WINSPERT

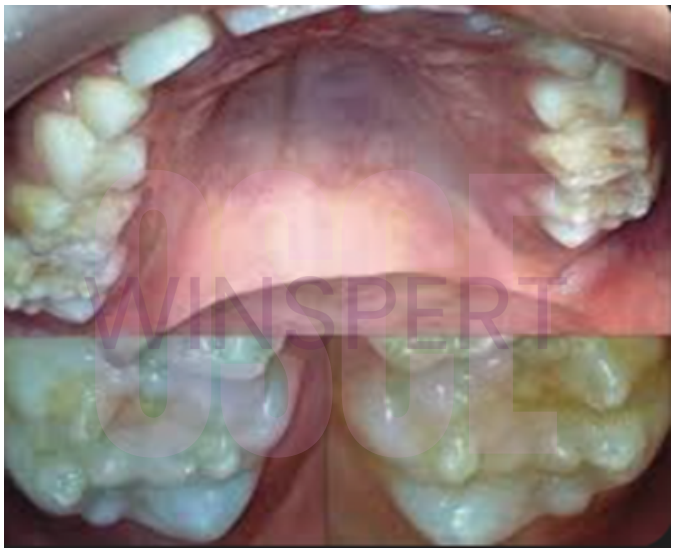
OSCE NOTES

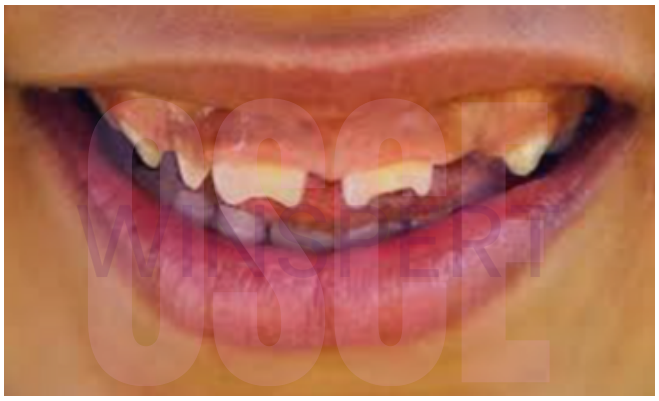
WINSPERT

QUAKE SET-CLUSTER 1

(Clinical Information Gathering)

CONGENITAL SYPHILIS (VERSION 1)





Mrs Kaur visits the clinic with eight year old Stevie. Mrs Kaur is a foster carer and has been with Stevie for about two weeks and will remain for another two weeks before transitioning to another family.

Mrs Kaur has limited medical and dental information about Stevie. Mrs Kaur is primarily concerned about the condition of Stevie's teeth and gums. Upon examination and taking photographs, you suspect Stevie may have congenital syphilis, which could be contributing to motor disabilities, partial vision loss, and hearing loss.

Mrs Kaur needs to report to the Chief executive officer of foster care to update Stevie's schedule. She has the authority to consent to today's examination.

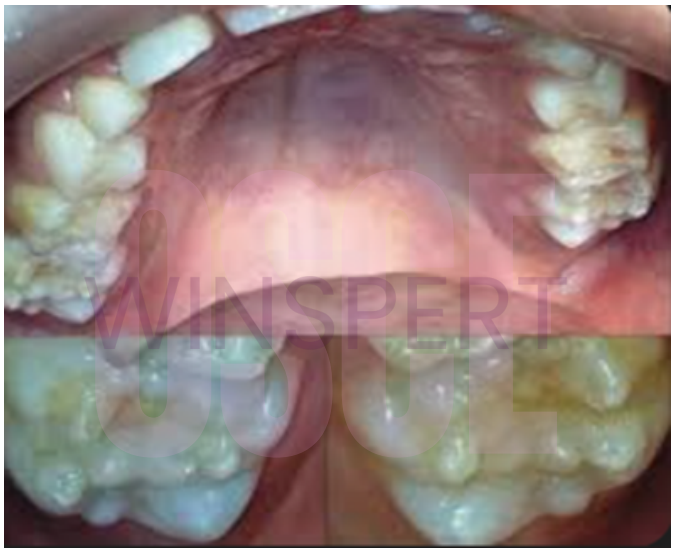
Please explain periodontal and dental findings and any special investigations that need to be conducted.

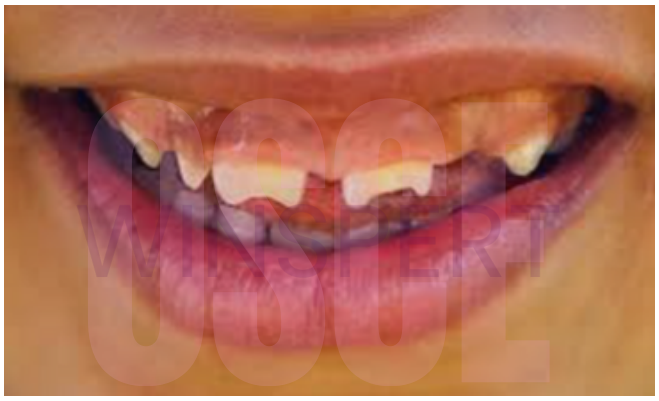
WINSPERT

QUAKE SET-CLUSTER 1

(Clinical Information Gathering)

CONGENITAL SYPHILIS (VERSION 2)





Mrs Kelly visits the clinic with eight year old Stevie. Mrs Kaur provides kinship care to Stevie. Stevie is with Mrs Kelly for two weeks and will continue to stay with her unless advised otherwise by authorities.

Mrs Kelly is primarily concerned about the condition of Stevie's teeth and gums. Upon examination and taking photographs, you suspect Stevie may have congenital syphilis, which could be contributing to motor disabilities, partial vision loss, and hearing loss.

Mrs Kelly needs to report to the authorities to update Stevie's schedule. She has the authority to consent to today's examination.

Please explain periodontal and dental findings and any special investigations that need to be conducted.

WINSPERT

CASE:

Opening remarks/ introduction:

Greet the patient and explore the chief complaint of a patient/ an adult accompanied with the patient. Always ask an open ended and concise question.

Mrs Kaur, I see you are here for concerns regarding Stevie's teeth. So, tell me more about this.

(You could also add empathy here, mentioning Mrs Kaur, it's so nice to know you want to take active efforts for Stevie's teeth).

Exploring the chief complaint:

Mrs Kaur, what concerns do you have regarding Stevie's teeth? Does Stevie have concerns too? Does she have any pain/ discomfort/ bleeding ?

Did you notice any change in Stevie's behaviour (eating habits, sleeping or playing affected) regarding her teeth?

Relevant history:

1 Medical History

In the scenario, it's mentioned she has limited information, so explore accordingly.
What limited information do you have Mrs. Kaur? If she has any regular GP? Here target Hutchinson's triad difficulties. Ask, if Mrs. Kaur has noticed any motor difficulties, hearing or eye issues?
Other than that you can ask, if she takes any medications?

2 Dental History

Similarly, what is she updated with in terms of dental aspects. If she knows about any regular dental visits? Last dental visit? Any major dental treatments in the past?

3 Oral Hygiene habits

1I understand Stevie is with you for a limited time, but what are her oral hygiene habits? Ask about her brushing, flossing, supervision and toothpaste?
If in any manner, she is not doing ideally, we will try to promote health in this section.

4 Diet and Water

What does Stevie's diet consist of mainly (ask about amount of sugars, consistency and frequency) ? What is her daily water intake ?
(You can correlate here with)

5 Social history

(In this case, there could be chances of Mrs Kaur mentioning about Stevie getting bullied in the school because of her teeth appearance). In such situations, empathise yet affirm to have several aids and approaches to deal with bullying.

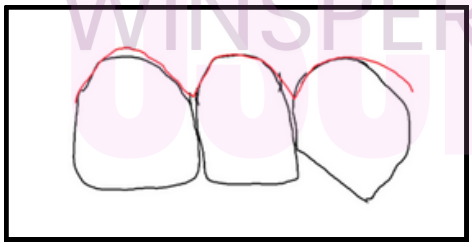
Explanation of probable diagnosis:

Always explain the probable diagnosis with the history that you have taken and with the help of photos or x-rays taken or shown.

As we can see here from the photos that I have taken , Stevie's teeth have a particular appearance on the front teeth. There is a notch and spacing present on the front teeth and the back teeth have several elevations and depressions. These are peculiar characteristics of Hutchinson's teeth (Hutchinson's incisors and mulberry molars) that are manifested in congenital syphilis. Were you aware about these appearances Mrs Kaur?

Moreover, if Mrs Kaur mentions in the history about motor disabilities, eye or hearing issues, you can include that in description and conveying about the hutchinson's triad which is why you are leaning more towards Stevie having Congenital syphilis.

Also, we could appreciate that her gums are not conformed well to the tooth due to spacing in between her teeth. (mention about rounding off present with interdental papilla).



You can assure her by saying, I do understand you want the best for Stevie. However, we will need to go stepwise by starting with her examination today and do a few tests from my end. In terms of treatment, she will need a multidisciplinary approach or we can do everything for her under one roof by referring to a children's hospital (which is out of my scope of practice).

So, how about Mrs Kaur, i will do a detailed examination for Stevie today and give you a detailed report of her findings. You can then present this to the organisation and we can go from there.

Investigations:

1. Start with an **Extraoral Examination** - check her Face Profile.
2. **Intraoral:** Detailed look around and count all teeth,
   Check the gum depths with the calibrated instrument
3. **Radiographs:** Bitewing to check decay
   Panoramic x-ray to understand the spaces and unerupted teeth.

In the meantime, how about Mrs Kaur, because Stevie is at risk of developing decay due to the complex structure of her teeth (and motor disabilities if the patient gives you this history), we can focus on preventive measures. Then advise on oral hygiene habits (brushing twice daily, flossing, supervision, electric toothbrush, fluoride toothpaste).

And then mention about diet chart to understand her eating habits influencing oral health. (Ideally according to Cameron, the diet chart needs to be detailed on 2 weekdays and 2 weekends, however, you can say get me a schedule of 7 days, as the bigger sample will give us a greater picture on eating habits).

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Important points in this case:

1. Consent by foster carer or kinship carer
2. Concerns of the carer or Stevie.
3. And if examination consent - please stick to relevant history and perform relevant investigations.

Important links to read to understand this case better:

Foster Care:

https://services.dffh.vic.gov.au/foster-care

Kinship Care:

https://services.dffh.vic.gov.au/kinship-care

Congenital Syphilis:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2819963/
https://www.rch.org.au/dentistry/about_us/Eligibility_criteria/
https://www.health.vic.gov.au/infectious-diseases/congenital-syphilis
https://www.health.vic.gov.au/publications/congenital-syphilis-important-information-for-health-professionals
https://www.healthline.com/health/hutchinson-teeth#pictures

Flossing Fact Sheet:

https://www.teeth.org.au/media/ecophwyy/ada2022-factsheet-tips-for-cleaning-between.pdf

Bullying in Australia:

https://www.aihw.gov.au/reports/children-youth/australias-children/contents/justice-safety/bullying

Questions asked in the exam regarding this case:

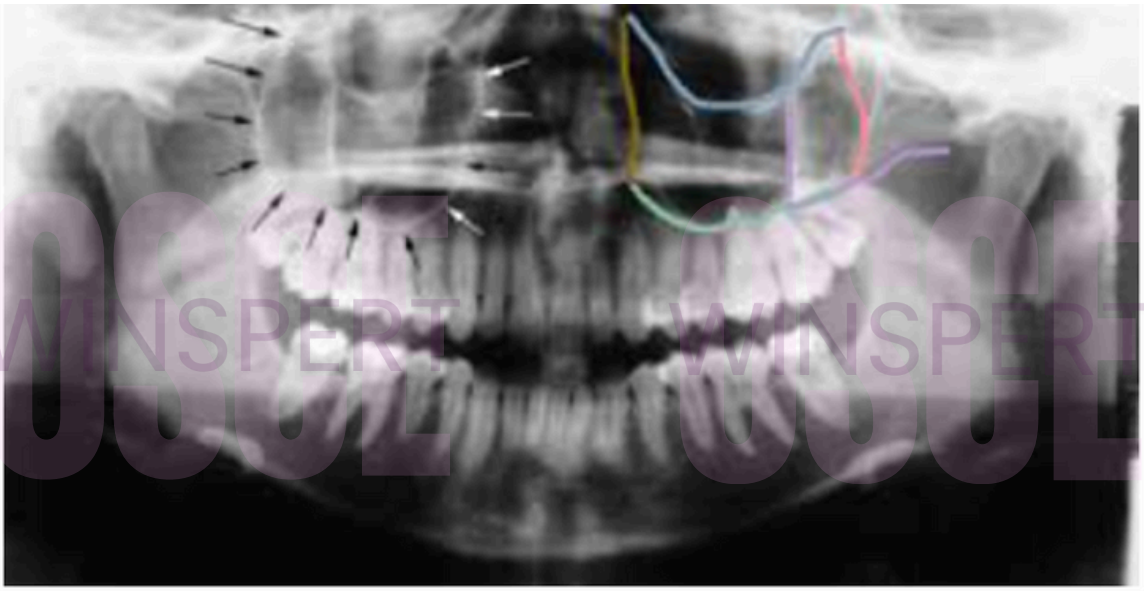
1. Is it contagious?
2. I'm afraid of x-ray exposures, is it necessary?
3. Is the treatment going to take time?
4. What are you going to do for her today?
5. What would you do if she is anxious about the exam today?

WINSPERT

QUAKE SET-CLUSTER 1

(Clinical Information Gathering)

SINUSITIS CASE (VERSION 1)



Mr./Mrs. Argenti, a 62 year old patient, has come to your clinic today with complaints of severe pain originating from a tooth in the upper right quadrant. He also reports experiencing halitosis.

You took an OPG, revealing that all teeth in the upper arch have undergone root canal treatment. Missing teeth are 17, 16 and 15. Moreover, all the RCT treated teeth are capped except for the 14.

Mr. Argenti is visibly upset and is requesting the removal of the teeth in the affected area.

Patient also had recent episodes of cold flu that kept on happening over months.

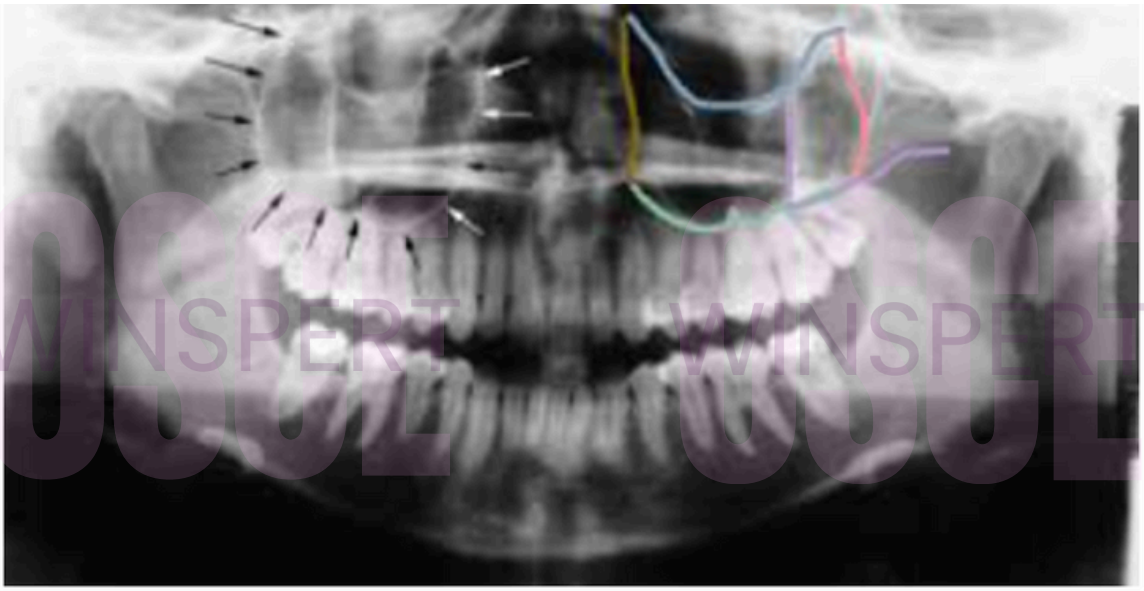
Please provide your differential diagnosis, outline the necessary investigations, and address the patient's concerns accordingly.

WINSPERT

QUAKE SET-CLUSTER 1

(Clinical Information Gathering)

SINUSITIS CASE (VERSION 2)



Mr./Mrs. Argenti, a 62 year old patient, has come to your clinic today with complaints of severe pain in the upper right region. He also reports experiencing halitosis.

You took an OPG, revealing that all teeth in the upper arch have undergone root canal treatment. Missing teeth are 17, 16 and 15.

Most of the teeth are RCT treated in the upper quadrant.

Mr. Argenti is visibly upset and is requesting the removal of the teeth in the affected area.

Patient also has a history of hay fever.

Please provide your differential diagnosis, outline the necessary investigations, and address the patient's concerns accordingly.

CASE:

Opening remarks/ introduction:

Greet the patient and explore the chief complaint of a patient. Always ask an open ended and concise question.
Mr. Argenti, tell me more about the pain that you are experiencing in the upper right area. ("What's brought you in to see me today?" or "Tell me about the issues you've been experiencing.")
(Add empathy by saying: I'm so sorry to see you in this state, it's not the best day for you Mr Argenti)

Exploring the chief complaint:

Site

- "Where is the pain?"
- "Can you point to the tooth or area in question?"

Onset

- "When did the pain start?"
- "Did it come on suddenly or gradually?"

Character

- "How would you describe the pain?" (e.g. achey, sore, throbbing, sharp)
- "Is the pain constant or does it come and go?"
- "Is it similar to the one experienced before getting any treatment?"

Radiation

- "Does the pain spread elsewhere?"

Associations

- "Are there any other symptoms that seem associated with the pain?" (e.g. bad taste, fever)
- "Any nasal congestion observed ?"

Time course

- "How has the pain changed over time?"

Exacerbating or relieving factors

- "Does anything make the pain better?" (e.g. analgesics)
- "Does anything make it worse or trigger it?" (e.g. cold, touch, bending, lying down)

Severity

- "On a scale of 0-10, how severe is the pain, if 0 is no pain and 10 is the worst pain you've ever experienced?"

Relevant history:

1 Dental History

In this section, take the dental aspect first as it will be more relevant to ask. Target on the previous dental appointments, ask how did he go with it? Also ask, if the treatment went well from his end? As the OPG has missing teeth in the area, how did he go with the extraction and when was it done? (This will hint at if OAC is present).
The one RCT treated 14, which is not with the crown, ask the reason for the same?
(The patient after this question, can ask you if the other dentist did a bad job?)
Oral hygiene habits are important, yet not too relevant here if the time does not permit.

2 Medical History

(Mnemonic - **M**edical condition and **M**edication **B**lood test **A**llergy)(**MBA**)
Ask about the recent episodes of cold flu? If he went to the GP for the same? Did he take any medications? If yes, which and how ?
Anything else if a patient wants to update his medical history?

3 Social History

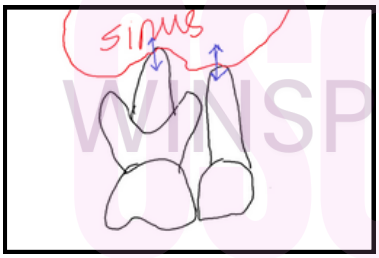
Ask if a patient is experiencing stress in life lately?
If yes, does the patient grind his teeth ?

Explanation of probable diagnosis:

Always explain the probable diagnosis with the history that you have taken and with the help of photos or x-rays taken or shown.

Mr Argenti, I understand you are leaning more towards taking the tooth out, however, teeth could not be the most probable cause of the pain as there are few situations that mimic as a toothache. Moreover, after tooth removal if the pain doesn't settle, I do not want you to be without a tooth and the similar pain experience.

From the panoramic x-ray and your description of pain, I'm inclined towards the pain coming from one of the structures close to the teeth. Let me explain with the help of an x-ray. Can you appreciate the hollow dark spaces situated near cheek areas just above the upper teeth? They are in close approximation to each other, we call them as maxillary sinus (they are air filled cavities)



Also, I noticed white cloud appearing in one sinus. Along, with you having recent episodes of cold and significant pain on bending are characteristic features of maxillary sinusitis. There could be few reasons for the pain mimicking a toothache.

Diffferential diagnosis:

There could be two most probable possibilities, either pain is coming from the maxillary sinusitis that never settled because of constant hay fever or cold episodes.
Or it could be post endodontic sinusitis (as it is unilateral).

The rest are: Oro-antral communication, trigeminal neuralgia, pain from the post endodontic treated tooth, apical periodontitis of the teeth in the area.

Investigations:

To help you best in terms of pain today, is it okay if I perform a few tests?
I will start by checking the outside of the mouth on your face, by checking muscles on your cheek and gently touching the area on the upper right side.

Inside the mouth, I will carefully check the area of concern and also the rest of the teeth. Next, I will check the gum depths of the teeth. Also, I will feel the gums in the area by a procedure called palpation.
Radiograph: I will take a specific x-ray of the region called a periapical x-ray.
(If the teeth are not endo treated - you can perform vitality tests by explaining the procedure).

Referral to GP is important for sinusitis and getting appropriate treatment for cold flu or hay fever.

Important points of this case:

1. Reassure the patient that pain will settle down if we find the root cause.
2. Validate his emotions regarding pain, as he will be frustrated because of unsettling pain, yet don't point out at anyone for doing wrong. Act neutral.
3. When asked about the other dentist doing a bad job, always say it's hard for me to comment as I do not have the records.
4. Differential diagnosis and reassurance if the patient is understanding each situation.

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Important links to read to understand this case better:

Allergy or common cold responsible for sinusitis:

https://www.allergy.org.au/patients/allergic-rhinitis-hay-fever-and-sinusitis/sinusitis-and-allergy
https://www.healthdirect.gov.au/sinusitis

Maxillary sinusitis of endodontic origin:

https://www.nernessendodontics.com/maxillary-sinusitis-of-endodontic-origin

Handling complaints in Australia:

https://www.dentalprotection.org/docs/dentalprotectioninternationallibraries/dental-advice-booklets/dental-advice---handling-complaints-(au).pdf

Questions asked in the exam regarding this case:

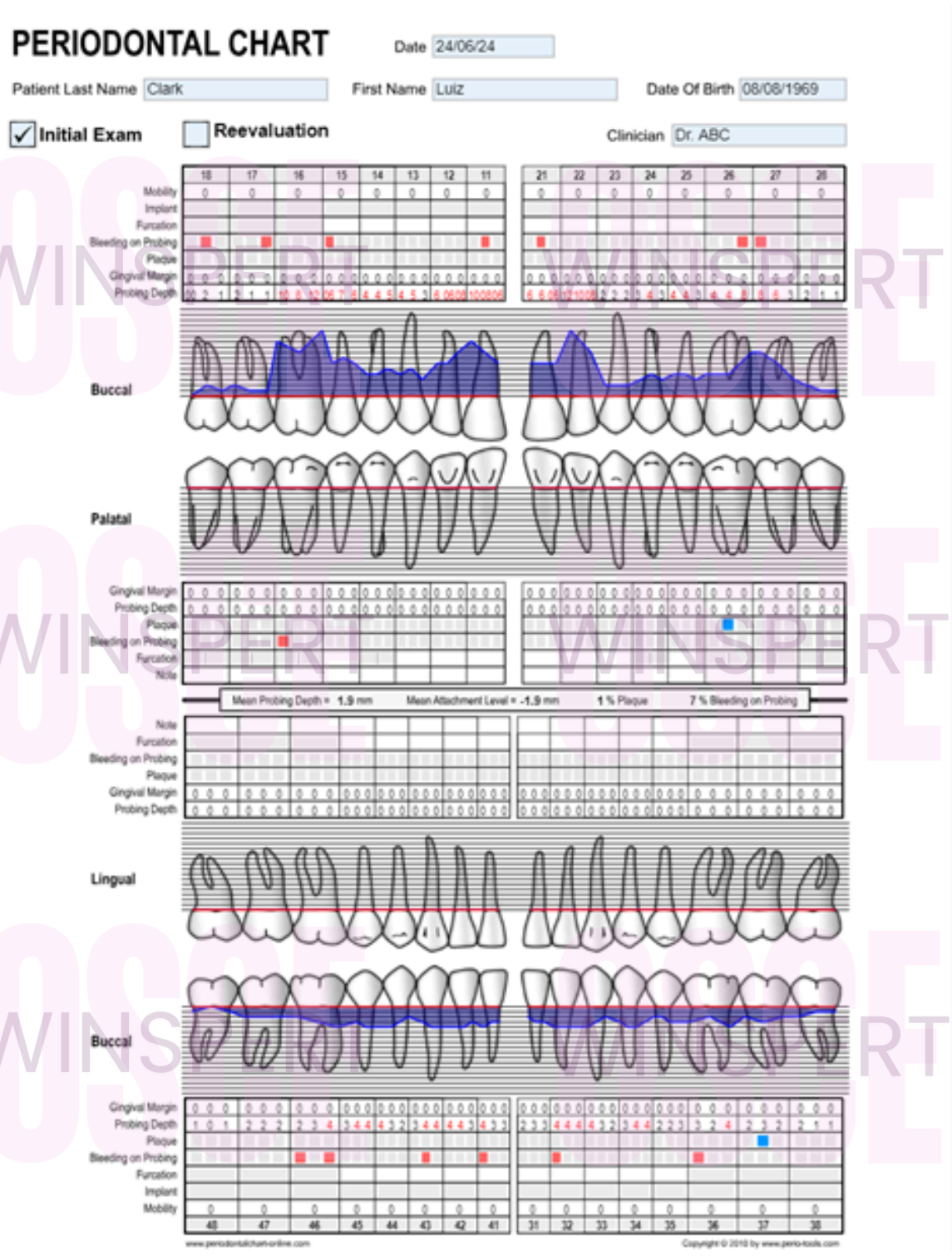
1. **Do you think the previous dentist misdiagnosed it?**
2. **I want to lodge a complaint against the previous dentist.**
3. **If it's coming from sinus, why do you need to do investigations?**
4. **Can you give me antibiotics?**

WINSPERT

QUAKE SET-CLUSTER 2

(Diagnosis and Management)

PERIODONTALLY AFFECTED LATERAL INCISOR

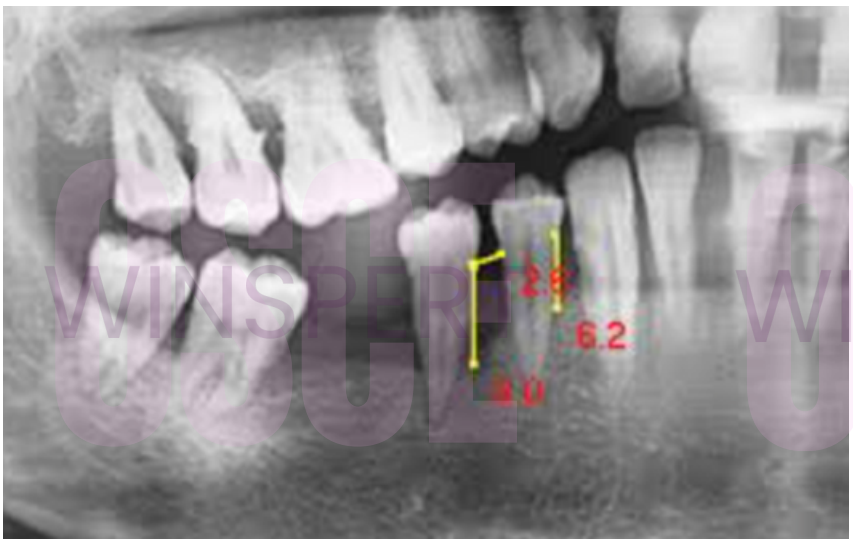


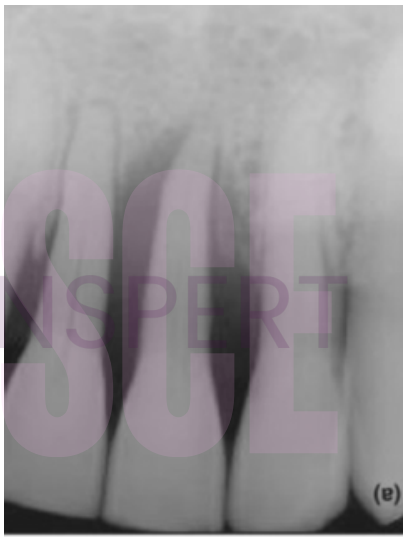
WINSPERT

QUAKE SET-CLUSTER 2

(Diagnosis and Management)

PERIODONTALLY AFFECTED LATERAL INCISOR





Mr/Mrs. Luiz, a 55-year-old school teacher, is visiting your clinic today with complaints of pain and mobility in the upper left lateral incisor. You do an examination and take an OPG. It reveals significant bone loss around most of the teeth, with up to 90% bone loss around the lateral incisor.

A periodontal chart is given with probing depths of 9, 11, 8 mm for most of the teeth, and 12 mm pocket around the lateral incisor.

Medical history includes hypothyroidism, bone pain, and gastrointestinal issues. The patient is taking thyroxine, vitamin D, and calcium. There is no history of smoking or alcohol consumption.

Address the patient's concerns in terms of replacement options and explain both the short-term and long-term management plans.

CASE:

Opening remarks/ introduction:

Mrs. Luiz, I can understand it must be uncomfortable for you with this wobbly front tooth and having to teach students with the risk of it falling. (Patient will have some comments after this).
Can you tell me more about the pain experience with this tooth? Did you appreciate any bad taste or pus coming out?
As you are keen for replacement options, do you have anything in mind?
What are your expectations for today? Also do you have any price range in your head for this replacement option?

Diagnosis

Mrs. Luiz, I have done my set of examination of your teeth. Let me explain with the x-ray taken here. Can you appreciate how the support of the tooth is varying for all the teeth, and specifically for this front tooth, it is lost to a greater extent making it very wobbly. When you mentioned, there was some pus coming from the area and how it became wobbly over the time.

It suggests you are experiencing:
Periodontal abscess/ Localised advanced periodontitis with the generalised moderate periodontitis.

I apologise for using such jargon terminologies. Let me explain them with the help of the x-ray taken. Can you appreciate how the supporting bone is uneven throughout. That's why we term this as a generalised and moderate level of supporting structure loss. With the front tooth which is localised there is an advanced loss of supporting tissues on this front tooth. Hence, the term. Thus, it's not just one tooth of a concern but we need to address all your teeth Mrs Luiz.

And few things are coming to my mind to manage your situation. However, let's talk about the immediate replacement for this wobbly tooth as you urgently want to look into it.

Short-term options:

These options are as the name goes short lived and serves temporary measures. For you:

1. **Fibre-reinforced bridge**

   It is esthetic but not functional. Let me explain with the diagram. An acrylic tooth is going to be supported by taut fibres that run from the behind of each adjacent tooth. And these fibres are fixed in that position.

2. **Essix retainer**

   it is a clear mould of your teeth, like an aligner. Like this diagram. Advantage is that the appearance will be natural. However, you need to take it out while eating, which won't be comfortable for you in school, right ?

3. **Immediate denture**

   1.This option is good, however, not for an immediate purpose. The first step is to make an impression and then the lab will send us the dentures. It will take a week. In the meantime, we can splint the tooth with the flexible wire. And after the denture arrives, we can remove the tooth and place the denture in the same appointment.

What are your thoughts Mrs Luiz? Are you leaning towards any option ? Please do not hesitate if you want me to explain about these options again.

Mrs Luis, just like our teeth, replacement options also need care from us and the dentist. Hence, regular visits are important to improve the longevity of our teeth and the replacement options.

Now coming to the long term option for you, as we know, we will need a permanent option after the temporary measure. And our gums and the bone are the foundation of our teeth. If they are compromised, our efforts towards teeth and replacement will go in vain. Hence, my concern for your rest of the teeth, gums and the bone is something I would want to talk about. The gum depths and the bone levels from my examination do not look at the healthy levels. What could be done for those is something we need to understand after we know what is the reason for this to happen.
To understand that, can I ask you a few relevant questions?

Relevant history and explanation of risk factors:

1 Medical History

Is your GP aware of all the medical conditions and medications that you are taking? Is everything under control? Is any of the medication over the counter? When was your last blood test?
Have you got your bone pain checked? We could check with your GP for any bone condition.
The reason I ask is, our mouth is a reflection of our general health and few medical situations and medications impact our oral health.

2 Dental History

When was your last dental visit? What is your routine to maintain your teeth and gums? (ask about interdental aids)
Our efforts to maintain oral hygiene have the most vital role on oral health.

3 Social History

Do you smoke or have you smoked in the past Mrs Luiz?
(If no, then no need to give reference.) If yes, then, Mrs. Luiz smoking has a powerful impact on supporting tooth structures in the long run by increasing the load of gum eating bacteria, reducing the saliva flow and increasing their count and reducing the healing potential by compromised blood supply.

Moreover, stress also has a role on gum health by reducing healing potential. And I understand being a teacher is not easy. Do you think you are stressed more lately?

Long-term options:

They range from removable to fixed options. What are your thoughts on them? I will give you detailed brochures on them to read about. But, as I mentioned, the best for Mrs Luiz is to manage and stabilise your current gum condition.

Management:

1. And thus best would be to see a gum specialist we call that as periodontist. He/ she will provide detailed management for you.
2. Other than that, everything starts at home, so we need to prioritise our oral hygiene. I will go through all the effective techniques to best look after our teeth.
3. Referral to your GP, regarding your medical conditions and to get the baselined blood test records.
4. If smoking is present, then educate on how we want to prevent this tooth condition from deteriorating further and save the natural teeth. I understand quitting smoking is easy to say, however it's difficult to implement. And thus, I will be with you in this journey and there are several ways to make it happen. Social groups, few applications on phone and some active intervention from GP and your dentist to provide prescriptions if necessary.

What do you think of all this Mrs. Luiz?

Important points for this OSCE:

- Understanding the patient needs first (she is keen on knowing the replacement options). Focus on that and which option is suitable for her.
- Then explanation of diagnosis and correlating to the finding of examination.
- Short term replacement options detailed explanation, taking into consideration patient demands.
- Risk factors discussion with relevant history.
- Stressing the importance of management of the gum condition before considering long term options.

Important links to read to understand this case better:

Thyroid problems and oral health:

https://www.myperiopro.com/about-us/blog/2021/december/the-connection-between-thyroid-problems-oral-hea/
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6305095

Periodontitis and gastrointestinal diseases:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10462160/
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8955434/

Fibre-reinforced bridge:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7030968/

Essix retainer:

https://vivantdental.ca/blog/essix-retainers/

Immediate dentures:

https://portal.ada.org.au/watch?videoId=438

Tooth replacement options explained very well:

https://pashadental.com/resource/tooth-replacement-options/

Smoking: it's effects on the body and quitting guidelines:

https://www.health.gov.au/give-up-for-good?

Questions asked in the exam regarding this case:

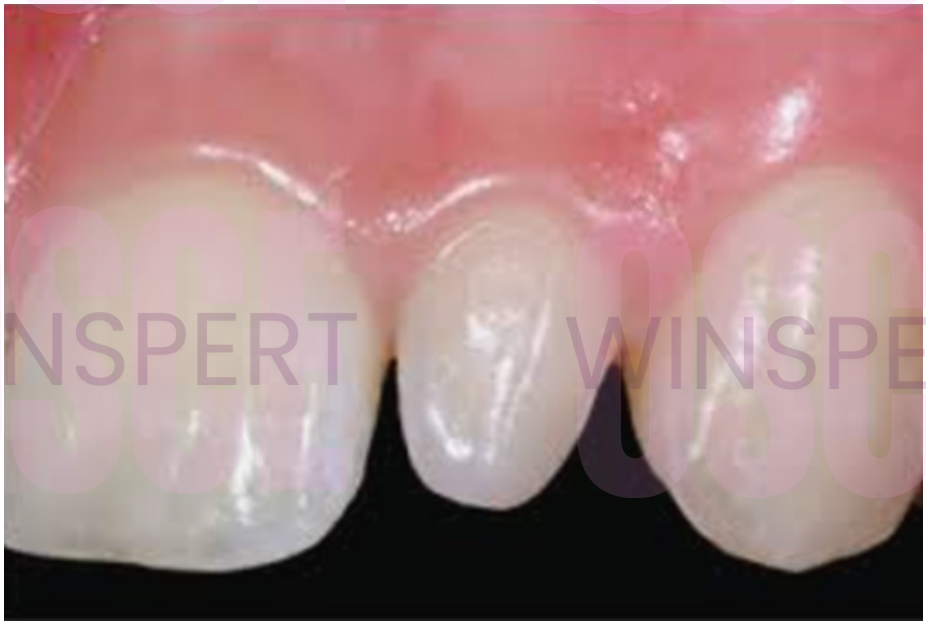
1. What replacement option do you recommend?
2. How long will it take to make dentures?
3. Why can't you treat me?
4. What will the specialist do?
5. Why do I have so much bone loss?
6. Am I going to lose more teeth?
7. By temporary, how long do you think it will be?
8. My friend had her implants, they are best. Can I get one too?

WINSPERT

QUAKE SET-CLUSTER 2

(Diagnosis and Management)

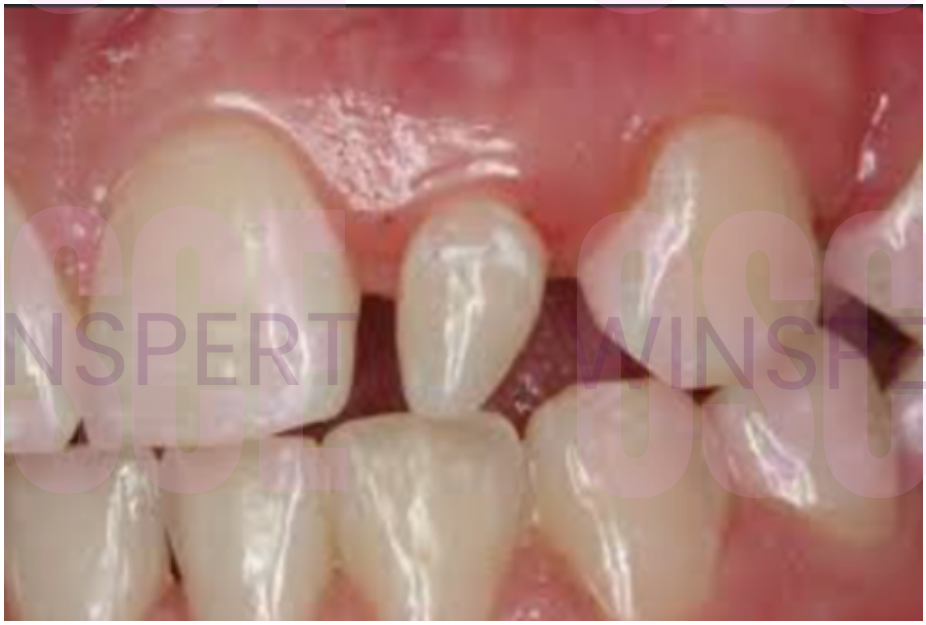
PEG LATERAL CASE (VERSION 1)



Ms Nguyen, an 18 year old new patient, has come to your clinic today with concerns about the appearance of her front tooth. She recently graduated from high school and has begun studies in the university. She also works part-time at a pub. She has generalised anxiety and is taking diazepam 10mg twice daily.

Diagnose and formulate a management plan to address her concerns.

QUAKE SET-CLUSTER 2
(Diagnosis and Management)
PEG LATERAL CASE (VERSION 2)



Ms Nguyen, an eighteen year old new patient, has come to your clinic today with concerns about the appearance of her front tooth. She recently graduated from high school and has begun studies in the university. She also works part-time at a pub and has a new partner who constantly tells she looks like a vamp. She has generalised anxiety because of changes in her life and is taking diazepam 10mg twice daily as prescribed by GP.

Diagnose and formulate a management plan to address her concerns.

CASE:

Opening remarks/ introduction:

Patient name, I understand you are here because of the few concerns regarding your front tooth. Tell me more about it?
(In the version 2 case, the patient will say she has no concerns but the partner calls her vampire and thus its appearance has been brought to attention).
After listening to her - you could add saying I'm so sorry **patient name**, I understand it's not something nice to hear like this, especially from your loved ones. **Patient name**, this is a safe space and if you want to be heard, I assure you to be there.

Exploring the chief complaint:

Patient name, what are your thoughts about this tooth? Did you have any issues in the past or now (like pain, bleeding in the area or any sensitivity?)

Short relevant history: (MH, DH, FH, and stress)

Focus on medical history. Ask (**patient name**) about the M/H that's mentioned in the history. I happen to see you are taking diazepam. Is that helping you? Since how long are you taking diazepam? Is it prescribed by the GP?

I'm glad to know that diazepam is working for you. Have you tried any other methods previously? (If a patient says yes, then mention saying I'm happy that diazepam works good for you. In the end, we want the best for you) If not then - Ms. **patient**, relying on medications in the long run is not ideally suggested as it could have few repercussions on our body. There are several ways to mitigate and work towards anxiety, I can provide you with brochures explaining the same. You can go through the same and discuss in detail with your GP (I can provide a referral to GP).

Also, when was the last time you visited a dentist? And what was the reason? (**Patient might say, I have anxiety with respect to the dental settings and hence I avoid it unless it's really urgent**). Assure her by saying, I can totally understand because you are not alone with the same thoughts. Ancient dentistry and the noise of drills with no direct vision of what's happening inside your mouth can make anyone anxious.

Because of such understanding, we have few ways to mitigate it. You can bring your loved ones with you for the appointment, also you can get your headphones and listen to calming music or we can play something for you on the TV screen.

I believe building a positive and trustworthy relationship with patients will be beneficial. I want to build the same with you, as visiting dentists regularly is important to avoid complications of late disease and prevent it at an early stage.

Also, I happen to notice, you are juggling between work, university, studies and personal life. A lot is going on, how are you coping with everything? (**Manage stress here, reference from the links provided**)

Are you aware, if you grind your teeth (because of stress)?

Explanation of probable diagnosis:

Ms. (**patient name**), let me explain with the help of a photo taken by me. Can you appreciate how distinctly small this tooth is? This form of tooth is infrequent yet familiar, we call it **microdont** and based on the shape, **peg lateral tooth**.
(patient will have comments after this, if not then you ask - are you following so far? Do you want me to explain again?)
Microdont means a tooth is smaller than it should be.
(You can explain the reason - It could be because of several reasons most commonly to be inherited from parents).

Management:

What are your hopes with today's appointment? (**Patient will say i just want to know about options today or will mention to do something for today's appointment - In both the options it is wise to do a mock up for the patient and give brochures to understand all the options and be given some time to think before going ahead with treatment**).

I can lay out a few options for you. (Patient could demand for no drilling and no anaesthetic options) I would want to take one periapical x-ray to understand what could be happening below the gums in this tooth region.

To begin with, let's go from minimally invasive options. I also want you to understand there's always an option of no treatment.

- **Composite filling** (Tooth coloured filling) - Advantage of chairside, quick results and economical. Disadvantages - It could stain (So ask, how's the patient's diet here)
- **Lumineers** (Like a tooth clip ons) - Advantages - Minimal prep required and aesthetic. Disadvantages - Expensive, not durable.

Once, you are comfortable with dental settings and want to look into permanent options:

- **Veneer** - Advantages: Natural looking option, some adjustments to the teeth are done. Disadvantages: It costs more.
- **Crowns** - Advantages: Long lasting option, Disadvantages - More cutting of the tooth involved.

After explaining everything, ask the patient if she is following everything or she wants you to repeat any information. I will provide you with brochures to understand each option better pictographically.

Important points for this case:

- Patient's thoughts about this tooth, rather than her partner's.
- Patient factors for management like: vulnerability in a new relationship, exams and new university life, juggling between part-time job, studies and new relationship.
- Diazepam medication for her anxiety- understand that if her anxiety is general or dental related. If it's prescribed by GP, there are higher chances she has tried all other alternative methods. So, understand the reason for diazepam first, then help her understand its effects.
- In management, after knowing from her history if she doesn't want to change actively. Assure her, we can discuss all the options and then think about it after having a detailed knowledge about them. Also, ask how she feels about dental experiences, if she is anxious, focussing on creating a trustworthy relationship with a patient is important. Giving options to make her dental experience at ease and a positive one.

Important links to read to understand this case better:

Management of anxiety:

https://www.betterhealth.vic.gov.au/health/healthyliving/Generalised-anxiety-disorder#self-help-strategies-for-generalised-anxiety-disorder

Management of stress in general:

Free support within respective universities.
https://www.studymelbourne.vic.gov.au/living-here/health-safety-and-wellbeing/archived/study-well/how-to-manage-stress
https://www.mhfa.org.au/
https://www.betterhealth.vic.gov.au/health/healthyliving/stress

Management of the peg lateral:

https://www.aihw.gov.au/family-domestic-and-sexual-violence/resources/fdsv-summary

Abuse and their types, also approach towards abuse:

ttps://fullstop.org.au/get-help/about-violence-and-abuse/types-of-domestic-and-family-violence
https://www.racgp.org.au/FSDEDEV/media/documents/Clinical%20Resources/Guidelines/Whitebook/Abuse-and-violence-working-with-our-patients-in-general-practice.pdf
(suggested in ADC practical handbook)

Lumineers:

https://www.healthline.com/health/veneers-vs-lumineer

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Questions asked in the exam regarding this case:

1. What if my fillings are stained?
2. How come I may have teeth similar to my family members?
3. Can you give me happy gas?
4. Why do we need an x-ray?

WINSPERT

QUAKE SET-CLUSTER 3

(Clinical Treatment and Evaluation)

INCISORS AFFECTED BECAUSE OF SPORTS TRAUMA

(PA X-ray of teeth is given)

Amelia John, a 12-year-old patient, has arrived at your clinic accompanied by her father. Her father reports that Amelia was struck in the face with a hockey stick approximately 30 minutes ago and was not wearing her mouth guard at the time. She did not lose consciousness and has not experienced any vomiting.

Upon examination, you observe that tooth 11 is displaced palatally, and tooth 21 is fractured up to the dentine level, although the pulp is not exposed. Additionally, she has a minor cut on her lip resulting from the trauma.

Further investigations reveal that tooth 11 did not respond to vitality testing, while tooth 21 elicited a painful response that subsided after a short period.

Explain the situation to Amelia's father and discuss both the immediate and long-term management plans.

CASE:

Opening remarks/ introduction:

Mr. John, it's not easy for you to see your daughter go through this. Especially, when the incident did not happen in front of you. (Patient will comment something after this). I have had a look inside the mouth, and I happened to notice a broken piece of tooth, was it found at all Mr. John? (Did the school nurse notice it?) I'm glad she did not lose consciousness or have any signs of concussion. But, did she cough at all?
(The reason is if the broken piece is not found, sometimes it could be swallowed and the person can start coughing).
I have done my set of examinations for Amelia, however, it's best to be seen by a GP as well to check if she will need any booster dose for tetanus.

Explanation of the affected teeth:

After examining her thoroughly and doing a few tests, I have come to a diagnosis. Let me explain to you with the help of a photo taken by me. Can you appreciate how this tooth is broken? The good news is whenI was doing a test of response, Amelia felt cold which means it hasn't affected the tooth nerves and blood vessels and this is what we call an uncomplicated fracture just affecting the outer layers of the tooth.

And with the tooth affected besides it, has moved out of its position and gone more inside the mouth as you could see it. Moreover, it did not respond to the sensitivity test and thus we call this as palatal luxation. In this situation, it is less likely to gain the sensation back. And thus it would need a nerve treatment which we call as root canal treatment. However, with the trauma I want to give this time to be fixed in one position for sometime, and then in one week we could start the procedure. It means we clean the nerves and place a filling within the tooth. (Draw and show).

Are you able to understand Mr. John? Please do not hesitate to stop and ask at any time.

Manage:

Let's understand how best we could manage her. As we can see there is blood on her lips and around the gums. I will begin by wiping it gently with a gauze piece.

For her lips, I will suture this portion that has been cut and review it in a week. Also before suturing I will carefully look for the piece of a broken tooth or remove all the superficial impurities. Later I will take one x-ray of the lip to look for any small broken pieces deep in the cut that were not appreciated by my eyes.

Then, with my gloved finger, I will move the tooth out of position into the place where it should be. Now to fix it in this position, I will take help of a splint which is a stainless steel wire, extending from the teeth adjacent to it on the lip side. (Explain in the photo, how you will extend that from 12 to 22 and glue it) The reason for the placement on the lip is because she can clean if any food gets stuck clearly and to avoid interference from the bottom teeth on biting. I will take an x-ray to confirm the position below the gums after placing the wire. The wire needs to be in place for 4 weeks.
Do you have any questions so far Mr. John?

Now, for this tooth which is broken, for today I will place a temporary similar to the tooth shade filling. (Patient will ask why temporary?) The reason for that is she has bleeding and the conditions are not ideal for a permanent filling to be placed. So, when she comes back to visit within a week for a removal of suture, I will place a permanent tooth coloured filling which we call as composite. This filing is a replacement, thus advising to drink water after stain continuing drinks to avoid stains and avoid eating apples, carrots or corn with front teeth to avoid load on these teeth.

Recalls:

Mr. John, is everything okay so far? I understand it's a lot of information that's why I'm going to give you everything written about what steps to follow in her management.

For a tooth that sustains trauma, it has to be followed up for a longer time, because there could be situations of infection that could arise later on. Thus you and I will keep an eye for wobbly teeth, pimples on the gums, teeth becoming discoloured or any pus discharge. Additionally, recall by me on the following (write on the paper and show - 2, 4, 6, 8 weeks then 6 months followed by a year and yearly for 5 years) to check with x-rays and to check with the tests performed today.

X-rays of the specific area which we call as periapical x-ray give us an indication of things that could happen below the gums. There could be few situations where the root of the tooth gets fixated within the adjacent bone or can get infected; we call that situation as ankylosis or resorption.
And thus to prevent such complications we need regular follow up visits. (you can talk about each complication in detail if time permits).

For a tooth coloured filling on an adjacent tooth, it can become stained over time, thus will require polishing or minor repairs. And if it chips over time, we can repair or replace the filling.

Post-operative instructions:

Also, you mentioned she wasn't wearing her mouthguard. Why was it so Mr. John? We advise to wear the mouthguards even for practice matches as the trauma could happen even within these situations. With the wire on, she won't be able to fit her mouthguard in, so she will need to wait for 4 weeks to play.

So for now, after today's procedure. We will be careful with the area, by continuing routine hygiene of the teeth and keeping the wire clean. How often does she brush her teeth? She can use mouthwash for today if she is unable to clean her teeth because of pain.

I would advise a soft diet for a couple of days.

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Important points for this case:

- Reassure and ask about signs of concussion and broken tooth (coughing). Dental evaluation and GP evaluation for tetanus booster dose.
- Diagnosis and immediate management for each tooth.
- Long term prognosis and importance of recall.
- Long term management.
- Mouthguards and post-operative instructions.

Important links to read to understand this case better:

Management of the tooth resorption:

Endo 9 Heithersay (adelaide.edu.au)

Explanation of all the dental traumas and it's management:

International Association of dental traumatology.

Mouthguards:

https://www.teeth.org.au/sports-mouthguards
https://www.ada.org.au/getmedia/595ad4e4-9889-4e66-9be6-d433140f4d71/ADA_Guidelines_Mouthguard-Fabrication.pdf

Tetanus:

https://immunisationhandbook.health.gov.au/recommendations/people-with-uncertain-vaccination-history-and-a-tetanus-prone-wound-are-recommended-to-receive-tetanus-toxoid-vaccine-and-tetanus-immunoglobulin

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Questions asked in the exam regarding this case:

1. Why can't we do the composite today?
2. Which is better GIC/ composite?
3. How do you know it is at the right place?
4. Which x-rays will you take?
5. What will you do if after 4 weeks, it's still mobile?
6. Why will you not start the RCT today?
7. Where are you going to put the splint?
8. Will both of my teeth be fixed to the bone?
9. Do you think she will need an orthodontist?
10. How will you splint?
11. When can she play again?
12. When can she switch to a normal diet?
13. I'm using Listerine mouthwash. Can I give her the same?
14. Why do you need the broken piece of tooth?

WINSPERT

QUAKE SET-CLUSTER 3

(Clinical Treatment and Evaluation)

PAIN AND SWELLING AFTER EXTRACTION

Mrs. Joshi, 63 years old, a regular patient at our clinic, had her severely decayed and broken upper left first molar removed on Monday afternoon. Today is Friday afternoon, and she has come in for an emergency appointment, reporting pain, swelling, and bad breath that began two days after the extraction. Upon examining her mouth, you suspect a post-surgical infection.

Her medical history includes an allergy to penicillin. She does not smoke or consume alcohol.

Address her condition and manage it, explain the possible causes, and outline the further investigations needed.

CASE:

Opening remarks/ introduction:

Mrs. Joshi, it's not the best few days for you with the pain and swelling persisting still. I'm glad you are here for the same before the weekend starts. I have had a look inside your mouth, but could you describe how did you go after tooth removal? How would you describe the swelling in the last 24 hours? Do you feel the swelling is affecting your swallowing or opening of mouth? Do you feel hesitancy in breathing or closing eyes at all? Any fever (have you felt unwell) at all Mrs. Joshi?

I understand it must not be easy to eat, but hope you have eaten and are well hydrated Mrs. Joshi? Please do not hesitate if you want anything.

Immediate actions:

Mrs. Joshi, from your explanation and because the swelling hasn't settled after 3 days and it's increasing I'm suspecting it to be a post-surgical infection. Thus, to begin with I will do important set of tests to understand a state of medical emergency. To begin with I need to feel the swelling extent with my gloved hands and will also check if any swellings in the neck area. I will also check the opening of your mouth by placing your two fingers and checking the extent of opening based on it. If any of these signs look concerning to me, Mrs. Joshi, I will call ambulance and get these looked at first.

Other than that I will check your temperature if it's above 38 degree Celsius as you mentioned you are feeling unwell. And look for the signs of pallor, if you are having heart palpitations or sweating as these would suggest the infection has reached within your body system and needs antibiotics.

Other than that, I will carefully look near the area to look for any food being lodged in it or any discharge coming?
Then, I need a specific x-ray for this area which we call a periapical x-ray. Because what is happening below the gums cannot be appreciated visibly.

You okay Mrs. Joshi so far?

Relevant history and explanation of risk factors:

1 Tooth removal related:

Mrs. Joshi, with to help you best, will you be comfortable to answer a few relevant questions for me?
You had a broken down tooth and the removal was not easy, so how did you go immediately after tooth removal?
There were a lot of instructions to follow, and it's a lot to understand, so how was it for you?
What did you eat after the procedure? And when did you rinse first?
Did you take any medications? What were they and did they help you?
How about the warm salt water rinses? Any difficulty experienced with those?
Have you experienced this for any tooth removed previously?

2 Medical History

Now, just double checking Mrs Joshi, your medical history was allergy to penicillin, anything else you want to update ? And when was your last blood test done?

3 Dental History

Did you have any restrictions because of swelling to clean your teeth? Especially near the tooth removal site?

4 Social History

You do not smoke or drink alcohol, that's great on you Mrs. Joshi

Possible Causes

After tooth removal, the first 24 hours are crucial for healing. And several factors are responsible for it. Let me explain to you with a diagram.

External factors like instructions followed by the patient including smoking, alcohol, food eaten, rinsing instructions. Also, oral hygiene habits or the amount of food lodged in that area that would hamper healing.

In terms of internal factors, they are the internal capacity to promote healing which could be interrupted if the body's low immunity or healing potential is affected by underlying medical conditions. Hence, I wanted to know when was your last blood test done?
Another reason in your case is because it was a broken tooth, and the removal was not straight in one piece. Sometimes in such situations there are possibilities that a small portion of bone or tooth can be appreciated on x-ray being responsible for delayed healing.

Management:

After inspecting the area carefully and having an x-ray, I would get a clear picture.

If I appreciate food being lodged in this area, I will use my special instrument to flush it, we call that as monojet. And after that I will add a dissolvable medication (we call that as alvogyl consists of eugenol, which will be irritant for a few seconds then it will settle - to improve healing).

And I will review you after 2 days.

If I notice something like a tooth in the healing area on an X-ray then depending on the complexity of removal, I will myself try to take the portion out or will need to refer to an experienced colleague or an oral surgeon.

What are you comfortable with Mrs Joshi?

Now, because it's a Friday afternoon, getting a surgeon's appointment is tough. I will make a few calls to see if any surgeon is open over the weekend and can fit you in.
As with surgeons, they usually have a longer waiting time.

However, I'm going to prescribe you an antibiotic for the swelling and pain killer too.

Antibiotic:
- Clindamycin 300mg 8 hourly for 5 days.

Pain killer: I will prescribe you the same that I gave you after tooth removal.
- Ibuprofen 400 mg 3 times a day until 3 days.
- Paracetamol 1000 mg 4 times a day until 3 days.

But, if at all the swelling becomes extensive such that you cannot breathe, swallow food, open your mouth, have significant pain. Then Mrs Joshi, I will give you an ambulance number, please call 000 and you will need medical attention urgently.

I understand, all of this is overwhelming. Please be assured, I'm with you until you feel better and are out of this situation.

I will review you on Monday morning. If you do not get any appointments with an oral surgeon until then, then there is an option to visit a dental hospital, where an onboard oral surgeon can help you. Again with hospitals there could be waiting times.
I will be with you Mrs Joshi, and you will feel better.

Are you alright, do you have any questions for me?

Important aspects in this case:

- Primarily, patient need to be asked about severe and systemic features as mentioned in therapeutic guidelines. To understand the severity of the post surgical infection. If a patient gives a positive history of anything, please refer to the hospital by calling an ambulance.
- Do your set of investigations and look for the signs of systemic and severe features. Relevant questions only. Post-extraction instructions to be asked very sensitively, not to blame on patient, but saying its a lot to remember, how did you with following them?
- Assurance and right guidance to the management along with the prescription.

Important links to read to understand this case better:

Management:

Therapeutic guidelines is the primary source of management.
Reading the TG chapters of acute odontogenic infections thoroughly.

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Questions asked in the exam regarding this case:

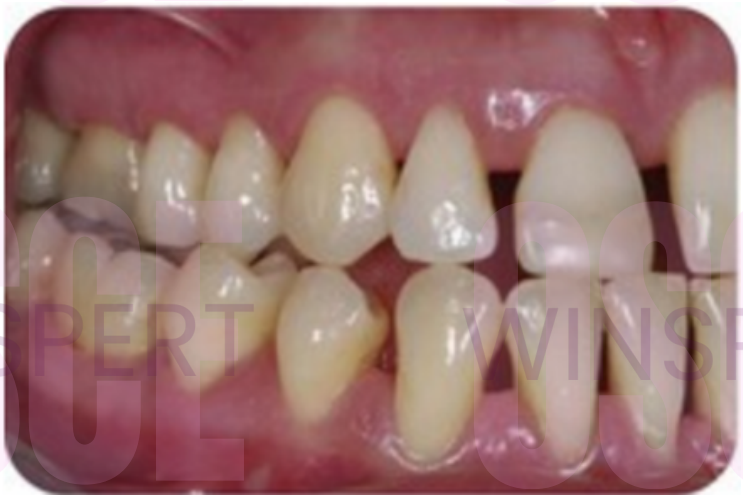
1. How long will it take to relieve the pain?
2. Can I use mouthwash?
3. Is there any treatment option for me today?
4. Will the specialist be available?
5. Can I get the medicine over the counter?
6. Instead of clindamycin, can I take something 12 hourly instead?
7. What are the differentials for this cause?

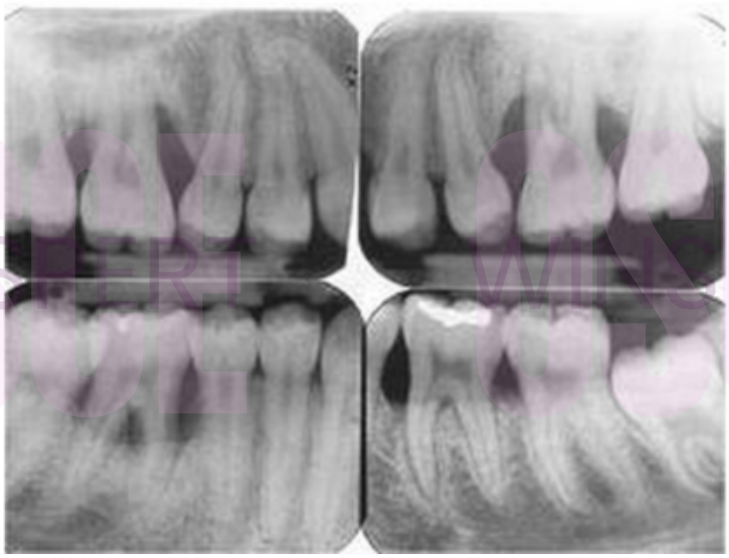
WINSPERT

YELLOW SET: CLUSTER 1

(Clinical Treatment and Evaluation)

PATIENT WITH PERIODONTITIS WANTS ORTHODONTIC TREATMENT CASE





Jordan, a 17 year old, is visiting your clinic today for a consultation about his teeth. He saw a dentist three months ago and has transferred his records. The previous dentist did the examination and sent the CPITN score, which is 444/424. He also did the bitewing x-rays that showed bone loss around his molars.

Consult the patient and discuss records by the previous dentist.

CASE:

Opening remarks/ introduction:

Greet the patient, introduce yourself as you haven't examined the patient in this scenario.
Hi Jordan, my name is Dr. ABC and I will be looking after you today. I notice a few records have been transferred. Thank you for that, so tell me about your concerns.

Exploring the chief complaint:

Talk about his concerns (it could be spacing, crowding or not happy with his own smile) How is it affecting your day-to-day life?

Any sensitivity with your teeth? Bleeding? Wobbly teeth? Puffiness around gums? Any pus noticed?

(Also, chances of a patient being bullied at school or by peers because of teeth in a particular way - I'm sorry for you to experience this Jordan. However, help is always out there. Have you considered talking to school authorities? If you are not comfortable there are government provisions for the same, I will help you with the support. I want you to remember you are not alone, okay Jordan?).

Discussing the records:

Jordan, I'm more than happy to help you, however, the transferred records caught my attention. After the previous dentist's examination, it shows that you have gum depths which are not ideal and the x-rays show significant bone loss, both are really concerning for your age. (Explain the CPITN score and how these scores are preferably managed with periodontists).

I understand teeth alignment is your top priority but teeth take support from the bone and the gums. And this foundation needs to be stable to consider changes with the teeth alignment. (Can explain with the diagram here).

I will perform my set of examinations as well for you and is it okay if I ask you a few relevant questions?

Relevant history and explanation of risk factors:

1. **Dental history**

   How often do you visit the dentist ? Have you had major dental treatments done in the past?

2. **Oral hygiene habits**

   How do you look after your teeth? Do you use anything to clean in between teeth? What toothbrush do you use?

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3 Medical history

How is your general health, Jordan? When was the last time you visited a GP or had a blood test done?

- Any medical conditions I should be aware of?
- Any medications? Do you have any allergies?

4 Family history

Do you know if anyone in the family has gum disease? Or history of early tooth loss in the family?

5 Social history

Now Jordan, just between you and me (this information will be just in this room), I know yours is not a legal age yet, but do you happen to consume alcohol or smoke at all?

- (I understand because of peer pressure, you could be leaning to such habits?)

Risk factors and its relevance:

Based on patient's answers to previous questions we will explain him:
Gum and bone disease which we call periodontal disease could take a few years to develop or can happen in a shorter span depending on several factors.

Our health of the mouth is a reflection of general health like it's a double edged sword.

Jordan, gum disease could be because of interplay of several individual factors or an outcome of genetic systemically involving factors. As from your answers to my question, I believe gum and bone disease is most likely due to the second reason in your case. Because looking at your age and the involvement of your gums and bone, we need to consider your medical condition or genetics to be responsible.

So, the most important step for us is to get to know your blood profile with your GP and then referral to a periodontist as he/she would be the best person to understand and manage your condition.

And once we get a green signal from GP and periodontist, we can look into alignment options. How does it sound?

I can explain in detail about the factors playing important role in the health of gums and bone disease, if you want to know more:

Primary factors: Bacteria (Through oral hygiene habits)

Secondary factors:
Localized (crowding, spacing, or use of inappropriate dental aids).
Systemic (Underlying medical condition)

Modifiers - Genetic transmission, stress (psychological aspects).

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Investigations:

For today, how about I perform my set of examinations. Starting with the external aspect of your face and inside the mouth a thorough look.
Followed by detailed gum depth measurements.
(If OPG is not given) Take an OPG, to get an overview of all the teeth and bone depths.

Important links to read to understand this case better:

Bullying:

https://bullyingnoway.gov.au/
https://kidshelpline.com.au/ h
ttps://headspace.org.au/online-and-phone-support/

CPITN or PSR:

https://www.bsperio.org.uk/assets/downloads/BSP_BPE_Guidelines_2019.pdf

Periodontitis in children or adolescents:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4098882/

Risk factors for periodontitis:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1351013/

Talk about sensitive topic like alcohol or drug use in teenagers:

https://cdn.adf.org.au/media/documents/ADF_MINI_BULLN_Youth_AOD-for_parents-web.pdf

Questions asked in the exam regarding this case:

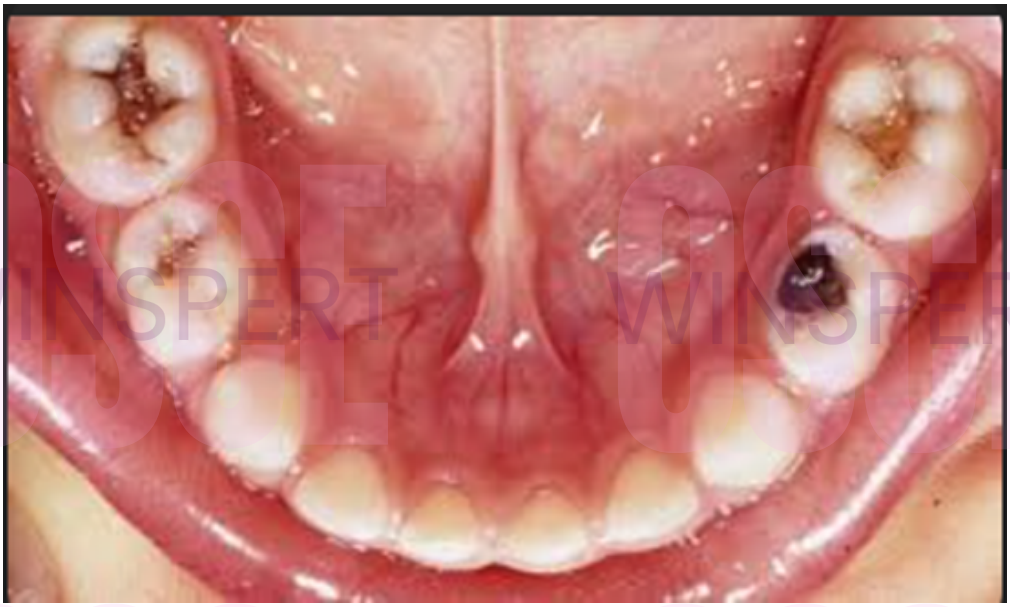
1. What will the specialist do?
2. Can't you fix this ?
3. How long will it take?
4. How is family history important?

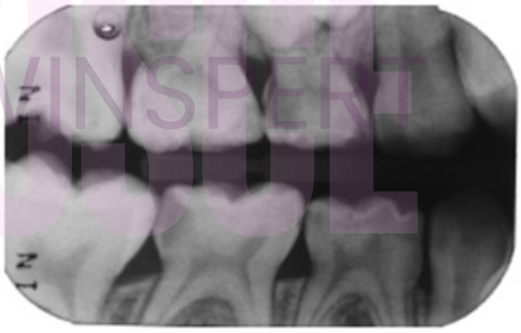
WINSPERT

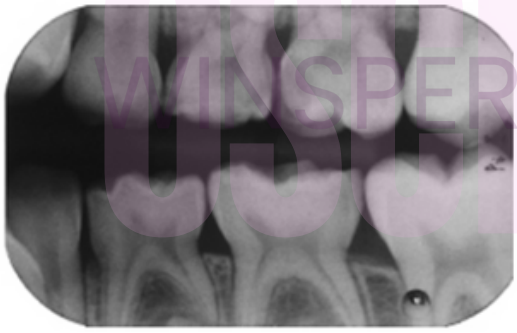
YELLOW SET: CLUSTER 1

(Clinical Treatment and Evaluation)

PATIENT HAS MULTIPLE BROWN SPOTS ON TEETH AND DAD IS WORRIED (VERSION 1)







Mehmat Khan, an 8 year old boy accompanied by his mother, comes to the clinic. His mother is worried about black holes and secondary teeth. No continuous pain experienced, has little discomfort on food lodgement. You did an examination and took 2 bitewing x-rays.

Evaluate radiographic features and investigate.

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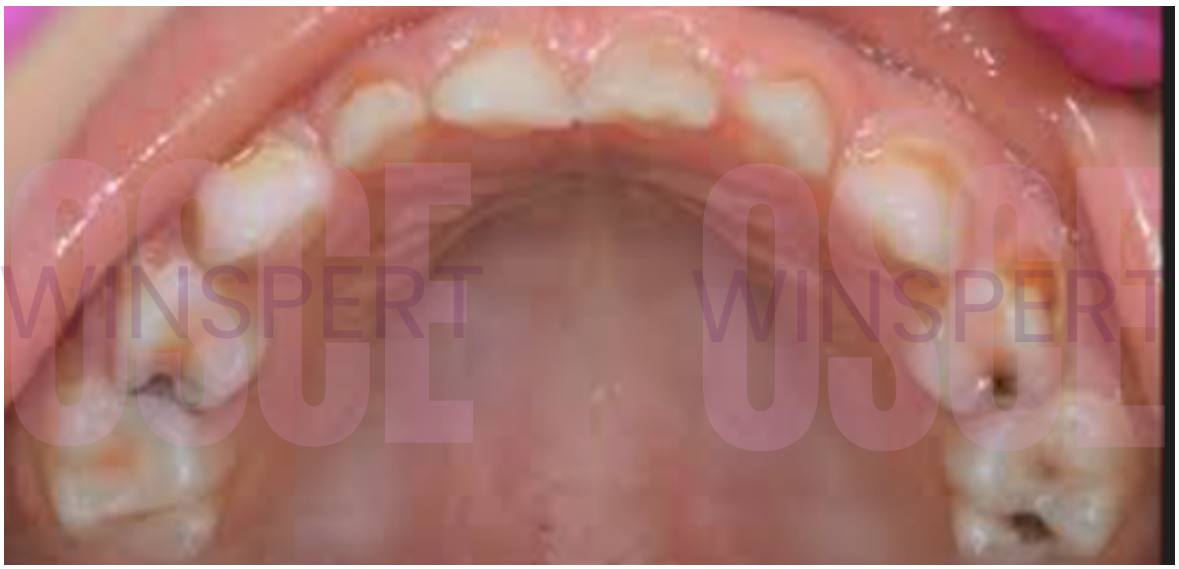
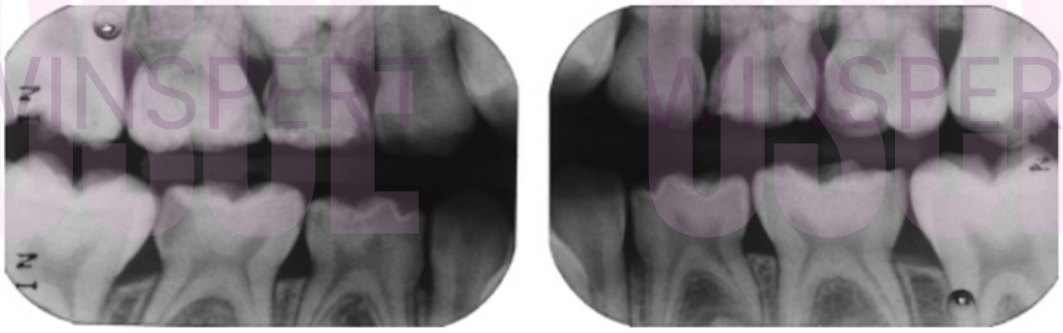
YELLOW SET: CLUSTER 1

(Clinical Treatment and Evaluation)

PATIENT HAS MULTIPLE BROWN SPOTS ON TEETH AND DAD IS WORRIED (VERSION 2)





Mustafa Khan, an 8 year old boy accompanied by his single dad. His father is worried about the black spots on the back molars. He does not have any symptoms. You did the examination and two bitewings. Mustafa has asthma and uses an inhaler. Address patient concerns and investigate.

Consult with dad about caries risk assessment.

CASE:

Opening remarks/ introduction:

Hello Mr./Mrs. Khan I see you are here because of concerns with black spots on Mehmat's teeth. (Is it okay if I address you as Mr./Mrs. Khan?) Tell me more about your concerns.
Seeing your child with this, it must be hard, and I can sense your concerns. To help you out best, is it okay, if I ask you related questions?

Exploring the chief complaint:

When did you first notice the black spots?
Did Mehmat/Mustafa ever complain about it ?
Does he have any pain or experienced in the past?
Any discomfort when chewing food? (Ask this if history of no symptoms is not given, if given, then state it as its good he does not have any discomfort).
Did you notice any changes in his behaviour with respect to eating, sleeping or playing?
Did you notice any redness or puffiness around the tooth or on his face?

If pain is present ask the following questions:

Site

- "Where is the pain?"
- "Can you point to the tooth or area in question?"

Onset

- "When did the pain start?"
- "Did it come on suddenly or gradually?"

Character

- "Did you notice any change in Mustafa's/ Mehmat's routine habits?" (e.g. unable to sleep well, eat well or play)
- "Is the pain constant or does it come and go?"

Radiation

- "Does the pain spread elsewhere?"

Associations

- "Are there any other symptoms that seem associated with the pain?" (e.g. bad taste, fever)

Exacerbating or relieving factors

- "Have you noticed, does anything make the pain better?" (e.g. analgesics)
- "Have you noticed, does anything make it worse or trigger it?" (e.g. cold, touch, bending, lying down)

Relevant history and explanation of risk factors:

1 Dental history

How often does he visit the dentist? When was the last time he visited and what was it for?
(Educate about the visits to dentist and how vital it is)

2 Oral hygiene habits

What is Mehmat's/Mustafa's oral hygiene routine?
Do you supervise him?
What toothpaste does he use?
Does he use anything to clean in between teeth?

3 Medical history

How is his general health?
If asthma is given, ask what is the medication in his inhaler?
How is his asthma? Is it under control?
Any other medications?
Any allergies that I should be aware of?

4 Social history

How is his water intake?
What does his diet consist of? And how often does he consume meals?

Correlation of risk factors with black spots:

Depending on patient's answers to the above questions, you will try to correlate:

Black spots are a form of dental caries also called cavities. Dental decay is a cumulative disease involving a series of processes. Primary factors responsible are bacteria in the mouth, sugar, time it's stuck on tooth structure, poor oral hygiene habits and quality of saliva. Moreover, acids can hasten the process of damage on the tooth. Additionally, Mehmat's medication is responsible for dryness of the mouth thus reducing the quantity of saliva required to flush.
To sum up for Mehmat, we can see (add the factors that are positive), these could be possibly contributing to decay.

Mr. Khan, I understand you want to improve his condition, I appreciate your efforts to get him to us early and now we all can work as a team to improve his oral health. I will provide you with some brochures too for better understanding of tooth friendly foods and habits. And regular check ups with me will make everything better.
I will formulate a plan for him after having a thorough look.

Health promotion:

Let me explain what is the best for teeth. I use a mnemonic for FOWL (fibrous food, oral hygiene habits, more water, Less frequency of eating) , it's because there's too much information, also I will provide some brochures about the same.

Investigations:

To begin with, I will check outside of the mouth to appreciate any swelling or change in face profile and inside the mouth I will check all the teeth and the surrounding gums.
I will carefully look at the teeth with black spots.
Also I will use my calibrated instrument to check all the teeth and the gums.
And to understand his food habits the best, can I get a diet chart detailing about 2 week days and 2 days of the weekend. You can get it next week and we will discuss it in detail.

Important links to read to understand this case better:

Understanding dental decay:

https://www.teeth.org.au/search
https://teeth.org.au/translated-factsheets

Advice on diet for children:

https://www.teeth.org.au/watch-your-mouth-podcast/paediatric-dietician-advice-on-food-drink-for-infants-and-children

Health promotion topics:

https://teeth.org.au/brushing-teeth
https://teeth.org.au/dental-fluoride
https://teeth.org.au/dental-care-for-kids

Effect of asthma and its medication on caries:

https://www.teeth.org.au/asthma

Questions asked in the exam regarding this case:

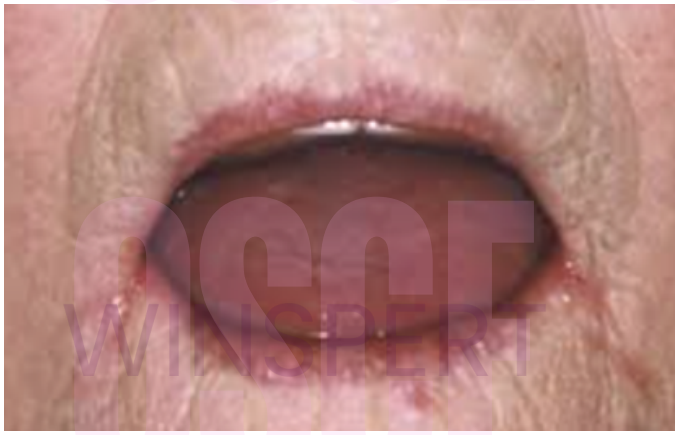
1. I don't supervise my kid's toothbrushing. Is it necessary?
2. My parents can't come/ his grandparents can't come. What should we do?
3. I have heard fluoride is poisonous. Is it necessary for our teeth?
4. What will you do for these teeth?
5. Why does only Mehmat/Mustafa have black spots and not his real brother?

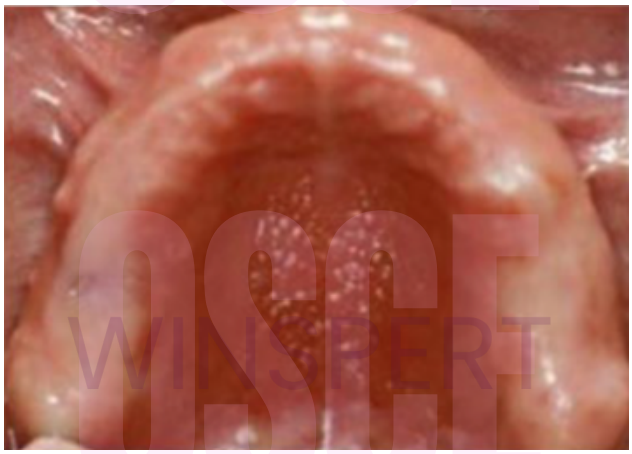
WINSPERT

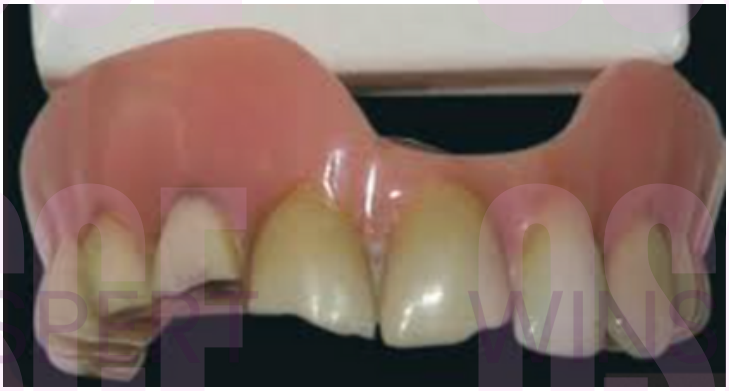
YELLOW SET: CLUSTER 2

(Diagnosis and Management)

DENTURE STOMATITIS (VERSION 1)







Mrs. Lin, a 68-year-old woman, has been wearing an upper denture for 28 years, with her current denture being 15 years old. She reported a poorly fitting denture that falls out during yawning and eating. She has a few teeth remaining in her lower jaw but does not wear a lower denture.

She also experiences soreness on the corners of the mouth.

Upon examination, you observed a red, inflamed palate, an irregular upper denture with a broken buccal flange, and worn-out teeth.

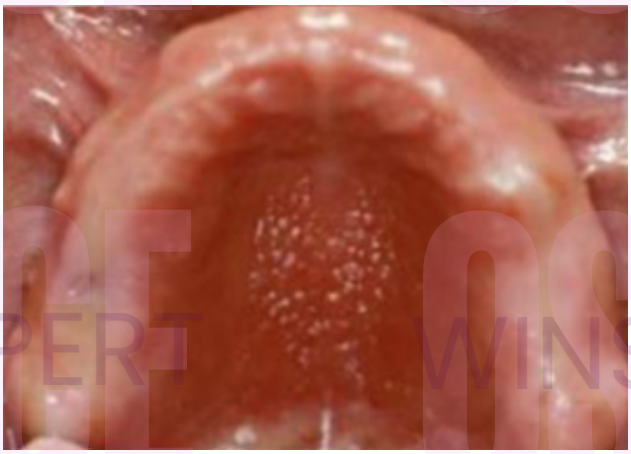
Provide differential diagnoses for her issues and address her concerns with an appropriate management plan.

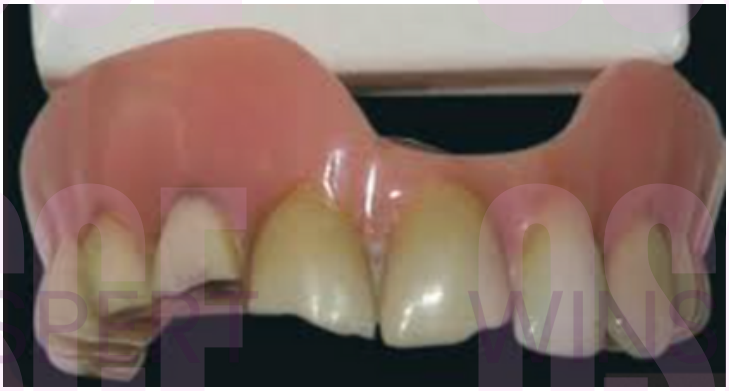
WINSPERT

YELLOW SET: CLUSTER 2

(Diagnosis and Management)

DENTURE STOMATITIS (VERSION 2)





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Upon examination, you observed a red, inflamed palate, an irregular upper denture with a broken buccal flange, and worn-out teeth.

Provide differential diagnoses for her issues and address her concerns with an appropriate management plan.

CASE:

Opening remarks/ introduction:

Mrs Lin, I see you are here for the concerns regarding denture, so tell me more about those. And it's affecting your eating too, that must be frustrating, how are you managing your diet?
I can certainly help you with your concerns, however you are having soreness around the corners of your mouth too, your denture issues could be related to this concern too, so is that okay if I ask you a few relevant questions?

Relevant history and explanation of risk factors:

1 Medical history

Medically how are you keeping Mrs Lin? Any medical conditions or medications that I should be aware of? When was the last time you went to your GP? Have any blood tests been done recently?

2 Dental habits

You mentioned your denture is 15 years old and never used lower dentures. Ideally, the expectancy of a denture is between 5-10 years, maximum extent to 15 years. Dentures are static in nature and our jaw bones are dynamic. You could imagine a constant force over a period of 15 years could have led to more than few changes and thus your dentures are ill-fitting. Also what is your routine in terms of maintaining denture hygiene? What do you use to clean your dentures? How often do you visit dentists for denture follow-up or regular visits?

3 Social History

Do you smoke at all or have you smoked in the past?

Promote health in terms of visiting dentists regularly and GP (specially after 50 years of age), also promote with respect to smoking cessation.

Explanation of diagnosis:

Thank you for your patience with my questions Mrs Lin. From my examination, and your answers I'm suspecting the changes of the roof of your mouth is what we call as denture stomatitis. As you mentioned, you have been reluctant to take your dentures out at night, the constant irritation of dentures on our mouth can have effects like this. It could also be a sign of suboptimal denture hygiene.

Additionally, you mentioned the soreness on the corners of your mouth, this could be because of several reasons, we call it angular cheilitis. Possibly because of nutritional deficiencies, manifestation of a systemic granulomatous disease, imbalance of mouth height or mixed bacterial and fungal infection.

Are you with me so far, Mrs Lin? Do you want me to repeat anything at all?

Investigations:

With the condition of the roof of your mouth, it will need rest and thus it's advisable to not wear dentures for a minimum of 1 month and optimise the denture hygiene. I can go through the steps with you if you like and also provide you a detailed brochure for reference at home.

To manage your concerns today, the upper denture is loose and broken too. So, with your worn out teeth and broken portion, it would be best we make a new set for you as it's been more than 15 years. Do you think that is something you will consider? In a way your roof of the mouth will get rest too.

Or we can reline the denture. It is a procedure, where we make a new base for the denture to rest on the changes within the jaw. This is not recommended for your case but we can consider it temporarily. We can do it with a tissue conditioner, which aids with the inflammation of the roof of the mouth.

And for the soreness that you are experiencing on the corners of your mouth, I can prescribe you a numbing or soothing agent (1% benzydamine gel). But, we need to understand the cause of it. So, I will give you a referral to a GP to understand your blood profile with a blood test. Also, in the meantime, do you think you want to consider replacing the missing teeth areas with a denture, if we are making a new one for your upper jaw?

And, if we are making dentures for both upper and lower jaw, it is something out of my scope, I will have to refer you to a prosthodontist (denture specialist), who can best manage your case. What are your thoughts on this Mrs. Lin?

Important links to read to understand this case better:

Denture care and life expectancy:

https://www.agedcaredentistry.com.au/how-long-do-dentures-last/
https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/dentures

Angular cheilitis:

https://www.ncbi.nlm.nih.gov/books/NBK536929/

Denture stomatitis:

https://exodontia.info/denture-stomatitis/

Management of denture stomatitis and angular cheilitis:

Only from therapeutic guidelines.

Relining procedure:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5903182/

Ageing and Dental Care:

https://www.aihw.gov.au/getmedia/96ff0700-9799-4e06-a712-8618be0c882d/aging_dental_health-a.pdf.aspx?inline=true

WINSPERT

Questions asked in the exam regarding this case:

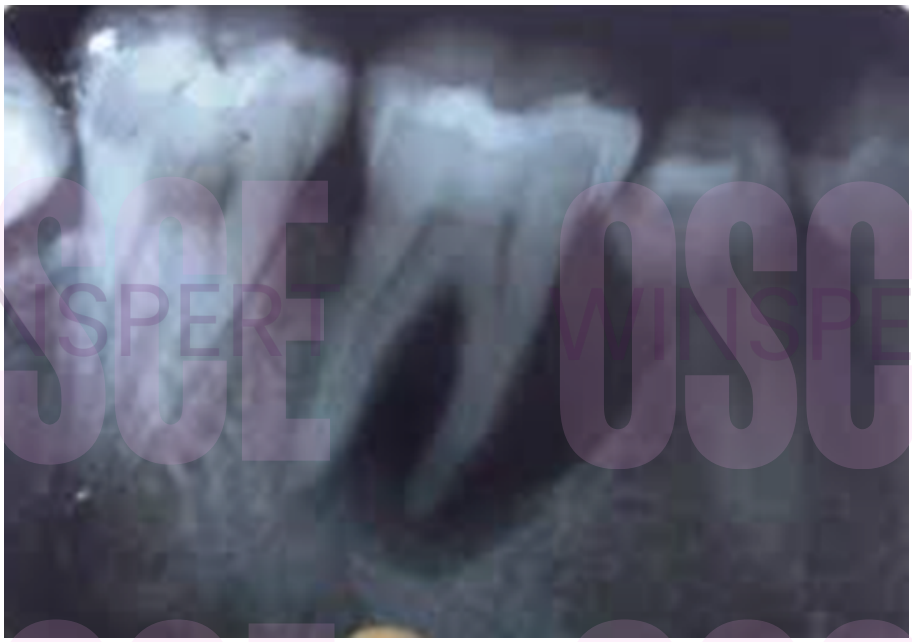
1. My friend is using an anti-inflammatory cream. Can you give me?
2. My partner does not like me without dentures. So, I cannot take it out?
3. Denture broke while cleaning in the sink, is there any other way to do it?
4. I have to attend a game tonight. Can I get my dentures before that?

WINSPERT

YELLOW SET: CLUSTER 2

(Diagnosis and Management)

PATIENT WITH ABSCESS, M/H OF WARFARIN AND BISPHOSPHONATE.



David Arthur, a 67-year-old patient, visited your clinic today with complaints of swelling and tooth mobility in the lower right side. After examination, you observed that the lower right first molar is vital but has grade 3 mobility and an associated abscess.

David has a medical history of myocardial infarction. He is currently managing hypertension with atenolol and verapamil. He is also taking warfarin. He has hypothyroidism, for which he takes thyroxine, and osteoporosis, for which he recently received a denosumab IM injection two days ago. He tried Panadeine Forte for pain relief, but it was ineffective.

He recently did INR - the reading was 2.2

Address David's concerns regarding the swelling and mobility of tooth 46 and develop an appropriate management plan.

CASE:

Opening remarks or exploring the Chief complaint:

Mr. Arthur, I'm so sorry to see you in this situation. I want to help you in the best possible way, so tell me more about this experience of yours. Have you eaten anything and are you well hydrated since the last 24 hours?
I have had a look inside your mouth, the good news is that the tooth is alive however the support of the tooth is compromised. How long have you had swelling in this area? Do you think it's increasing in size? Do you get a bad taste in your mouth? Have you noticed pus coming from that area? Any similar experiences in the past?
Before I give you a thorough explanation I want to understand a few conditions from your medical history. If that's okay with you?

Relevant history and explanation of risk factors:

1 Medical history

How long have you been taking Denosumab for? How are your GP follow ups going with respect to your myocardial infarction, hypothyroidism, hypertension and osteoporosis?
Thank you for the update with the INR test, however we may need the latest INR test done in the last 24 hours.
Did your GP update you in your recent visit?

2 Dental habits

When was your last dental visit?

3 Oral hygiene

What is your routine for your oral hygiene? Do you use any aids to clean in between your teeth?

4 Social History

Do you smoke or have you smoked in the past? (if yes, how many years?)

Diagnosis:

David, the reason for all these questions is there could be interplay between these factors to be responsible for your swelling.

Also, it helped me to come to a diagnosis which appears to be a periodontal abscess. Have you heard about this before?

It's a compromised support of the tooth because (insert all the positive risk factors) of the risk factors involved in your case.

WINSPERT

Correlation of risk factors and its modification:

Hypothyroidism has an impact because of thyroid levels on the tooth support. Osteoporosis affects lower jaw bone to some extent. Additionally our own efforts could also affect the health of periodontium (which is the support of teeth). All in all systemic and local factors are crucial for this to occur.

Do the health promotion of modifiable factors after explaining the correlation.

Management:

To best help you today, I have to be cautious of risks involved with your medical history. Active treatment is something I have to hold onto, as you are taking denosumab and because of periodontal abscess you are at risk of developing medication related osteonecrosis of the jaw. Where, the support bone can die and lose its potential to heal. Additionally you have taken the dose 2 days ago, increasing the risk of complications. Thus, the best idea would be to be seen by a periodontist, who knows to manage any complications that may arise while treating you.
Thyroxine and warfarin when taken together sensitise an individual to accentuate effects of warfarin and increase the risk of bleeding. Thus, limiting our options of extraction or incision and drainage.

Thus, I would do a minimal intervention today by gently pressing over the swelling and try to ooze out the pus as much as I could. I will also superficially clean the area with my instrument for any irritants.
What are your thoughts David?

Also, I will prescribe you pain killer as the one you are taking is not effective, also is associated with more side effects. Any allergies or reactions to the medications in the past, David? (Depending on the answer you can prescribe)

You can take:
Ibuprofen 400 mg 6-8 hourly (3 times a day)
Panadol 1000mg 4-6 hourly (4 times a day)
Take both these medications until pain subsides, but no more than 5 days.

I will call up the specialist and look for an earliest appointment for you, if it's not available then I will give you details of the hospital. There would be waiting time there, but hoping you get managed in less than 24 hours.

(If patient says, i don't think I can go to hospital or specialist is not available for 24 hours, you can prescribe him antibiotics as follows:
Amoxicillin 500mg 8 hourly for 5 days.
Metronidazole 400mg 12 hourly for 5 days. (Always with the prescription of metronidazole - ask if the patient consumes alcohol? Because of the risk of disulfiram reaction).

Always ask at the end, are you okay David? Do you want me to repeat any information at all?

WINSPERT

Important links to read to understand this case better:

Periodontal abscess:

https://www.ncbi.nlm.nih.gov/books/NBK560625/#:~:text=A%20periodontal%20abscess%20is%20described,tissues%20and%20depicting%20clear%20symptoms.

Warfarin and thyroxine interaction:

https://www.drugs.com/drug-interactions/coumadin-with-levothyroxine-2311-1529-1463-0.html

Hypothyroidism and its effect on periodontium:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7025985/

Management:

Read Therapeutic Guidelines.

Questions asked in the exam regarding this case:

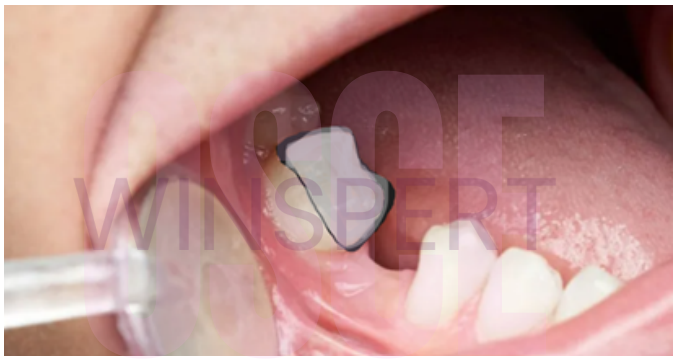
1. My tooth is so wobbly, why can't you take it out?
2. What is a prick test?
3. Can a tooth fall out on its own?
4. What will the specialist do?
5. Will you be able to arrange a specialist?
6. Panadeine forte was prescribed by my GP, why do you say it is not good?

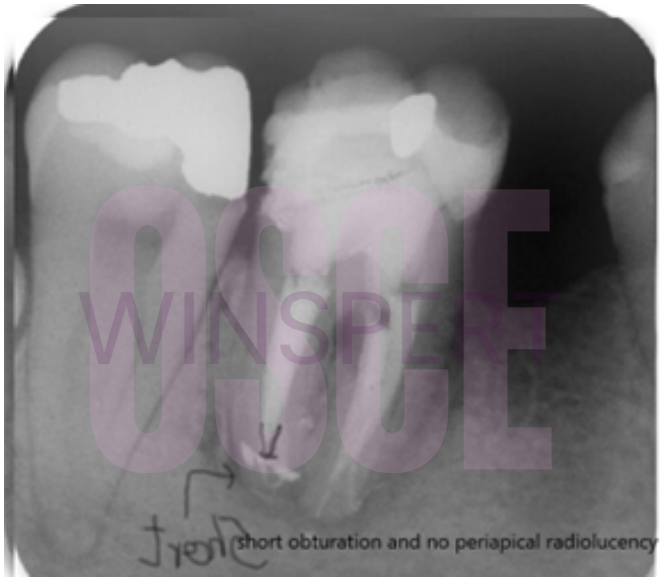
WINSPERT

YELLOW SET: CLUSTER 3

(Clinical Treatment and Evaluation)

GAP PRESENT BECAUSE OF MISSING TOOTH





Mr. Ken, a 73-year-old regular patient at our clinic, is here today for his routine check-up and cleaning, his last one being a year ago. After completing the examination, you inform him that he has no new cavities and his gums are in good health. Mr. Ken inquires about replacement options for the gap between teeth 44 and 46, which have been present since around 10-15 years. You have taken a photograph and a bitewing X-ray, which show that the gap appears normal, with tooth 46 having a metal cap.

Medically he is fit, takes medications for his hypertension.
Periapical x ray was also taken RCT was done with 46 and shows short obturation with the distal root with no periapical radiolucency.

Address Mr. Ken's concerns and discuss the potential replacement options available.

CASE:

Opening paragraph:

Mr. Ken, it's so nice to see you again for your regular check ups. I have had a thorough look inside your mouth and nothing has changed since the last time. So, the good news is no cavities are present and the gums look healthy. So keep up with the great job Mr. Ken.
And I noticed, you have some questions with the space present in your lower right jaw. Do you have anything in mind with respect to this gap? Since, how long have you had this gap?
Any expectations from today's appointment? And in terms of finances involved for replacement what range are you thinking about?

Thank you Mr. Ken for guiding me, to help you best today. Will you be okay to discuss a few more questions to narrow down options to what suits you best?

Relevant history and explanation of risk factors:

1 Medical history

Mr. Ken, any updates in your medical history since the last time we met? Any medications other than you take for your hypertension?

2 Dental habits

You are amazing with your regular visits to the dentist and keep up with that as the replacement needs a follow up too. Also, the way you are looking after teeth, we need to keep up with the similar job for replacement too.
How long was the root canal treatment done for this tooth at the back? And have experienced any issues with that tooth all this time?

3 Social History

Do you recall if you grind your teeth at all? Do you smoke Mr. Ken? And how about alcohol consumption?

Treatment:

Thank you Mr. Ken for your patience, now let's walk you through the options of replacement for that gap. (In the exam, depending on the patient's preference you will begin with the options).

Mr. Ken, you also have an option of no treatment. However, with the gap all the adjacent or opposing teeth try to move towards it over a period of time and thus reducing the space for replacement.

There are many reasons why you should replace missing teeth: (optional to say this, if patient is reluctant for any replacement)You may not like how the gap looks when you smile.

- Missing teeth will affect the way you speak.
- When a tooth is lost and not replaced, the remaining teeth can shift.
- Bone loss can occur around the missing tooth. This may cause the remaining teeth to become loose over time.
- Loss of teeth and bone can make your face muscles sag.

Let's talk about implants, they can replace a single tooth best and are surgically placed in the jaw bone. They are the most effective yet expensive replacement option. Also, several considerable factors like medical fit, dental hygiene, gum health and also bone quality decide whether we are the right candidate or not. In your case, I feel you are the right candidate. However, implants are not done by me. It will be done by an experienced colleague of mine or specialist and thus treating practitioner would be the best judge. Bone quality is judged by a special 3D scan done by a specialist. Are you following Mr. Ken, any questions at all?

The other option is fixed bridges which could be a traditional bridge or a cantilever bridge. Let me explain each option in detail for you to understand the difference.
Traditional dental bridge takes support from both the adjacent teeth, let's look at the diagram to visualise best. Advantages are stability and good replacement. But, drawbacks are it will be invasive and on a costlier end. But, in your situation one tooth at the front tooth is looking good, but the one at the back has root canal treatment done. The good news is you haven't experienced any issues in the past, however, the filling in the root is short of ideal length. There are possibilities of you experiencing pain with that tooth, so the best person to judge that would be an endodontist, specialist to do RCTs.
Any questions so far ?
Now with a cantilever bridge, it takes support just from one tooth. So, taking support from the back tooth is ideal however it's already been compromised with the RCT and thus, not the best option. And taking the support from the front tooth would put a lot of pressure on the bridge thus not lasting for long.
(Explain each option with the diagram).

For a removable option, I could think of valplast. It is made of acrylic completely and looks something like this (shown on a diagram). The advantage is you can take it off and easily put it back, looks natural, cost effective but the process could be tedious for few of putting it back and taking it out. It will not be as stable as fixed options and it's used as a temporary measure several times.

What's going behind the thoughts Mr. Ken?

Also, these are the options given by me that surround my scope of practice. If you do not feel satisfied with options, you do not have to decide right now, I will give you more written information to know in detail about each option. Also, you can always get a second opinion.

Important links to read to understand this case better:

Dental implant:

https://www.teeth.org.au/dental-implants#:~:text=Dental%20implants%20are%20used%20to%20replace%20missing%20teeth.,discuss%20these%20thoroughly%20with%20you.

Valplast:

https://www.valplast.com/patients-1

Tooth replacement options explained very well:

https://pashadental.com/resource/tooth-replacement-options/

WINSPERT

Questions asked in the exam regarding this case:

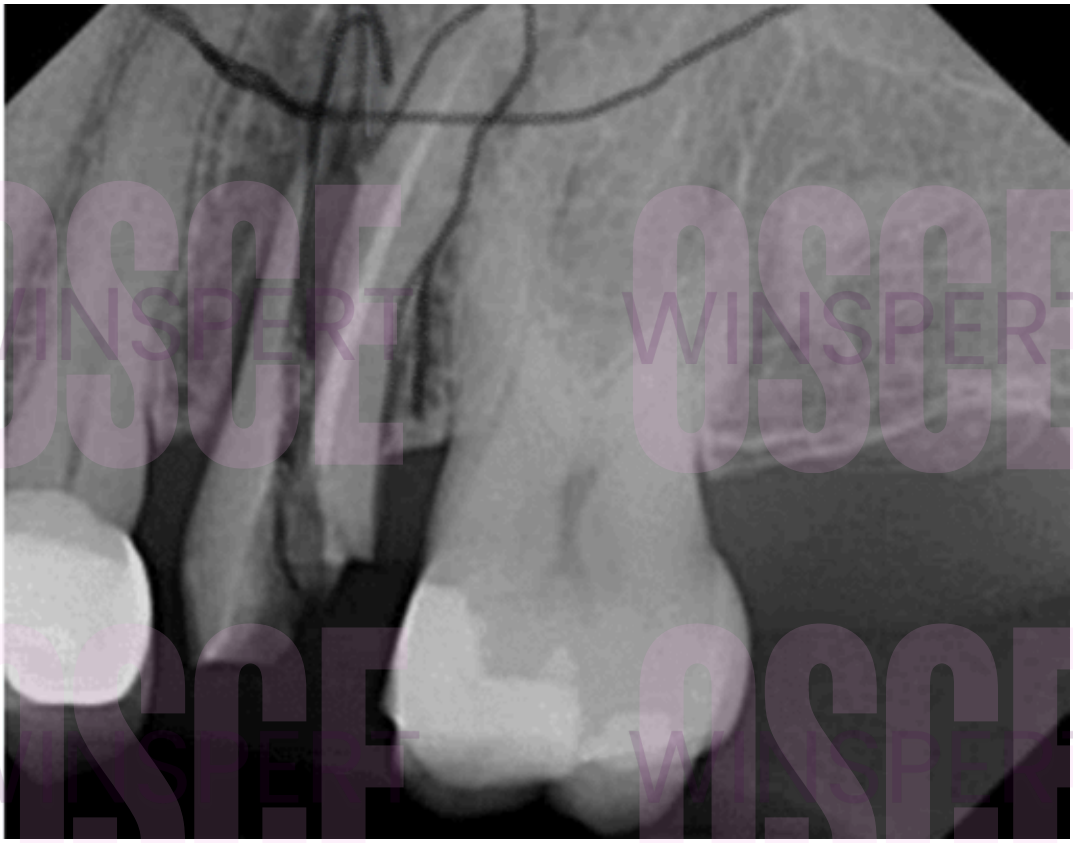
1. Can we not take any support from the RCT tooth?
2. I have had RCT done for such a long time, why do I have to consult a specialist about it now?
3. What do you think of the tooth in front of the gap?
4. What is the best option as per you?
5. Where will you place the rest?
6. How is the design of an RPD?
7. Which tooth will you use as an abutment?

WINSPERT

YELLOW SET: CLUSTER 3

(Clinical Treatment and Evaluation)

CROWN BROKE DURING EXTRACTION



Mr. Singh, a 52-year-old patient, visited your clinic today with complaints of pain and swelling near his ear. He travelled two hours to reach your clinic on a friday afternoon. Upon examination, you found that tooth 16 is severely decayed and irreparable.

You decide to perform extraction and gain informed consent. During the extraction attempt, the crown broke at the gum level, leaving all three roots in the socket. His medical history is clear.

Inform Mr. Singh about the situation, address his concerns, and explain the next steps in his treatment.

CASE:

Opening remarks:

Mr. Singh, I will get you to bite down on this gauze piece and I will sit you upright. Are you okay?
Mr. Singh, as we had discussed this was a complex tooth removal, good news is it is still manageable however, only part of the tooth has come and the rest is still inside being broken at the gum level.
I want to assure you, it is manageable and we will be taking you out of this painful and swelling situation. I understand it must not be easy for you to hear this, I will explain all the following procedures in detail, but for now do you have any questions for me, please feel free to ask?

Management steps:

To begin with, I will take a periapical x-ray to understand what level has the tooth broken and how much is left inside. X-rays are a 2-D representation of a 3-D structure, so it will not be accurate but I will get an idea.

The next step is I will understand the position of roots in comparison to the anatomical structure present near to it, which we call as maxillary sinus. Let me explain to you with the help of x-ray taken here. Can you appreciate this dark shadow, that is what I'm talking about. Now, there are few risks involved, however taking you out of the painful and infectious stage is our priority

I want to be aware of the risks, which are while trying to take the rest of the tooth out, landing into the complication of developing a communication between the sinus and mouth because they are overlapping on the structure. And in a few situations if manipulated in a certain way, root pieces can further break and land inside the sinus.
Now, I want you to be assured, each complication is manageable however out my scope of practice.

So, to look out for the best for you, I would want the rest of the tooth removal process to be seen by either an experienced colleague of mine or by the oral surgeon, who can have waiting times and there would be more finances involved. What are your thoughts Mr. Singh?

(Continued on next page)

What concerns me the most is it's friday afternoon, so the chances of you being seen by a specialist is less. Let me make a few calls and arrange the best for you, as you have travelled all the way for 2 hours. But, I would also like to update you that the Victorian government has made provisions for people travelling more than 100 kms for a specialist treatment, their fees could be waived off either completely or partially. Moreover, you can claim accommodation and the travel fees. I will send you a link for you to apply or have a look. If we cannot arrange anyone for you in the next 24 hours, I will prescribe you antibiotics and painkillers. Before that, any allergies or reactions to medication in the past that I should be aware of?
(Amoxicillin 500mg 8 hourly for no more than 5 days + Metronidazole 400mg 12 hourly for no more than 5 days)

As the swelling is involved near the ear area, we do not want it to spread and increase in size, but if that happens and you feel unable to eat, breathe, swallow and close eyelids. Please call an ambulance at 000, as medical supervision is vital here to avoid medical emergencies.

Are you alright, Mr. Singh?

In the meantime while we make a few arrangements for you, do you want me to give a set of instructions as we have had partial tooth removed.
The first **24 hours after tooth removal** are **very crucial**.

- You are numb in this area because of the effect of anaesthetic, in a few hours it will wade off, until then be careful to not bite your upper lip or inner side of the cheek.
- Once the effect of anaesthetic wears away, you are expected to experience pain and some swelling for the next 48 hours which will settle down in the coming days as the body is coping with the loss of a structure. So, I will advise you to eat or drink something cold and take pain medication before anaesthetic wears away.
- I will prescribe you pain medications as the one I have done before.
- Bleeding is expected to occur, I will place a gauze piece on which you will bite in that area and remove it after 40 minutes. This will add pressure and stop bleeding. It will stop in the next 20 minutes, but even after taking it off, if it bleeds, please apply pressure with more gauze pieces which I will give you and show as well how to do it.
- In the first 24 hours, an initial clot, which is a blood plug, forming a base for healing. Hence, we have to avoid spitting, rinsing out or gargling for 24 hours.
- Now, I understand you will have questions on how to brush teeth, you can brush the rest of the teeth and that area gently instead of spitting, open mouth and let the water flow out on its own and swallow the rest.
- Do you happen to smoke or drink alcohol? It is best to avoid it for 7 days, to avoid any complications of healing. Initial healing takes around 7-10 days, both have constituents which prevent healing with the production of heat and they dissociate the plug that gets formed.
- In terms of eating and drinking, you can drink room temperature or cold water. And in food I will encourage you to eat something of room temperature or cold and soft, as we want to avoid hot food or drinks. Like soups, or porridge. Also, to avoid using straw, as it creates negative pressure and prevents forming plugs at the healing site.
- Avoid strenuous activities like exercising, swimming or weight lifting.

After 24 hours, you can rinse the mouth after each meal with warm salt water to avoid food lodgement in that area. And hasten the process of healing.
This is a lot to remember, so I will give you everything in the written format too.
Please do not hesitate to contact the clinic for any questions. We will give you a call the next day as a follow-up call. Are you feeling alright, Mr. Singh?

If time permits, you can mention about few complications arising after tooth removal

1. **Dry socket**
2. **Post Surgical Infection**
3. **Excessive bleeding**

Important links to read to understand this case better:

Provision for rural people by Victorian government:

https://www.health.vic.gov.au/rural-health/victorian-patient-transport-assistance-scheme-vptas
https://www.health.vic.gov.au/dental-health/access-to-victorias-public-dental-care-services
https://www.health.vic.gov.au/hospitals-and-health-services/public-hospitals-in-victoria
(List of all public hospitals in victoria)

Management:

Therapeutic Guidelines

Care post extraction:

https://www.dhsv.org.au/__data/assets/pdf_file/0011/154874/20150304-2014_FINAL_Care-After-Extraction.pdf

Questions asked in the exam regarding this case:

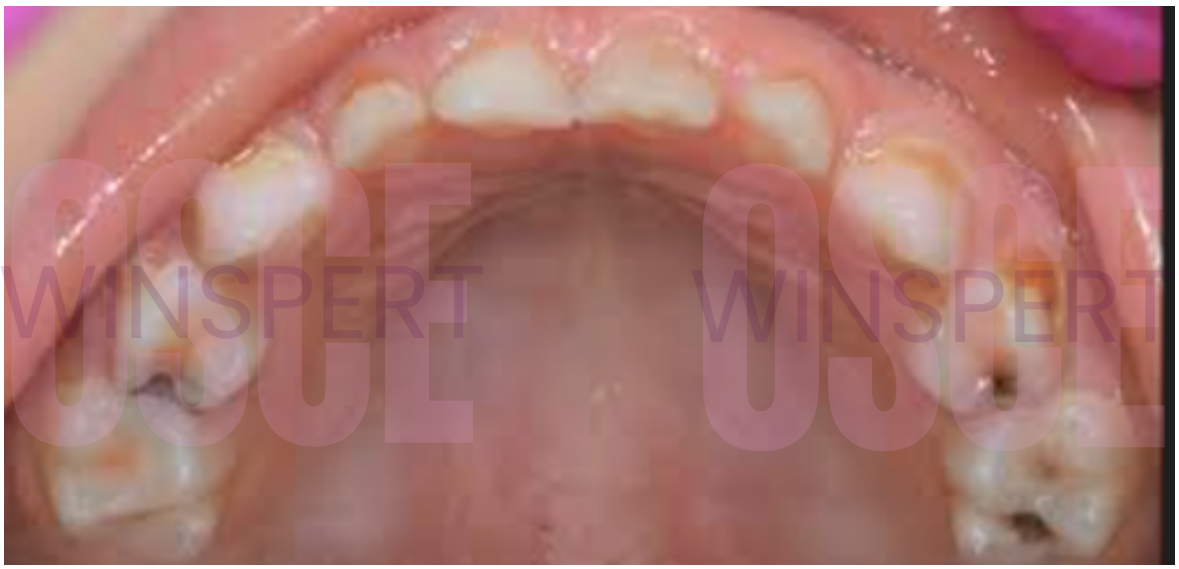
1. **I don't want to continue with you and the specialist is not available till Monday. What should I do?**
2. **If it was complicated, why did you attempt it?**
3. **I do not want to go to a specialist or any hospital, what should I do?**
4. **Who will pay for the specialist fees?**
5. **How will you confirm the size of an OAC?**
6. **If I just leave it like that, what happens?**
7. **I have swelling, I do not want the worst to happen over the weekend, what should we do?**

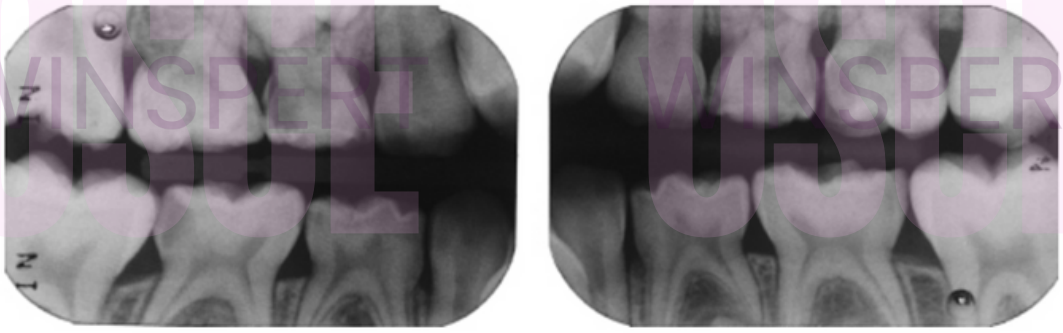
WINSPERT

YELLOW SET: CLUSTER 1

(Clinical Treatment and Evaluation)

PATIENT HAS MULTIPLE BROWN SPOTS ON TEETH AND DAD IS WORRIED (VERSION 2)





Mustafa Khan, an 8 year old boy accompanied by his single dad. His father is worried about the black spots on the back molars. He does not have any symptoms. You did the examination and two bitewings. Mustafa has asthma and uses an inhaler. Address patient concerns and investigate.

Consult with dad about caries risk assessment.

CASE:

Opening remarks/ introduction:

Mrs Lin, I see you are here for the concerns regarding denture, so tell me more about those. And it's affecting your eating too, that must be frustrating, how are you managing your diet?
I can certainly help you with your concerns, however you are having soreness around the corners of your mouth too, your denture issues could be related to this concern too, so is that okay if I ask you a few relevant questions?

Relevant history and explanation of risk factors:

1 Medical history

Medically how are you keeping Mrs Lin? Any medical conditions or medications that I should be aware of? When was the last time you went to your GP? Have any blood tests been done recently?

2 Dental habits

You mentioned your denture is 15 years old and never used lower dentures. Ideally, the expectancy of a denture is between 5-10 years, maximum extent to 15 years. Dentures are static in nature and our jaw bones are dynamic. You could imagine a constant force over a period of 15 years could have led to more than few changes and thus your dentures are ill-fitting. Also what is your routine in terms of maintaining denture hygiene? What do you use to clean your dentures? How often do you visit dentists for denture follow-up or regular visits?

3 Social History

Do you smoke at all or have you smoked in the past?

Promote health in terms of visiting dentists regularly and GP (specially after 50 years of age), also promote with respect to smoking cessation.

Explanation of diagnosis:

Thank you for your patience with my questions Mrs Lin. From my examination, and your answers I'm suspecting the changes of the roof of your mouth is what we call as denture stomatitis. As you mentioned, you have been reluctant to take your dentures out at night, the constant irritation of dentures on our mouth can have effects like this. It could also be a sign of suboptimal denture hygiene.

Additionally, you mentioned the soreness on the corners of your mouth, this could be because of several reasons, we call it angular cheilitis. Possibly because of nutritional deficiencies, manifestation of a systemic granulomatous disease, imbalance of mouth height or mixed bacterial and fungal infection.

Are you with me so far, Mrs Lin? Do you want me to repeat anything at all?

Investigations:

To begin with, I will check outside of the mouth to appreciate any swelling or change in face profile and inside the mouth I will check all the teeth and the surrounding gums.
I will carefully look at the teeth with black spots.
Also I will use my calibrated instrument to check all the teeth and the gums.
And to understand his food habits the best, can I get a diet chart detailing about 2 week days and 2 days of the weekend. You can get it next week and we will discuss it in detail.

Important links to read to understand this case better:

Periodontal abscess:

https://www.ncbi.nlm.nih.gov/books/NBK560625/#:~:text=A%20periodontal%20abscess%20is%20described,tissues%20and%20depicting%20clear%20symptoms.

Warfarin and thyroxine interaction:

https://www.drugs.com/drug-interactions/coumadin-with-levothyroxine-2311-1529-1463-0.html

Hypothyroidism and its effect on periodontium:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7025985/

Management:

Read Therapeutic Guidelines.

Questions asked in the exam regarding this case:

1. My tooth is so wobbly, why can't you take it out?
2. What is a prick test?
3. Can a tooth fall out on its own?
4. What will the specialist do?
5. Will you be able to arrange a specialist?
6. Panadeine forte was prescribed by my GP, why do you say it is not good?

WINSPERT

GOLD SET: CLUSTER 1

(Clinical Treatment and Evaluation)

CONSENT FOR EXTRACTION WITH M/H OF PREDNISOLONE AND ACTONEL

Mrs. Xiao, a 55-year-old patient, visited your clinic today, complaining of pain in tooth 37 for the past 10 days. Upon examination, you find that tooth 37 is severely decayed and beyond repair, necessitating extraction. Medically, she is in good health. She has been taking Actonel 150 mg once a month for osteoporosis for the past four months and prednisolone 10 mg daily for rheumatoid arthritis for the past seven years. Additionally, she had a hip replacement three years ago.

3 versions of possible diagnosis

1. **Irreversible pulpitis**
2. **Periapical infection**
3. **Wobbly tooth with no pain**

Obtain consent for the extraction, explain the necessary investigations, and address her concerns.

CASE:

Opening remarks/ statement:

Mrs. Xiao with the pain of 10 days, it's not the best few days for you, how are you coping with this pain? I hope you are able to eat and sleep well. Did you eat this morning? (If no and you feel unwell, let me know, I can arrange something for you).
I have had a look inside your mouth, to help you best today can I ask you a few relevant questions?

Exploring the chief complaint

(Ideally, pain questions need to be asked in detail, but this case has extensive medical history that needs to be addressed, because of the time constraint: asking relevant questions about pain like the nature of the pain, if it has changed in its intensity, any swelling or fever? And if pain is affecting her daily routine?

(If any question you ask in the opening remarks, do not ask them again).

Site

- "Where is the pain?"
- "Can you point to the tooth or area in question?"

Onset

- "When did the pain start?"
- "Did it come on suddenly or gradually?"

Character

- "How would you describe the pain?" (e.g. achey, sore, throbbing, sharp)
- "Is the pain constant or does it come and go?"
- "Is it similar to the one experienced before getting any treatment?"

Radiation

- "Does the pain spread elsewhere?"

Associations

- "Are there any other symptoms that seem associated with the pain?" (e.g. bad taste, fever, discharge)
- "Any swelling around the gums or on the face observed ?"
- "Any wobbly teeth appreciated?"

Time course

- "How has the pain changed over time?"

Exacerbating or relieving factors

- "Does anything make the pain better?" (e.g. analgesics)
- "Does anything make it worse or trigger it?" (e.g. cold, touch, bending, lying down)

Severity

- "On a scale of 0-10, how severe is the pain, if 0 is no pain and 10 is the worst pain you've ever experienced?"

Relevant history and explanation of risk factors:

(Patient has an elaborate medical history. So, most of the time will be consumed with this. Additionally you can ask about the extraction associated history).
I have had a brief look inside the mouth and I can say the tooth does not look promising and unfortunately needs to come out. However, what caught my attention was the medications that you take.

1 Medical history

Thank you for filling out the detailed form for us. I happen to notice you have been taking prednisolone for 7 years and actonel since 4 months.
First, I would like to know how GP follow ups are going with respect to medications and medical conditions? (That's good to know Mrs. Xiao)
Both these medications have quite an impact on our body if taken for a longer duration.
How did you go after the hip replacement procedure? (Great to know everything is going well).

2 Social History

Do you smoke Mrs. Xiao? How about alcohol?

3 Risk Factors

My priority is to take you out of this painful situation. However, risks need to be considered to prevent you from landing into a complication.

When I mentioned an impact on the general body, it means Prednisolone medication suppresses our immune system if taken for more than 3 weeks and thus it will affect the healing process after tooth removal. But, what's more concerning is the medical emergency Adrenal crisis associated with this medication taken in the long run. This situation arises if a patient taking this medication is going through physiological stress, which means your body is in a tensed state possibly because of a tooth removal procedure and because of this stressed state, stomach upset and the body's blood levels drop down to an extent where the patient can collapse any time even while asleep. Thus, to prevent this situation from happening, patients need an action plan or recommendation of antibiotic prophylaxis given by a treating medical practitioner, be seen for the morning appointment and be accompanied by a responsible adult for 2-3 days.
Are you alright so far? Please do not hesitate to stop me and ask at any time.

Also, with the medication Actonel, it's a bone modulating drug meaning having an impact on the growth of low jaw bone. And, if this medication is taken along with other risk factors present like immunosuppression (other factors present like periodontal problem, local pus, smoking, denture use), it puts you in a situation to develop a complication called Medication related osteonecrosis of the jaw. This is a condition where the bone fails to heal and dies especially if the tooth is taken out and the bone is still exposed after 8 weeks.

Because of these risks involved, Mrs. Xiao, the best person to take care of your teeth and manage if complications arise, is an oral surgeon. What are your thoughts?

Antibiotics

- In this case, usually, the patient will say can you please give me antibiotics as the previous dentist gave them to prevent infection in the hip replacement joint.
- Based on GP's decision, antibiotic prohylaxis could be needed if the patient is taking prednisolone for a really long time.
- Active and acute peri-apical infection if present, then we will give antibiotics, unless we are doing an active treatment within 24 hours).

Depending on the given above situation, you will decide to give antibiotics.

For the first situation, mention, that Mrs Xiao I understand your concern, let me understand the notes from the previous dentist for the need of antibiotics. The reason I'm hesitant is because there have been changes in the guidelines and we prevent antibiotic prescription in avoidable situations because of risks associated with antibiotic use.
The risks range from having stomach upsets to hypersensitivity reactions.

Moreover, there is more risk of developing infection from our daily oral hygiene habits.

Investigations

How about Mrs. Xiao, I perform few tests to confirm the status of your tooth and make the best plan for you to decide on?
E/O: I will begin with checking the symmetry of your face. Also, I will feel with my hands if there are any sore spots on your face and if we could appreciate any swollen lymphnodes around the face.

I/O: Inside the mouth I will have a look at the area of concern thoroughly. Have a feel of the gums in the area with my gloved fingers to know if you feel the pain or appreciate any pus coming out of the area. The next I will check if the teeth are wobbly in the region.
I have a calibrated instrument to check the depths of gums of teeth in the area.
Also, I will do a test called as pulp sensibility where I'm going to apply a cold spray onto your teeth. You let me know when you feel the cold sensation and when the sensation disappears, as depending on that I will understand the status of the tooth.
Later after all these tests, I will take one xray specific to this area called as a periapical x-ray.

Important aspects in this case

- To understand the history of patient in terms of pain history given. Whether its an irreversible pulpitis, periodontal abscess or periapical infection and the prognosis of the tooth. (remeber this is a cluster 1 case, try to gain information more than management).
- This case could be about patient requesting for antibiotic prophylaxis, instead of saying no, try to understand why patient wants it, if previously given was it consulted with GP and given.
- Bold part would most probably ask for consent for extraction: Consent is mainly about informing the patient about the risks and patient understanding the risks associated with it. Risks mainly involving the medication actonel and prednisolone.

WINSPERT

Important links to read to understand this case better:

Learning about actonel:

https://www.nps.org.au/assets/medicines/e2fe712a-94d0-4165-9b61-a53300ff0a89.pdf

Prednisolone:

Read therapeutic guidelines.
https://www.healthdirect.gov.au/prednisolone

The risk of MRONJ:

Read therapeutic guidelines. Specially the flow chart about the risk.

Adrenal crisis:

https://www.rch.org.au/uploadedFiles/Main/Content/endo/CPG%20adrenal%20suppression%20secondary%20to%20exogenous%20glucocorticoids%20for%20website.pdf

Questions asked in the exam regarding this case:

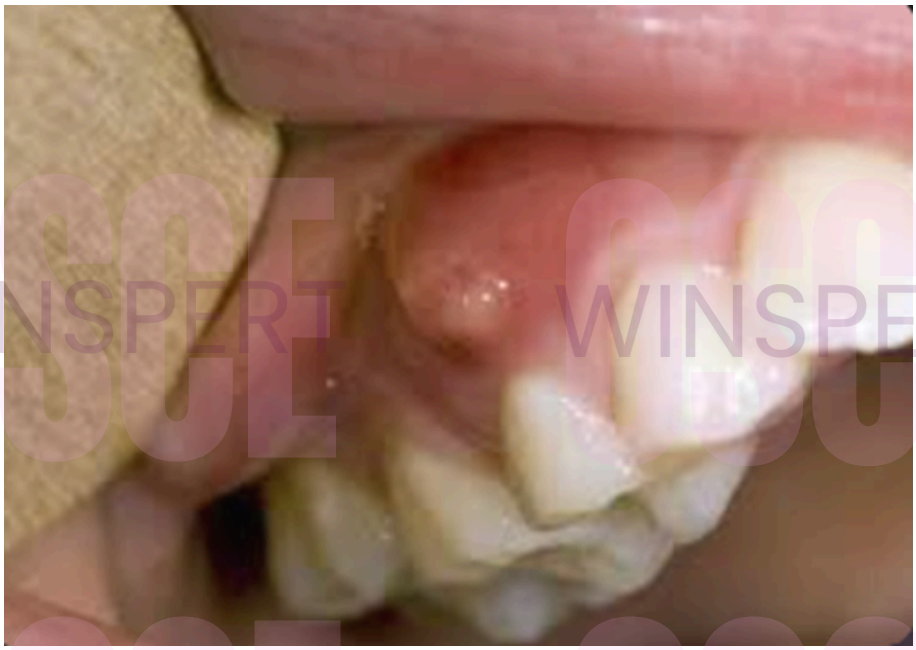
1. **Why can't you treat it?**
2. **Why do I have to go to the GP?**

WINSPERT

GOLD SET: CLUSTER 1

(Clinical Treatment and Evaluation)

FIVE YEARS OLD WITH A DRAINING SINUS



Five-year-old Sally is here today with her mother, who reports that Sally is experiencing discomfort and has a pimple on the upper left side. The pain experience is dull and also has some bad taste in the mouth. At times she also experiences sensitivity in some other teeth which is triggered by hot and cold.

Upon examination, you observe a draining sinus in tooth 54 region. Sally had a GIC filling done by the school nurse a few months ago. Sally is not bothered by the filling but her mother is upset with the nurse.

Sally's diet consists of juices and muesli.

You need to gather more information, determine the necessary investigations, and address her mother's concerns.

CASE:

HOPC

Sally's mum, it must not be easy for you to see Sally in this condition. (Especially with mother, be extra empathetic). Sally's mum, how would you want me to address you today?
Okay Mrs/ Ms...., so let's understand more about Sally's situation. How will you describe the pain experienced by Sally? When did you notice a pimple ? Is it the first time she has got pimple on gums? Did the pimple burst anytime?

If pain is present ask the following questions:

Site

- "Where is the pain?"
- "Can she point to the tooth or area?"

Onset

- "When did the pain start?"
- "Did it come on suddenly or gradually?"

Character

- "Did you notice any change in Sally's routine habits?" (e.g. unable to sleep well, eat well or play)
- "Is the pain constant or does it come and go?"

Radiation

- "Does the pain spread elsewhere?"

Associations

- "You mentioned she has bad taste, are there any other symptoms that seem associated with the pain?" (e.g. swelling, fever).

Exacerbating or relieving factors

- "Have you noticed, does anything make the pain better?" (e.g. analgesics)
- "Have you noticed, does anything make it worse or trigger it?" (e.g. cold, touch, bending, lying down)

Addressing the complaint:

(If the mum wants to talk about this first, focus on this first before HOPC).
Mrs./ Ms....., when was the filling done for Sally? How did she go with the treatment? Any discomfort that was experienced immediately? Did the school provide with the details of Sally's treatment?
Mrs./ Ms....., I can understand your apprehension, which is valid.

(If patient's mum is insisting on complaints: Mrs./ Ms....., you have all rights to complaint, however, how about we discuss the situation with school, get her records transferred? You can also have a word with the dentists/nurses of school and get clarity. What are your thoughts on this Mrs./Ms...? If you are not comfortable to talk to school nurse or dentist, we can discuss this with school authorities and they would help us)

WINSPERT

Explanation of possible causes:

Mrs./ Ms...., a pimple on gums appear after a decay from the tooth has progressed to the end of the tooth and then the infected pus formed by germs over a long time comes out through the least resisted way via gums. If that pimple bursts, there would be pus coming out from it. And that least resisted way could be anywhere in the gums which is not directly related to the tooth nearby. Thus, performing few tests would give us clarity on that.

And there could be more than one reason for it to happen in her case. So, Mrs./Ms... will it be okay for you to answer few relevant questions for me?

Relevant history and explanation of risk factors:

1 Dental History

Other than the school visit to dentists. How often does Sally visit dentist? Have any concerns been raised in the previous dental visits?

Correlation: What happens within teeth and gums couldn't be appreciated with our eyes, hence few tests by dentists can help us intervene early stages of decay.

2 Oral History

How does sally go with her brushing of teeth? Do you assist her? Have you introduced floss to her? What toothpaste does she uses?

Correlation: The start of any disease or its progression is best controlled by our own efforts. Hence, taking care of teeth at home major contribute to decay or further stages. I understand children and toothbrushing don't go well always. I will help you with some interesting videos to tackle this in kids.

3 Social History

How is Sally's diet? Kids have sweet tooth and that's alright too. Does Sally have one? Do you think she frequently snacks? And how is her water intake?

Correlation: Why do I ask about this, our diet plays an important part as it's the fuel for the progression of decay. Moreover, if given frequently we could imagine how much damage it will cause. Thus, we need to give enough water to rinse it away, as well as innate mechanism of our saliva also helps to prevent decay.

4 Medical History

Sally looks fit and well to me. Did she have any major illnesses or fever during her early few months of life? How is she medically Mrs./Ms...? Is she on any medications? Does she have any allergies?

Correlation: Our mouth is a mirror to the medical conditions. Also medications we consume could have an impact on our teeth, gums and saliva.

WINSPERT

Important points for this case:

- Addressing the complaint, if mother wants to talk about the complain procedure, walk her through the process.
- With young kids, parents will be emotionally thinking, so be considerate and try to promote health later after understanding concerns.
- If she is in pain and did not sleep or eat well, try to encourage mum about looking into the cause as we want the best for Sally.

Important links to read to understand this case better:

Tooth calcification times and defects associated:

https://aapd.org.au/resources/enamel-defects/

Brochure on teeth and maternal health:

https://www.dhsv.org.au/__data/assets/pdf_file/0016/152251/teeth-oral-health-information-for-maternal-and-child-health-nurses-manual.pdf

Oral health guidelines for child health:

https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2014_020.pdf

Defects on the teeth because of early issues in life:(not too relevant article, but can have a read).

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3671208/

Questions asked in the exam regarding this case:

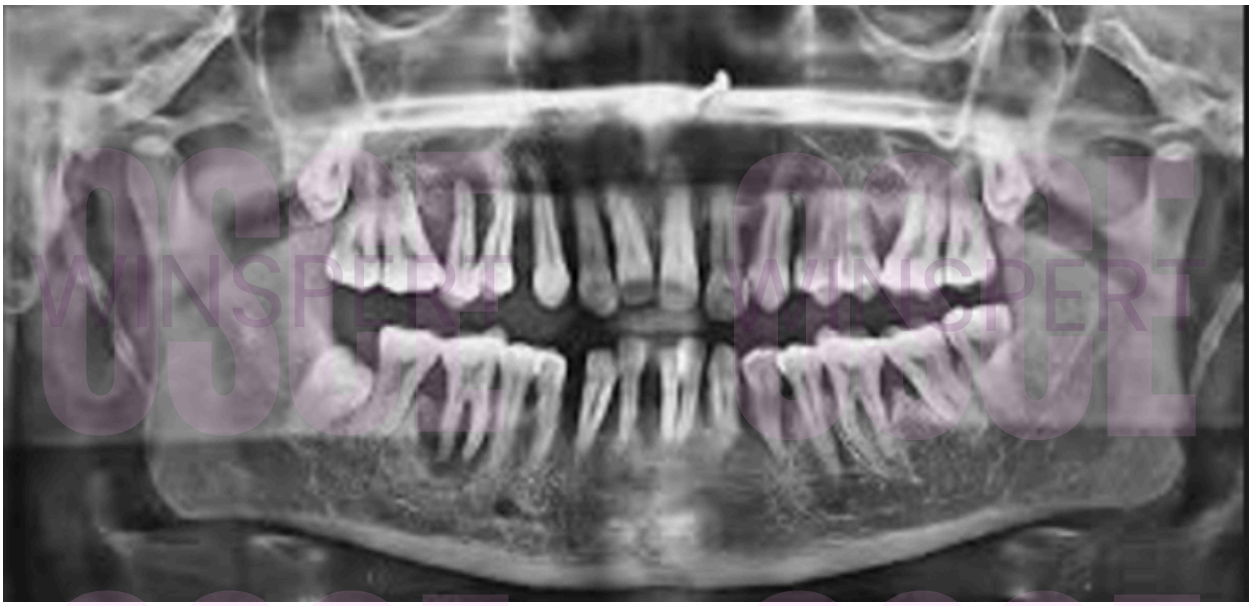
1. Do you think the nurse did a bad job?
2. She doesn't want to quit giving juices?
3. Why has this treatment failed, it was done 3 months back?
4. I want to lodge a complaint, how to proceed?
5. I don't like putting my hand in the mouth for flossing, any other alternatives?
6. Can you use adult toothpaste forever?

WINSPERT

GOLD SET: CLUSTER 2

(Diagnosis and Management)

GENERALISED SEVERE PERIODONTITIS IN A PATIENT (VERSION 1)



Mr./Mrs. Baldowski, a 55-year-old patient, is attending your clinic today with complaints of bleeding gums and sensitivity. He also feels his teeth are becoming wobbly. Upon examination, you find that some of the teeth have grade 3 mobility. An OPG taken today reveals generalised bone loss. You diagnose the condition as generalised periodontitis with stage 4 and grade C.

His last visit to the dentist was long time ago.

His medical records indicate that he hasn't seen a GP in 10 years.

You decide to refer her to a specialist.

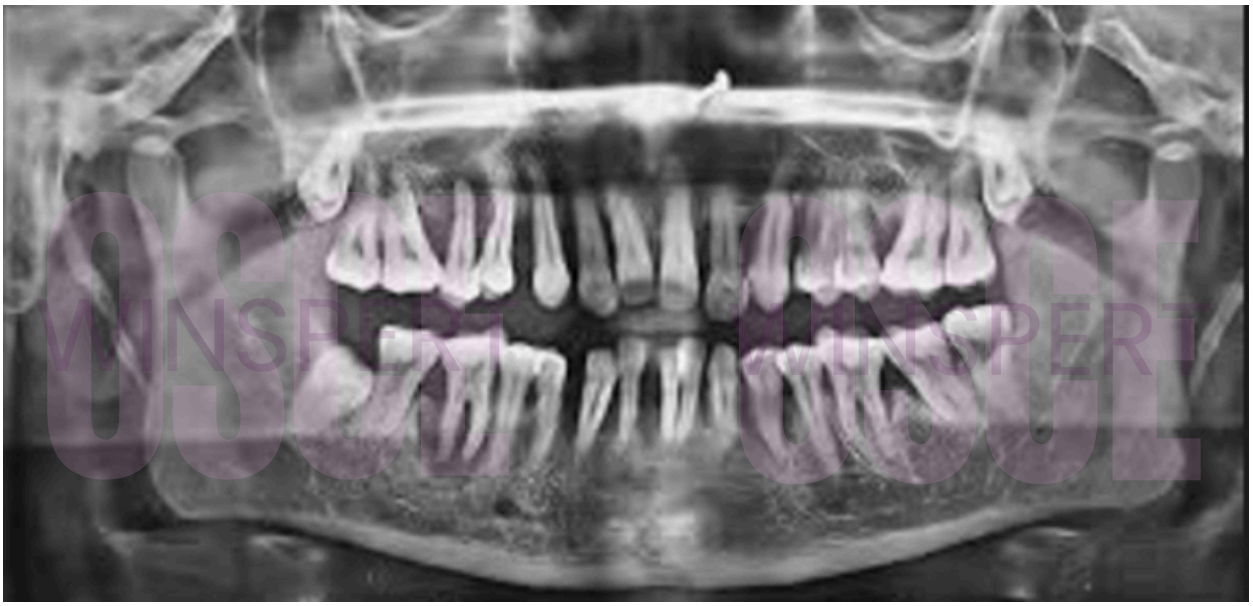
Explain the reasons for the referral and address any concerns he may have.

WINSPERT

GOLD SET: CLUSTER 2

(Diagnosis and Management)

GENERALISED SEVERE PERIODONTITIS IN A PATIENT (VERSION 2)



Mr./Mrs. Baldowski, a 55-year-old patient, is attending your clinic today with complaints of bleeding gums and sensitivity. He has travelled for hours to visit you and belongs to an aboriginal community. He also feels his teeth are becoming wobbly. Upon examination, you find that some of the teeth have grade 3 mobility. An OPG taken today reveals generalised bone loss. You diagnose the condition as generalised periodontitis with stage 4 and grade C.

His last visit to the dentist was long time ago as he lives in the remote area.

His medical records indicate that he hasn't seen a GP in 10 years.

You decide to refer her to a specialist

Explain the reasons for the referral and address any concerns he may have.

CASE:

Introductory remarks:

Mr. Baldowski, thank your for your patience while I was checking inside your mouth. Can you tell me, more about the bleeding gums and the sensitivity that you are experiencing?
I also appreciate how far you have travelled to get here and hope to help you in the best possible way.
While examining you and from your history provided, there are areas that caught my attention and possibly the reason for you to have bleeding gums and sensitivity.
Let me explain you with my findings and on the x-ray here.

Explanation of findings:

(You did hear me call out few numbers while I was checking the gums, those were the gum depths and they ususally range between 2-3mm. Now, in your case, it ranged between 8-10 mm. - mention this only if present in the scenario).
Can you see the overview of all your teeth in this x-ray? Now, the usual bone levels for any tooth are somewhere near the neck of the tooth (point it out on the xray). However, the levels of your bone has gone way beyond the neck of the tooth in most of your teeth and that too at an angle. Because, bone supports the tooth, a compromised bone has resulted in most of your teeth to become wobbly.
Are you following so far Mr. Baldowski?

Discussion of medical records/ history given:

Also, Mr Baldowski, our oral health is a reflection of our general body health. And they have a two way relationship.
I happened to notice, you mentioned that you haven't been to the GP in a long time. Thank you for being honest, Mr. Baldowski, may I know the reason for this ?
And when was your last blood test done?

Why I was stressing on this, is because few medical conditions like diabetes mellitus and immunological conditions could be impacting oral health, specially our gums and bone. We wouldn't want to lose healthy teeth if the supporting structures are compromised?
Because of a greater extent of supporting structures are affected in your situation, and that concerns me.

Do you smoke or have you smoked in the past, Mr. Baldowski? (If no - lets focus on other risk factors)

Mr. Baldowski, I respect your decision, however I would want to encourage you on quitting smoking (If patient used to smoke for lot of years - congratulate on quitting, and say I'm so proud of you, as it is not an easy task). To explain in short, smoking reduces the blood supply and saliva thus increasing the bad bacteria responsible for gum disease. Moreover, body's capacity to fight these bacteria reduces. All in all, worsens the gum and bone condition.

Diagnosis:

And because of the compromised supporting structures, you are experiencing bleeding gums and sensitivity. All these features are characteristic of a gum and bone disease, we term it as periodontitis.
And in your situation it is Stage 4 and Grade C periodontitis. What this means, is:
Stage 4 - relates to the excessive amount of bone loss of the teeth affecting the wobbliness of the teeth.
Grade C - Probably your medical status and smoking, has reflected on gums and led to the severe condition. These are modifying factors.

Is there any part you want me to repeat? Please do not hesitate, Mr. Baldowski.

Relevant history and explanation of risk factors:

Mr. Baldowski, to help you out in a holistic way, is that okay if I ask you a few more relevant questions? As I don't want you to be losing teeth.
What are your hopes and expectations with your teeth?

1 Dental History

When was your last dental visit? What was the purpose for the same?
Why was I asking this, is because, we try our best to look after the teeth but what's happening below the gums and within our teeth is best judged by a dentist. And thus to intervene any issues at the earliest best we see a dentist 6 monthly to keep our mouth healthy.

2 Oral History

How do you look after your teeth?
Taking care of teeth is combined efforts from an individual and dentist with major contributing factors from individuals.
Most missed areas by us is between two teeth. And that's where the beginning of gum disease is. Hence, incorporating floss or interdental brushes in our routine is very important.

Management:

For the bleeding and sensitivity concerns of yours, they are interdependent on your gums. Thus we need to manage it stepwise.
And with the severity of your condition Mr Baldowski, it's best to be seen by the expertise of a periodontist, a gum specialist.
Because, a specialist has special instrumentation and will have a surgical approach, which will help to clean the deepest areas as well gauge prognosis for each tooth.
I understand the travel is not easy for you. And thus to prioritise your health, Victorian Patient Transport Assistance Scheme (VPTAS) by
government of victoria would be of help. If you want to consider this, Royal dental hospital provides assistance with transport and accommodation both for specialist treatment.

In terms of treatment for today, Mr. Baldowski, how far is a medical centre from you? (After knowing the possibility of patient visiting medical centre whether it's early or far, decide on doing superficial clean today - if patient's visit to a GP is after 2 weeks or more - do superficial clean for him today as we do not want his medical health to compromise more).

As my superficial clean won't suffice and stabilise your situation. Rather, it can even create areas of non-healing wounds. So, I do not want to rush. I hope you are able to understand?
But, Mr. Baldowski, I'm going to help you and provide a detailed plan to help you with your gun situation.
And after the blood test, we can take steps in accordance with your GP and specialist to improve your oral health.

Important points for this case:

- Patients are negligent about oral and medical health so understanding the patient's thoughts on health is important.
- Stressing the importance of correlation of risk factors to his/her condition.
- It's a lengthy case, so stressing on medical history, dental history and smoking prioritise that.
- Providing an appropriate rationale for the referral to periodontist and GP.
- Management and approach changes as the patient is travelling from rural areas and if belongs to an aboriginal community.

Important links to read to understand this case better:

Medical conditions and periodontal disease

https://health.adelaide.edu.au/arcpoh/dperu/colgate-periodontal-education-program/practice-information-sheets/medical-conditions-affecting-the

https://www.colgateprofessional.com.au/content/dam/cp-sites/oral-care/professional/global/general/pdf/OSCD.pdf
(Chapter 5 and 6)

https://ada.org.au/getmedia/7ec60bb3-9139-456c-9e4b-1ea5cc05c98e/ADA_Submission_Inquiry-into-Diabetes-ADA-submission-31-Aug-2023-final-approved.pdf

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/diabetes-and-oral-health

https://www.qld.gov.au/health/staying-healthy/oral-health/information-for/people-living-with-disability-or-health-conditions/diabetes-and-oral-health

https://www.teeth.org.au/diabetes

Transport and accommodation assistance by government:

https://www.dhsv.org.au/archived/preparing-for-your-appointment/travelling-from-rural-or-remote-area
(At this stage applicable only to royal dental hospital)

Brochures for patients to read about periodontal treatment:

https://adavb.org/news-media/latest-news/new-fact-sheet---periodontal--gum--disease-

Smoking quitlines:

https://www.quithq.initiatives.qld.gov.au/

Questions asked in the exam regarding this case:

1. **You have done the examination, so tell me what is happening with my teeth?**
2. **I don't want to go to the specialist, what are the other options?**
3. **Do you think this has happened to me recently?**
4. **Why can't you temporarily clean for me?**

WINSPERT

GOLD SET: CLUSTER 2

(Diagnosis and Management)

PATIENT WITH HAEMATOMA

Mrs. Heather James is a regular patient at your clinic. Last week, you administered an inferior alveolar nerve block (IANB) and extracted her severely decayed tooth 36. The procedure was uneventful, and you provided her with post-operative instructions, advising her to return for a follow-up after a week.

Today, one week later, Mrs. James has returned, complaining of pain, swelling, and limited mouth opening. Upon examination, you observe facial swelling and a mouth opening of approximately 20 mm. You diagnose her with:

1. A hematoma, myospasm, and trismus.
2. .A hematoma.

Explain that these conditions may have developed due to complications from the local anaesthesia technique used during the procedure. Then, outline the steps you will take to manage her condition.

CASE:

Introductory paragraph/ empathetic remarks:

Mrs. James, it's not in the best state that you are visiting me today. Unfortunate situations are not foreseeable and I'm sorry to see you in this state. However, I'm glad you have faith in me and have visited me. I want to assure you Mrs. James, I will be with you until you feel better.
To manage you best Mrs James, let's understand from the beginning how did pain and swelling start ?
I hope you ate and slept well.

Understanding the seriousness:

(In any swelling situation, first begin with asking the severe features from therapeutic guidelines)
Mrs. Heather, do you feel breathless or unable to swallow because of swelling ? Also, you are unable to open your mouth, I will know the seriousness of that by checking how many of your fingers can fit in your open mouth.

The reason I was asking these questions, Heather, is to understand the seriousness and need to get medical attention first.

Explaining the condition/ Diagnosis:

Now, Mrs. James, after having a look inside your mouth and from your symptoms, I'm considering the possibility of you having a haematoma and because of your limited mouth opening the swelling has led to myospasm and trismus. Apologies Heather, for using all the jargon words here. Let me explain to you each term.
Before proceeding to the removal, we discussed a few complications, one of which was haematoma, which is swelling due to pooling of blood. How does this happen? - injection technique used in your case targets a very deep area, we use few landmarks as a reference. However, because it's deep into the skin, there are bundles of nerves and blood vessels. Thus, chances of nicking the vessel are more. We take all the precautions however, while moving the needle inside or outside, it can happen.
When the pooling of the blood results in swelling it causes pressure and limits the muscle movement and the mouth opening, we call it myospasm and trismus respectively.

Management:

Heather, I will be with you until you are out of the pain and this situation, I assure you this. Haematoma usually takes a few weeks to resolve, ranging from a couple of weeks to 4 weeks and the opening of mouth will take a week or 14 days to resolve. Management involves home remedies and wait and watch policy. There are several methods involved, I will tell you as well as give you in writing.

Application of heat:

Placement of moist hot towels on the affected area for 10-20min/h for the dissociation of pooled blood.
I will prescribe you **painkillers**, so just confirming Heather, any changes to your medical history or allergies since I saw you last? (if no)
Paracetamol 1000 mg 4 times a day for 3 days.
Ibuprofen 400 mg thrice daily for 3 days.
I will review you after 3 days.
A further advancement of the hematoma and its infection needs to be prevented,
hence **I will prescribe you antibiotics**:-
Amoxicillin 500 mg thrice daily for 5 days.
Metronidazole 400 mg twice daily for 5 days.
(With this medication avoiding drinking alcohol as there are side effects associated) (You can mention about the symptoms of disulfiram reaction - if patient asks)
To relieve the mouth opening I will prescribe you muscle relaxants and show you exercise:-
Benzodiazepine 2.5 mg 3 times a day for 3 days.
For physiotherapy, opening and closing, as well as lateral movements of the lower jaw for 5 minutes every 3 to 4 hours.

How are you after all this information Heather? I understand it's a lot.

Haematoma usually resolves on its own and I will be doing follow ups every week and monitoring. However, if you are comfortable seeing an oral surgeon from the start, you also have that as an option. An oral surgeon will take a radiograph for muscles and intervene in the best possible way.

What are your thoughts on this Heather?

Important points for this case:

- Patients in pain and swelling need to be heard. So active listening to what patient needs are.
- Before giving management, knowing about the seriousness of the patient's situation. So, ask about the severe features of spreading odontogenic infection.
- In this case, it's probably because of your procedural complication, so accepting and reassuring patient that you will take active efforts.
- Providing the option of visiting an oral surgeon from the beginning.

Important links to read to understand this case better:

Haematoma, pain and trismus following IANB:

https://www.iosrjournals.org/iosr-jdms/papers/Vol18-issue5/Series-14/F1805142630.pdf

Haematoma on cheek after infiltration:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6301842/

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Questions asked in the exam regarding this case:

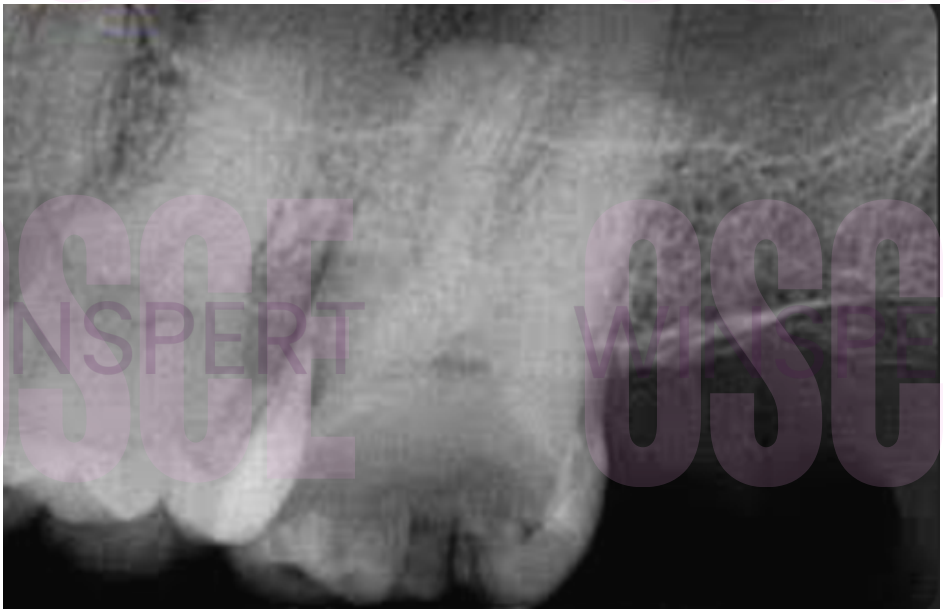
1. I had dental filling in the past but this has never happened before, why now?
2. Is this your fault?
3. I won't keep doing compressions, what is the alternative?
4. How will you prevent that from happening in future?
5. Are you going to refund? Who will pay the specialist?
6. What is an aspiration technique?
7. You mean because of my fault it can get infected?
8. Why can't I eat a whole apple now?

WINSPERT

GOLD SET: CLUSTER 3

(Clinical Treatment and Evaluation)

PATIENT WORRIED ABOUT OAC AND INFECTION CONTROL (VERSION 1)



Terry Jones, a student nurse from New Zealand and of Torres Strait Islander heritage, is visiting your clinic today with a complaint of pain from a top right tooth. During your examination, you observe that tooth 16 is severely decayed, with roots nearly reaching the sinus. You diagnose the condition as irreversible pulpitis and explain options to treat this tooth.

She prefers to extract the tooth as her family beliefs are to go for extraction over other treatments.

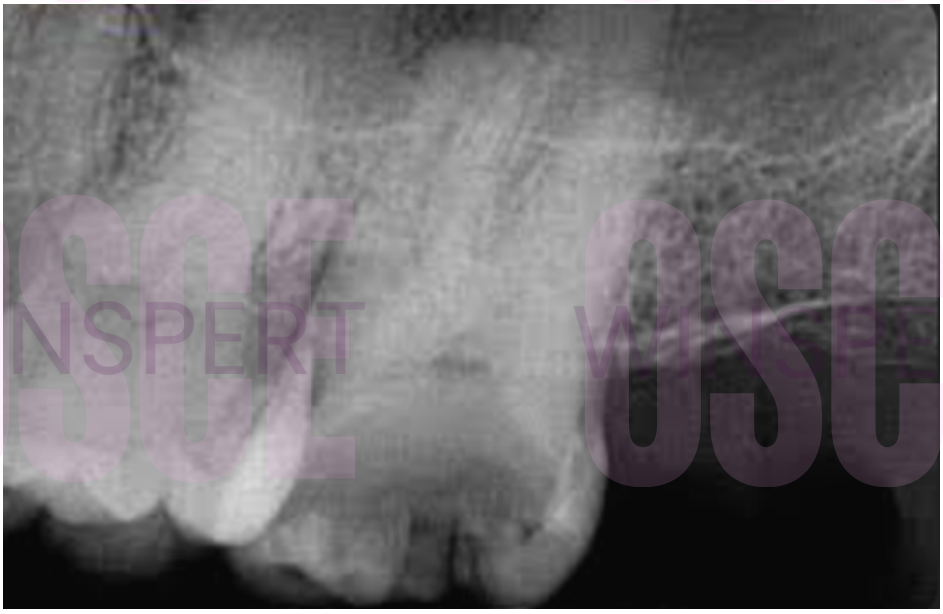
Terry is interested in learning more about Oroantral Communication (OAC). And the infection control protocols your clinic follows to prevent the transmission of HIV and hepatitis.

WINSPERT

GOLD SET: CLUSTER 3

(Clinical Treatment and Evaluation)

PATIENT WORRIED ABOUT OAC AND INFECTION CONTROL (VERSION 2)



Terry Jones, a student nurse from New Zealand and of Torres Strait Islander heritage, is visiting you in clinic today. You work in a public hospital, where she studies. She has a complaint of unbearable pain from a top right tooth. During your examination, you observe that tooth 16 is severely decayed, with roots nearly reaching the sinus. You diagnose the condition as irreversible pulpitis and explain options to treat this tooth.

She prefers to extract the tooth as her family beliefs are to go for extraction over other treatments.

Terry is interested in learning more about Oroantral Communication (OAC). And the infection control protocols your clinic follows to prevent the transmission of HIV and hepatitis.

CASE: (public hospital version)

WINSPERT

Introductory paragraph/ empathetic remarks:

Ms. Jones, having a painful tooth is one of the most unbearable pain experience. How are you coping with it?
I have had a thorough look inside mouth and I would like to describe few options to you. Just before that, did you eat and sleep well in the last 24 hours?

Introductory questions to judge situation/ need of antibiotics:

(Patient is in uncontrollable pain, do not ask all the history questions)
How about any swelling near your gums or on face? (If yes - Did the swelling affect closing of your eyes?)
Did you happen to check if you had fever? (Do not worry, I will check with thermometer too).

Explanation of situation:

Terry, the unbearable pain experienced by you is because of the nerves of the tooth being involved. Let me explain you with the help of x-ray and my diagram here. A tooth has 3 layers and the decay started from the top most and reached the 3rd layer which encompasses the nerves and vessels of the tooth. As you can appreciate on the x-ray that I'm pointing at. (If it's an irreversible pulpitis as mentioned in scenario then you can say as follows:)

This painful tooth condition is very common within patients, we call it as irreversible pulpitis which means the nerves of the teeth are irreversibly damaged.

Ms. Jones, what are your hopes or expectations with this tooth?

Clinical treatment and evaluation:

Terry, I will walk you through each option advisable for this tooth, however, you always have an option of no treatment.

Having said that Terry, with no treatment there would be worsening of the situation followed by an involvement of the tooth supporting tissues and the infection spreading further. This is not something I would want for you.

The most common treatment by saving a tooth is what we call as root canal treatment. We gauge the remaining tooth structure and decide for this treatment. It's a procedure where we remove the inflamed nerves from the tooth and fill it followed by the placement of crown on top of it.

Are you following so far Ms. Jones?
(If patient says I want to extract the tooth when you ask about expectations/ hopes - then mention Ms. Jones I respect your decision however, as your practitioner it's my responsibility to tell you all the options and that too best ones).
The advantage is we save the tooth, however, it is a multi-step procedure, it involves more finances and has an additional procedure after it.

The next one is tooth removal, this procedure we do not encourage unless prognosis is bad for a tooth. The reason being Ms. Jones, after tooth removal we have to look for replacement option immediately as it impacts the adjacent teeth and also the chewing potential in a back tooth.
Terry, I respect the cultural beliefs on taking this tooth out, however there are few concerns that I wanted to voice out. First being, how are your medical records? When was your last blood test and is eveyrthing well? The reason I ask is because healing process is impacted in few medical situations. And do you smoke Ms. Jones? The reason for that being a delay in healing process, also I will give you set of instructions to follow after tooth removal.
But, before everything, I need to discuss the striking possibility of acomplication in your case with the tooth removal. Let's understand on the x-ray, can you appreciate this white line? That is a lining of a maxillary sinus which is a bone cavity filled with air. It looks like its overlapping, but we are not too clear on this as x-rays are 2-D representation of a 3-D tooth. And thus, there is a possibility of developing oro-antral communication in your case, oro means mouth and antral means that bone cavity. (Sometimes, because the patient is nurse would be aware of all the medical terms, so no need to go into details of it).

What are your thoughts on this Terry? I hope I'm making it clear for you.
In terms of this complication, depending on how big the communication is, the management would be either by me or by an oral surgeon. I would confirm the presence of communication by performing few tests.
Because of the possibility of OAC being more in your case, it would be best to see an oral surgeon for taking the tooth out. As, he would be more comfortable to manage it.
The great news is Ms. Jones, because you are visiting us in a public hospital, there won't be longer waiting times, you would be seen on a priority basis by our onboard oral surgeon.

Do you think this would be more comfortable for you?
In the mean time, I do not want you to have pain or other consequences of infection of nerves. So, I would advise to releive the pain by performing extirpation of inflamed nerves, which is to remove the inflamed nerves from the tooth. Do you think, that will be convenient way for you in the mean time?

Terry, do not hesitate if you want me to repeat any options. As, we won't proceed with anything unless you understand and consent for the treatment.

Infection control protocols:

(Patient is concerned about blood borne transmission, so just provide information about that).

Also for your concerns with respect to the HIV and hepatitis. For these blood borne viruses as well, Australian dental association/ Dental board of Australia adopts standard levels of precaution. These are set to a higher level to accommodate precaution against most of the organisms.
All the staff members of the clinic are upto date with their immunisation schedule.
All instruments sterilised by autoclave that also kills the spores and are verified by the sterilisation nurse in the room as well as by dentist in front of the patient. And then we open the packets. Moreover, extra precautions are taken with respect to needle injury, while handling them and making sure all the sharps are disposed off by the dentist.
Incase of any needlestick injury, there is an appropriate protocol followed to prevent the transmission.
Our sterilisation room and staff are accredited timely by clinic first aid officer with all the updates by Dental board of Australia.

WINSPERT

Important points for this case:

- Patient is a student nurse, she is going to be aware of medical terminologies. Respecting her cultural beliefs if at she mentions them.
- Torres strait islander's have free treatments in public hospitals including an emergency. Only specialist costs at reduced price incur.
- No antibiotic if no signs or symptoms of systemic features. Refer to therapeutic guidelines for the systemic features.
- Management approach has to be culturally respectful.

Important links to read to understand this case better:

Understanding public dental care:

https://www.health.vic.gov.au/dental-health/access-to-victorias-public-dental-care-services

https://www.health.vic.gov.au/dental-health/victorias-public-dental-care-fees

https://www.rdhm.org.au/rdhm_patients/dental/dental-services-for-aboriginal-and-torres-strait-islander-peoples

Irreversible pulpitis and management:

Refer to Therapeutic Guidelines.

Infection control guidelines:

https://ada.org.au/getmedia/e99d888d-c0ab-4be1-b889-85e5193fd7e7/ADA_Guidelines_Infection_Control_Guidelines.pdf

Questions asked in the exam regarding this case:

1. What are tests to confirm the presence of an OAC?
2. I do not have finances to perform any procedure, will that be okay?
3. When will I get an appointment?
4. Do you think I'm in safe hands?
5. Why are you asking me about family history?
6. What are the risk factors of OAC?
7. How are you going to decide treatment of OAC?
8. What will you do if you get a prick?

GOLD SET: CLUSTER 3

(Clinical Treatment and Evaluation)

ATHLETIC PATIENT SEEKING DIETARY ADVICE

Day	one	two	3
Breakfast	Orange juice Whole milk Muesli Wholemeal bread Margarine Jam	Orange juice Whole milk Muesli Cookies Jam	Orange juice Whole milk Muesli Wholemeal bread York Ham Toasted bread Jam
Midmorning	Bananas Cookies	Nonfat yogurt Honey Orange Cookies	Bananas Apple pie Wholemeal bread Jam
lunch	Spaghetti with tomato Grilled beef with cooked potato Apple	Paella Grilled horse steak Peach syrup	Peas with serrano ham Roast chicken with peppers Rice pudding
Snack	Fruit yogurt Cookies Jam	Orange juice Toasted bread Jam Rice pudding	Fruit yogurt Cornflakes Cookies
Dinner	Mashed vegetables Croquettes Egg flan	Rice salad Grilled sole with potatoes Apple	Salad Beef fillet with potatoes Nonfat yogurt Fruit juice Honey

WINSPERT

GOLD SET: CLUSTER 3

(Clinical Treatment and Evaluation)

ATHLETIC PATIENT SEEKING DIETARY ADVICE

Mr. Sam Smith, a 28-year-old gym trainer and regular patient at your clinic, had a check-up during his last visit where you noted several interproximal caries/ erosion lesions and observed that his saliva is thick and stringy. You provided him with oral hygiene instructions, advised him to get some restorations, and asked him to fill out a diet chart.

Today, he has returned with the completed diet chart and is seeking advice on how to modify his diet. He is very health-conscious and follows a good diet regimen. Medically, he is fit and healthy.

Address his concerns and provide guidance on diet modification.

CASE:

Introductory paragraph:

Sam, its great to see you again and thank you for getting a diet chart along. How have you been since I last saw you?
And how did you go with the new oral hygiene routine? Initial few days will be difficult but once a habit sets in, you will ace in optimum oral care.

Other than discussing your diet chart I will be giving you tooth and gums healthy options. However, based on your body's nutritional requirements for your exercise/ gym/ sports routine, the best person would be a sports nutritionist. And then, me and your sports nutritionist can work out a plan for you.
All good so far, Sam?

Sam, any changes or updates to your medical history/ allergies since the last time I saw you?

Discussion of diet chart:

(In exam it is going to be different and may vary each time, find the crucial food stuffs or drinks).

Sam, good on you to keep up with a set dietary requirement and following the routine. However, there are few things catching my eye. When it comes to food it's not just the sugars Sam, but also the frequency of its consumption, acidic drinks or foods, sticky sugars and also the quality of our saliva affecting it. I noticed, you happen to consume sugars for each meal and also have several acidic foodstuffs.
Sam, it's not just you, all of us have a sweet tooth. I'm glad/ proud as you are actively seeking to optimise your oral health. And it's never too late.

Discussion and Correlation of risk factors from diet chart:

As I mentioned earlier, the sugars are not solely responsible for tooth decay. As we noticed in the previous appointment, you have few early decay in between teeth and also erosion lesions which are primarily due to acidic reaction.
Let me explain you, whenever we consume sugars they increase the acidity within our mouth and you can imagine if we drink direct acidic drinks, how much of damage will it cause on our teeth.
Now, to balance the acidity, our saliva helps mouth to maintain the pH levels. But, it does take few hours to neutralise the acidity. But, if we feed our mouth continuously, the balancing time is compromised and that's when critical pH is crossed. Why we call it as critical, because the acidity is uncontrollable and the teeth starts to get affected (dissociates).

Sam, please do not hesitate to stop me at any explanation stage. Do you have any questions so far?

(Take any one or 2 foodstuffs from diet chart and acknowledge them in explanation).

Also, at night time for dinner, it's best we do have any sugars because at night time our body produces negligible saliva. So, all the decay fighting factors from the saliva are less. Hence, we advise to focus on optimising the oral hygiene before bed time in addition to ususal routine.

(This is for sports drinks, if present in diet chart - Also I do understand there will be few dietary foods which you cannot give up on like sports drinks or energy bars. So, with sugary or acid drinks I would suggest to take sips of it with a straw followed by a sip of water to minimise contact with teeth.
And for energy bars - because there are sticky in nature, they do not easily wash off from the teeth, make sure you target the right areas to brush off these from teeth).

Sam, to sum up, I will draw a diagram and give brochures to you for better understanding of tooth healthy food and habits.

Treatment Plan:

Sam, is there any information you want me to repeat? How should we go from here then - Along with the brochures to understand teeth healthy foods, I will send you contact of sports nutritionist.
I'm happy to know you are motivated to adopt a healthy lifestyle for your oral health which will also impact your general health as sugars are not great for our health in general too.

On website of sports dietitians australia (SDA) - you will find all the detailed information on nearby and suitable nutritionist for you. There is also other important knowledgeable facts to understand.

And for your initial decay lesions we can keep on monitoring those. I will see you in 3 months to have a follow up on diet and your oral hygiene routine. I will do a thorough check up and we will go from there until your condition of these initial lesion stabilises.
Are you allergic to milk? The reason I ask is I'm going to write a tooth mousse cream, which has mineral and milk protein to help mineralise the initial lesions of teeth. You can apply pea size on teeth after brushing teeth and let it be on teeth for 30 minutes to maximise it's effect.

For erosion lesions, we can keep on monitoring in the following appointments. I will also refer you to GP, to get clearance from internal acidity issues.

Important points for this case:

- Have a careful look at the diet chart. Check if its the sports drinks frequency of sugars or sugars before night time as the issue.
- Do not state, that his diet chart isn't great at all, it could be insensitive. Always say everyone has sweet tooth and glad he is here. Now, we can work as a team for your general health and oral health.
- Congratulate him on how motivate he is to make change, as he has come back after first appointment for an active change.
- It's a cluster 3 case, so do not forget the treatment plan in terms of recalls and intervention for the early lesions or erosion lesions.

Important links to read to understand this case better:

Sports dietitians Australia:

https://www.sportsdietitians.com.au/factsheets/fuelling-recovery/dental-health-for-athletes

Sports drinks and oral health:

https://strokefoundation.org.au/news-and-events/latest-news/2015/08/australians-urged-to-rethink-sports-drinks-for-dental-health-week

https://www.diabetesaustralia.com.au/blog/dental-health-sports-drinks/
https://www.teeth.org.au/sports-drinks

Questions asked in the exam regarding this case:

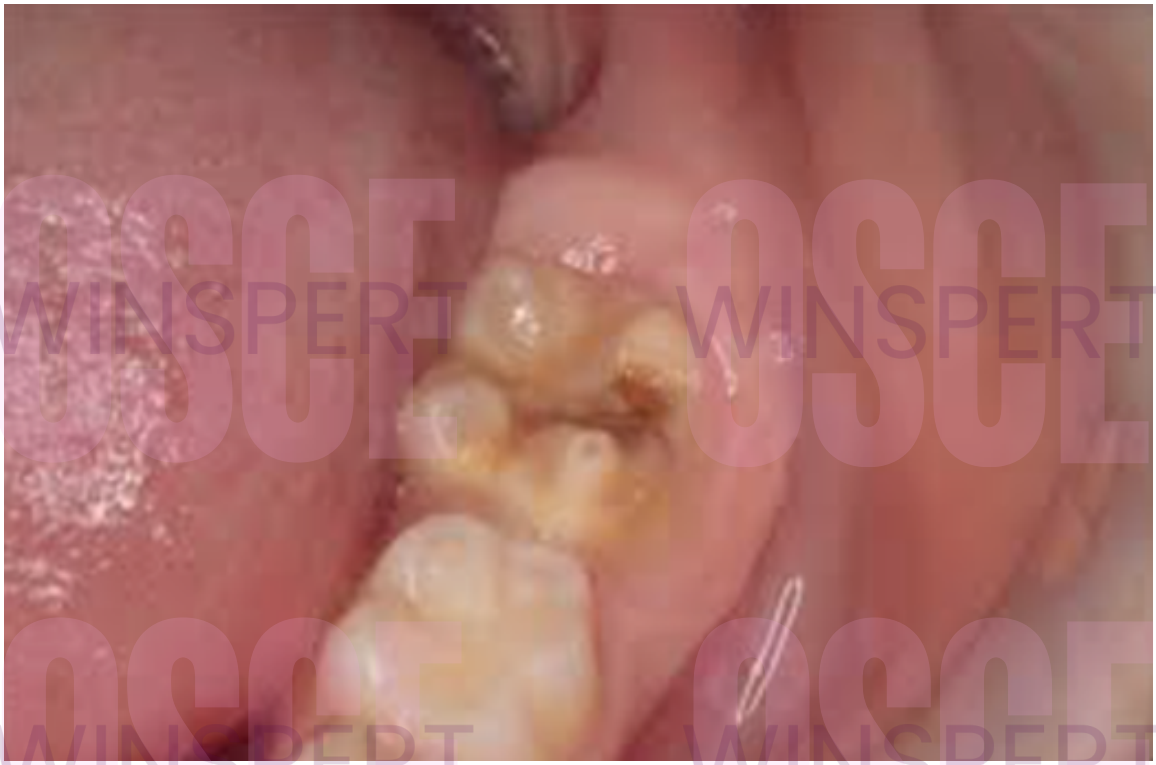
1. When are you going to do fillings for me?
2. Can I use 5000 ppm toothpaste forever?
3. Until when do you want me to use 5000 ppm toothpaste?
4. I need to eat every hour, so how should we go?
5. What is fluoride?
6. Can I brush after taking sports drinks?

WINSPERT

SILVER SET: CLUSTER 1

(Clinical Treatment and Evaluation)

PRESCHOOL KID WITH PAIN, PROBABILITY OF MIH



Ms Alice Zhang is a 5 year old, visiting your dental clinic for the first time today with her father. Her father reports that she has been experiencing pain in a tooth on her lower left side, which prevented her from sleeping last night.

On examining, you observe that the second primary molar on the left side has significant decay and swollen gums.
Medically she is fit and well. Her father mentions that Alice took antibiotics for an ear infection when she was under 2 years old.

Address patient's concerns and gather information.

CASE:

WINSPERT

Introductory paragraph/ opening empathetic statement:

Mr. Zhang, it must be quite a difficult and hard time with Alice not being able to sleep because of a toothache. Can you tell me more about her pain?
Did she eat something in the last 24 hours?

Mr. Zhang, I'm going to do my best to take her out of this painful situation.

Exploring the chief complaint:

(If any question you ask in the opening remarks, if mentioned in the scenario or while initial description by patient, do not ask them again).
Also, I understand Mr. Zhang you must have noticed a few things either by Alice or on your own. To relieve her, I have to understand the features of her pain and have a thorough look. So, I will make it quick with my questions to understand her situation.

Site

- "Where is the pain?"
- "Can she point to the tooth or area?"

Onset

- "When did the pain start?"
- "Did it come on suddenly or gradually?"
- "Did Alice mention it or you figured it out for her?"

Character

- "How would she describe the pain?" (e.g. achey, sore, throbbing, sharp)
- "Is the pain constant or does it come and go?"
- "Does pain aggravate on biting down ?"

Radiation

- "Does the pain spread elsewhere?"

Associations

- "Did she complain of any other symptoms that seem associated with the pain?" (e.g. bad taste, fever, discharge)
- "Any swelling around the gums or on the face that you observed for her ?"

Time Course

- "Did she mention if pain has changed over time for her?"

Exacerbating or relieving factors

- "Did you give her any medications for her pain? Or Does anything make the pain better?" (e.g. analgesics)
- "Does anything make it worse or trigger it?" (e.g. cold, touch, lying down, while biting).

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Relevant history and explanation of risk factors:

1 Medical history

Mr. Zhang you mentioned antibiotics for Alice's ear infection. Any other medication she took in the past or going on now? Is she all well now ? Any other medical updates or allergies, Mr. Zhang?

2 Dental habits

How often do you take her to the dentist? The reason I'm asking Mr. Zhang, we miss out on a few things which can only be appreciated by the dentist, and to prevent worse outcomes, it's advisable to visit the dentist every 6 months..

3 Oral habits

Does she brush her teeth on own? How many times is it? Does she use floss? I understand this might come as a shock but Mr. Zhang most of the decay and gum disease starts in between teeth. And thus, as soon as the teeth come in contact we advise using floss.
Also, what toothpaste does she use?

I will shortly come to my explanation for her pain, Mr. Zhang.

4 Social History

How are her food habits? And what about her water intake?

Explanation of MIH/ hypo plastic tooth and risk factors:

Thank you for your cooperation with my questions. Now, there is a better picture for me to explain to you.

The first I would like to talk about is antibiotics taken during her early age. In the first year after birth, the teeth are still developing and their layers are very sensitive to our health, whether it's fever, infection or some antibiotics.
Given that she had them, these back teeth are developing at that stage and unfortunately looks like it did affect its structure. We call this hypoplasia.
(If in the photo, incisors are also present with hypoplastic appearance, mention it too).

Hypoplastic teeth are weak on their own. And if other factors like poor oral hygiene and food or water consumption habits which are decay prone can worsen and accelerate the decay process to be near to the tooth nerve and the pain starts.

Any questions so far, Mr. Zhang?

I will have a thorough look at the rest of her, so that we can avoid pain in future.

Decay process is controlled primarily by our own efforts:

- **Oral hygiene habits**: Now you mentioned Mr. Zhang, she is doing well. However kids miss out on crucial areas to brush, floss. This we need to monitor. Also, kids have a liking towards eating the toothpaste, specially before age 6, eating toothpaste with fluoride in maximum amount can cause fluorosis, which is again leading to a compromised tooth structure.

- **Food and water**: Eating sugars is not just causing decay but the frequency of their consumption, acidic and sticky foodstuffs are not tooth healthy. So, to flush them out from teeth, we need good water intake, our own saliva does the job. There are few situations where our saliva is not healthy. Let me have a look and tell you about Alice's saliva.

- **Dentist visits**: As I mentioned earlier, to prevent any further stages of decay, dentist visits are advisable, also for kids to have a healthy relationship with dentists in future.

Any questions for me, Mr. Zhang?

Investigations:

I will begin with checking Alice's face profile if any swelling is visible.

Then, I will carefully look at the gums and the soft tissues in the area of pain.
Then to understand what is happening below the gums and within the tooth, I will take one periapical X-ray, which is specific to that tooth. If that X-ray is uncomfortable I can start with bitewing X-ray and judge the area first.

I will also look at the rest of the teeth if they are affected because of antibiotics.

And for a future appointment, Mr. Zhang, can you fill up a diet chart of 7 days for me, so I can guide you on a teeth healthy diet for Alice.

Important points for this case:

- Alice's age and teeth affected as shown on photo should be carefully looked at.
- Check if it's hypoplasia or MIH. No need to talk about MIH, if incisors are not mentioned by a patient or shown in a photo.
- Check when the antibiotics were given. Because hypoplasia can be because of other reasons too.
- Explanation of risk factors by drawing a diagram would be better.
- Investigations are not commonly asked in bold in this case. So, cover the thorough history and the risk factors. After that if time permits mention investigations. As it's a cluster one case: investigations do have points.

WINSPERT

Important links to read to understand this case better:

Enamel defects:

https://aapd.org.au/resources/enamel-defects/

https://digital.library.adelaide.edu.au/dspace/bitstream/2440/137305/2/hdl_137305.pdf

https://www.aapd.org/globalassets/media/publications/archives/pascoe-16-03.pdf

Ear infection, antibiotics and Enamel defects (dental caries/ hypoplasia/ MIH):

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6709956/

https://www.safetyandquality.gov.au/sites/default/files/2024-05/Decision%20aid%20for%20consumers%20-%20Middle%20ear%20infection%20-%20Should%20my%20child%20take%20antibiotics_0.pdf

https://www.researchgate.net/publication/342717042_Use_of_Antibiotics_in_early_Childhood_and_Dental_Enamel_Defects_in_6-_to_12-year-old_Children_in_Primary_Health_Care

https://www.sciencedirect.com/science/article/pii/S0300571222003700

https://www.aapd.org/globalassets/media/publications/archives/william2-28-3.pdf

Questions asked in the exam regarding this case:

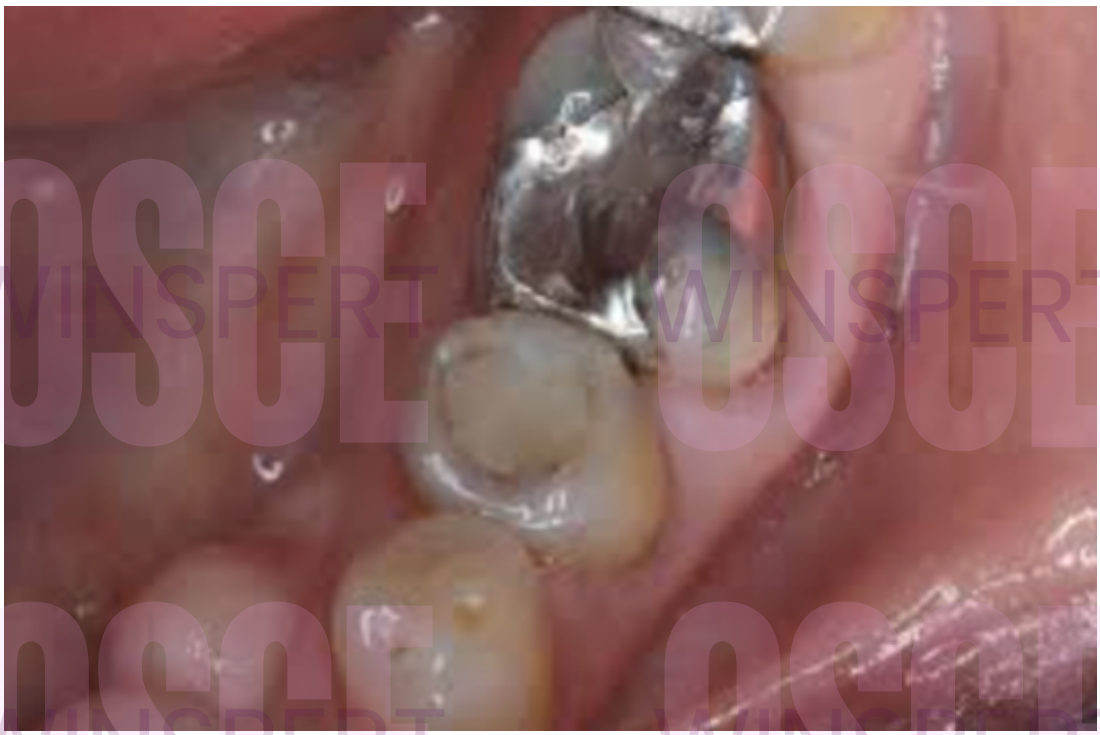
1. Do you think I should have given her medicine ?
2. I use herbal toothpaste. What are my options?
3. I don't drink tap water, is it good ?
4. I don't think she can brush her twice daily, she is tired.

WINSPERT

SILVER SET: CLUSTER 1

(Clinical Treatment and Evaluation)

INTERNATIONAL STUDENT HAS PAIN FROM BITING



Mr Sean Hobart, a 42 year old is an overseas student. He arrived in Australia 4 years ago, and is visiting your clinic today. He has been experiencing pain in one of his lower left teeth for the past 3 weeks. He works part-time while studying. While he cannot pinpoint the exact tooth, he notes that biting on that side exacerbates the pain.

You do an examination and observe a large MOD amalgam restoration on tooth 36, which was placed 22 years ago.

Gather information to help Sean, explain the necessary investigations, and discuss the possibilities for pain to address his concerns.

CASE:

Opening remarks/ Introductory statements:

more about this pain?
Also Sean, you mentioned being an international student here. How are you finding it around after 4 years? (You can add a few more points about understanding how difficult it is for an international student, if time permits). Sean, I hope you have eaten well and slept since the pain began?

Exploring the chief complaint:

(If any question you ask in the opening remarks, if mentioned in the scenario or while initial description by patient, do not ask them again).

Site

- "Where is the pain?"
- "Can she point to the tooth or area in question?"

Onset

- "When did the pain start?"
- "Did it come on suddenly or gradually?"

Character

- "How would she describe the pain?" (e.g. achey, sore, throbbing, sharp)
- "Is the pain constant or does it come and go?"
- "Does pain aggravate on biting down ?"

Radiation

- "Does the pain spread elsewhere?"

Associations

- "Are there any other symptoms that seem associated with the pain?" (e.g. bad taste, fever, discharge)
- "Any swelling around the gums or on the face observed ?"
- "Any wobbly teeth appreciated?"

Time Course

- "How has the pain changed over time?"

Exacerbating or relieving factors

- "Does anything make the pain better?" (e.g. analgesics)
- "Does anything make it worse or trigger it?" (e.g. cold, touch, lying down, while biting, bending down)
- "Do you recall any experience that might have led to the start of pain?" (e.g. pain after biting on ice chips/cube, any hard foodstuffs?)

Severity

- "On a scale of 0-10, how severe is the pain, with 0 being negligible and 10 being the worst pain you've ever experienced?"

Relevant history and explanation of risk factors:

Thank you for your patience with all answers. And after having a look inside your mouth, to understand more about your pain, is it okay if I ask you a few more relevant questions?

1 Social History

Although it's been 4 years, life isn't too easy for an international student. How are you managing it with your studies, part-time job and university Sean? Do you feel a lot stressed because of all this? Are you aware if you grind your teeth?
The reason I'm asking, is most of the time our body reacts to the external stressors and we don't realise. In our mouth, it could be manifested as consciously or unconsciously grinding of our teeth.
If you need any assistance with stressful situations, I can provide you with contact details. To bring it to your attention, universities and workplaces offer support in stressful times through therapy sessions or even special programs. Have a word with the co-ordinator at work and university and they will guide you the best.

2 Medical History

When was your last medical check, Sean? Any medications or medical conditions that I should be aware of? Any allergies? (Blood test is not necessary to ask, however, if the patient did not visit the GP or had checked in the long time you can ask. Sean, you haven't had a check up in a long time and also with our busy lives, we miss out on healthy food. So, it would be best to get a blood test done.

3 Dental History

When was your last dental visit Sean? I noticed a big filling on one of your teeth in the area of pain. When was it done? Have you had issues with it in the past?
(If a patient says no - I can totally understand Sean, you haven't been to a dentist here, but there could be some medical or dental camps within university for students.)

Possible causes of pain:

Sean, thank you for your patience with my questions in this painful experience. Although I'm going to do my set of detailed examination and few tests, yet let me explain you few possibilities:

- **Cracked tooth syndrome**: I'm leaning more towards this as a possible reason for that as you have a massive silver filling on the tooth in that region. What happens with large silver fillings is that they tend to expand in your mouth, you can appreciate on the photo how it appears to be crawling on the tooth surface. And because of this pressure they tend to create cracks at the junction of filling and tooth. These cracks develop slowly over a period of time. And when the crack is closer to the nerve of the tooth, that's when you experience this pain that you are mentioning. Any questions Sean ?

- **Secondary decay leading to pulpitis**: We say secondary when decay is present on a tooth below the filling. And when that decay is closer to the nerves, it's a painful experience.

- **Trigeminal neuralgia** (If a patient says of having an electric shock pain only then mention this possibility): this is a facial nerve pain and gives electric pain. It is usually associated with trigger points over the face.

Investigations:

To make our suspicions clear, Sean I will perform a few examinations and tests.
To begin with outside the mouth, I will check your jaw opening and closure. Also check for any tenderness over your cheeks.
Now inside the mouth, I will thoroughly check the gums and soft tissues of the area. For gums, I will use my calibrated instrument to check the depths around the tooth for any gums issues.
Carefully look and use an instrument for teeth to check in that area.
Next, I will take a specific X-ray we call that as a periapical X-ray - to look out for decay below filling or any changes in the bone.
Also, because of suspicion of crack, I will perform a crack test using a tooth slooth. Which is one of the crack detection techniques. With that, I will place it over each tooth biting surface and see if you are experiencing similar pain.
Also to check the nerve status, it is best to perform a cold test. It would be uncomfortable, when I would place a cold cotton ball on the tooth surface. You will get a cold sensation or nothing, you can raise your hand and put it down when the sensation goes away. Depending on your reaction, I will judge the status of each tooth.

Important aspects of this case:

- Patient factors like international student, part time job, university stress need to be taken into consideration. And promote health with consideration of these aspects.
- Cracked tooth syndrome in silver fillings need to be explained with the diagram for patient understanding.
- Investigations to be explained with the rationale of each test.
- Promotion of health with patient factors and provisions within university and workplaces should be mentioned.

Important links to read to understand this case better:

Understanding cracked tooth:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4606573/

https://teeth.org.au/cracked-teeth

https://www.ada.org.au/event?eventcode=240217

https://onlinelibrary.wiley.com/doi/full/10.1111/adj.12959

Amalgam fillings and cracks (read this only for reference)

https://platinumdental.com.au/amalgam-fillings/

WINSPERT

Questions asked in the exam regarding this case:

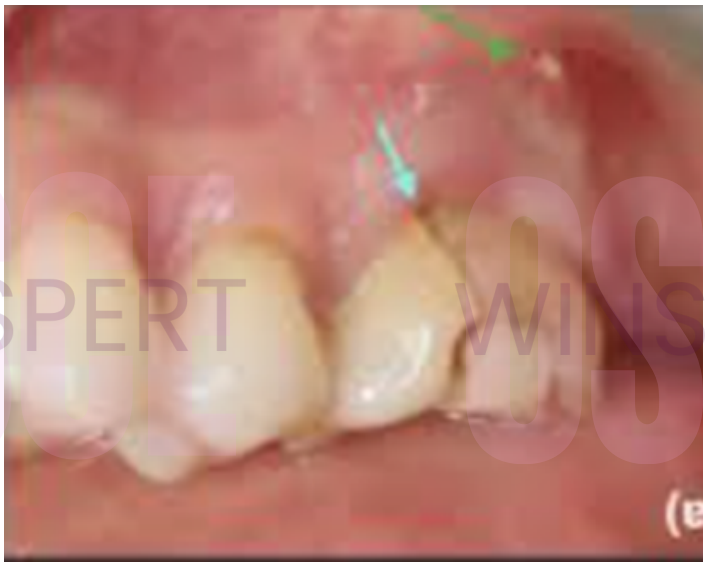
1. Are there any other ways to find the crack?
2. Are you able to see cracks on the X-ray?
3. What will you do if a crack is present?
4. I can't afford any treatments here.
5. Finance isn't an issue, but I do not have time to go with 6 days of work.

WINSPERT

SILVER SET: CLUSTER 2

(Diagnosis and Management)

VERTICAL ROOT FRACTURE IN A PATIENT (VERSION 1)



Mr./Mrs. Tiner, a 42-year-old new patient, is experiencing pain in his upper left first molar. Examination reveals a composite restoration on the tooth extending MOD. The tooth looks unrestorable and has an 8mm pocket depth on one side. The diagnosis is a vertical root fracture, and would require extraction of the tooth.

Mr./Mrs. Tiner has a medical history of asthma and arthritis and is currently taking Ventolin and 15 mg of prednisolone respectively.

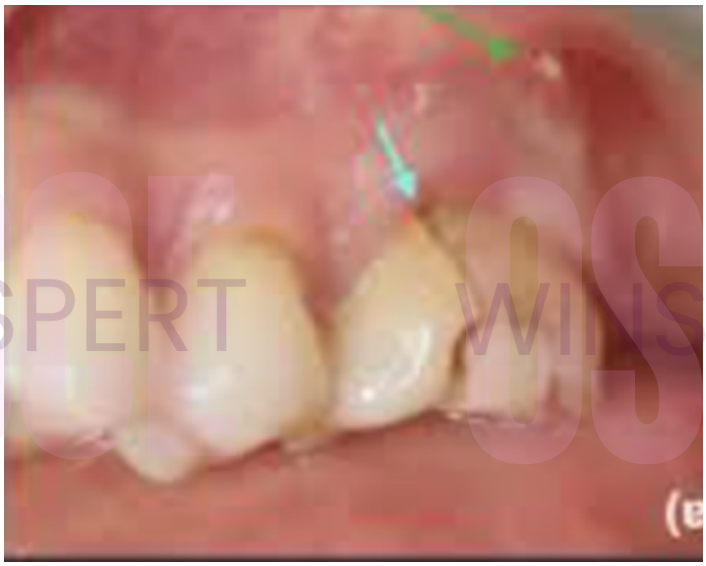
Explain your diagnosis and outline the management plan for Mr./Mrs. Tiner.
Excluding the extraction procedure details.

WINSPERT

SILVER SET: CLUSTER 2

(Diagnosis and Management)

VERTICAL ROOT FRACTURE IN A PATIENT (VERSION 2)



Mr./Mrs. Tiner, a 42-year-old new patient, is experiencing pain in his upper left first molar. Patient recalls eating on ice and then experiencing this pain. Examination reveals a composite restoration on the tooth extending MOD. The tooth looks unrestorable and has an 8mm pocket depth on one side. The diagnosis is a vertical root fracture, and would require extraction of the tooth.

Mr./Mrs. Tiner has a medical history of asthma and arthritis and is currently taking Ventolin and 15 mg of prednisolone respectively.

Explain your diagnosis and outline the management plan for Mr./Mrs. Tiner.
Excluding the extraction procedure details.

CASE:

WINSPERT

Introductory paragraph/ Empathetic statement:

Mr. Tiner, today isn't your finest day with the toothache. Could you tell me more about this experience? Mr.Tiner, how did you go with eating meals after you bit on the ice? And was your sleep affected? Any fever or swelling?

Did you take any pain medication?

I hope you will be out of this situation as soon as possible.
Also, are you carrying your asthma inhaler?

Relevant history for diagnosis:

From my examination in your mouth, I'm guessing one possibility to be most likely. However, to understand the possible causes, can I ask you a few relevant questions?

1 Dental History

The affected tooth has a big filling, do you recall how long ago was it done? Was any major treatment like RCT performed on that tooth? When was your last dental visit?

2 Social History

Do you know if you happen to grind/ clench your teeth? (If no - Has your partner ever mentioned that to you?)
You mentioned eating ice. Do you frequently do that?

Diagnosis explanation with risk factors:

Thank you for your patience with my questions.
I had a detailed look at the tooth and from my judgement, it possibly appears to be a vertical root fracture. As from the term, you could guess, it doesn't look quite promising.

To explain you best, let me show you with the help of a diagram.
This tooth of yours has a massive tooth coloured filling as we can see from the photo. When a lot of tooth structure is removed and replaced with a filling, a tooth becomes weak. And from what I understand, you mentioned biting down on the ice (mention if it's his continuous habit, grinding or clenching if present). The tooth already had developed a crack within the root portion. Why I say this is because while checking your gum depths, just at one point the gum depth was 8mm which normally ranges between 2-3mm. Because there was a crack in the root portion, the gum depth also increased.
I hope I'm helping you understand, do you want me to repeat anything?

Now we could imagine, on an already compromised tooth if you add pressure with ice, grinding or clenching, it's bound to fracture.
This is how a crack within a tooth became a vertical root fracture.

Any questions so far Mr. Tiner?

Relevant history for management:

Medical History

Also, you mentioned on our form, you have asthma and arthritis. How are GP follow ups going for the same? For arthritis, you are taking prednisolone, for how long have you been taking it?
Having said that, Mr. Tiner prednisolone is an external steroid for our body. When steroids are taken for more than 3 weeks, it does impact our general body. In a way, that landing into a medical emergency which we call an adrenal crisis. It could usually happen when our body is in a physiological stressful situation, which would only be understood by our body. Let's say we are going to perform a procedure of extraction for you, your body will unknowingly be in a fight and flight mode, and this would trigger landing into adrenal crisis, where your body's blood pressure and blood levels would drop even when you are asleep, risking your life to serious medical issues.
Because of this medical worry, Mr. Tiner, it is risky to perform extraction for you today. Moreover, to prevent such complication, we need to talk to your GP, to check for an action plan or need for an antibiotic prophylaxis. Also, it is advisable to be accompanied by a responsible adult for 2-3 days. Also, to carry your asthma inhaler for each appointment.

Management

There is a risk of a medical emergency with any major procedure. However, I would perform a temporary measure in the meantime to relieve you from this pain. Because there is pain on biting, I would place a small block of filling on the biting surface of the tooth to avoid teeth from biting down.
I will prescribe you medications, any allergies or interaction with medications in the past ?
Rx
paracetamol 1000 mg, you can take up to 4 doses at an interval of 6 hours until pain subsides. Please do not consume more than 3 tablets.
(If a patient has swelling or fever, you can check - only then give antibiotics).

Important links to read to understand this case better:

Vertical root fracture:

https://periomelbourne.com.au/?page_id=171#:~:text=Keeping%20a%20tooth%20with%20a,bridge%20or%20a%20dental%20implant.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4001262/#ref34

Management:

https://www.researchgate.net/publication/12848017_Diagnosis_and_management_of_teeth_with_vertical_root_fractures

Prednisolone:

https://www.healthdirect.gov.au/amp/article/prednisolone
Refer to therapeutic guidelines for management and to understand adrenal crisis.

WINSPERT

Questions asked in the exam regarding this case:

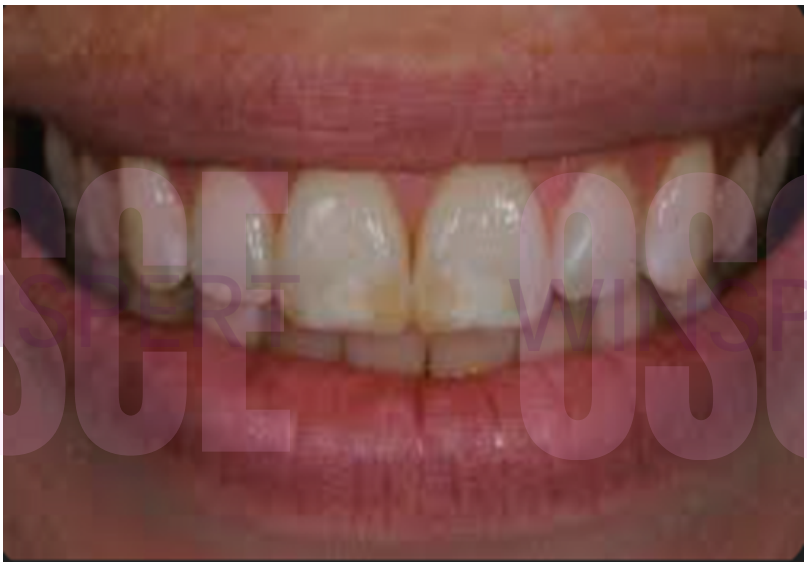
1. Why do you think this happened?
2. Has this happened recently?
3. I will go to the GP, to adjust the dose. Can you do it now?
4. If the filling is done, how can I eat it?
5. I really want something to be done today, please suggest how?
6. Can you save this tooth?
7. Why 8mm of pocket just in one place?

WINSPERT

SILVER SET: CLUSTER 2

(Diagnosis and Management)

PATIENT HAVING FLUOROSIS IN TEETH



Kim, a 15 year old girl, visited your clinic today with concerns about white and brown patches on her front teeth. On examination, you observe these spots throughout the mouth. Kim lived in a rural area until the age of 10 and then moved to boarding school for further education. She mentions taking fluoride tablets until the age of 10 as advised by her mother.

Kim doesn't prefer drilling or any anaesthesia. She wants her teeth fixed quickly because she has a photoshoot for her sister's wedding in a few weeks.

Provide a diagnosis, treatment plan, and management strategy for her condition.

CASE:

WINSPERT

Introductory paragraph/ understanding patient:

Kim, I did have a thorough look and believe you are keen on looking to get solutions for spots on front teeth.

Also, exciting times ahead for you and your family with your sister's wedding.
To manage you best, Kim I need to understand what are your hopes and expectations with these teeth?

Thank you for that Kim, I will explain to you all possible treatment options, before that I will ask you a few relevant questions that will help me with your management.
Also, what caught my attention, Kim, you are 15 years old, are you accompanied by anyone today ? And what about the treatment, are you going to be solely responsible for the finances?
Kim, I like how you are independent, but because few options are invasive, it's best to discuss as our parents always think the best for us.

Relevant history:

1 Medical History

Kim, medically you are fit and well? Any medications or allergies that I should be aware of?

2 Dental History

You mentioned on our history form, you had fluoride tablets. Thank you for your information on that. (It's hard to recall, but do you remember if water in the rural area was fluoridated ? Also, if you recall about the toothpaste you used as a child? - you can ask these questions, however, history taking has no points in cluster 2, so be mindful if time permits)

Exploring dental anxiety/ fears:

What caught my attention was your fear for dentists/ drills and needles. Kim, you are not alone with this fear, the majority of people have dentist fears and that usually is associated with a childhood correlation of dental experience, fear created by the community or because of needles.
I want to reassure you Kim, now because of advanced techniques and dentist awareness, changes are adopted. And I want to have a trustworthy relationship with you, to help you overcome this fear.
With respect to drill fears, you can bring your earphones or I can play some favourite music/ videos to help you be calm on the dental chair.
For your needle fears, we have a distraction technique to make the process smooth. Also, the advantage of using numbing gel beforehand helps with the sensation.
You can also bring along someone trustworthy for an appointment and stop me if needed at any stage. Do you think we can try this? I want you to have a comfortable experience and build a good relationship with you.
(We offer happy gas or laughing gas, nitrous oxide can help people relax during dental treatment - offer this only if patient has dental anxiety, not for only needle fears or drills)

Diagnosis:

Kim, from my judgement, the spots on your teeth are possibly because of excessive consumption of fluoride in childhood. We call them fluorosis.
The reason for this to happen is that early years of our life are when our teeth are still developing, and they are very sensitive. If fluoride is ingested in excess, it affects the structure of the tooth by being porous and stains are caught over it in the long run.
Are you following so far, Kim?

Initially Australian guidelines did approve fluoride tablets, however recently their use is not effective and is removed from guidelines. They could have been the primary cause of fluorosis.

Exploring dental anxiety/ fears:

For treatment options related to this condition depending on the severity of it, we proceed stepwise. In your situation from the looks of it, it appears to be a mild-moderate case of fluorosis.

Thus, we will begin with the least invasive technique.

- **Micro-abrasion:** This technique uses a paste and with my instrument I will rub it over the tooth surface which removes stains. To apply a CPP-ACP cream after the procedure to help with calcium ions to be taken up by porous structures. Advantage: Less invasive, quick results. Disadvantage: It won't take away all the stains and sometimes post-operative sensitivity experienced. Results may take 7-10 days to be effective.

- **Resin infiltration**: This is a procedure where the uneven surface and the stains are covered with the tooth coloured filling material without drilling. Only use of different agents. (draw a diagram of composite flowable for an understanding). Advantages: Results are seen immediately, comfortable procedure. Disadvantages: Slightly expensive and can obtain stains over them. It would need repair or polishing in a few weeks/ months.
- Kim, does your diet contain more coffee, tea or curries? If we proceed with this option, I would suggest taking a sip of water to minimise the effect of any stain.

- **Combination of both:** A combination would have an added advantage and more promising results.

Are you inclining towards any of these options? Please do not hesitate if you want me to repeat any of the information. Also, if you are not ready, there is no rush. You take your time to read about all the options, discuss it with your family if needed.

Health promotion:

With each procedure on teeth, care needs to be taken of them too. How do you look after your teeth, Kim? (Advise oral hygiene habits)
A visit to a dentist is recommended every 6 months, to prevent longevity of teeth and any treatment done.

WINSPERT

Talk about this only if time permits:

Let's say you are still not happy with its results, then if you feel comfortable we can think of more invasive options which would require needles and drilling like composite veneer, porcelain veneer or crown. (Talk in detail about the following if time permits).

- **Composite veneer**: This involves slight polishing with a drill, only the lip surface of the tooth, followed by moulding tooth coloured filling to look aesthetic. We could consider numbing you, if needed.
- **Porcelain lab-made veneer**: It involves drilling to more extent than 1st option. The procedure is done in 2 appointments. Where adjustments are made on the lip side of the tooth and measurements are sent to the lab to get it fixed in the following appointment.
- **Crown**: It's more invasive than previous options. Again same like above the procedure is done in 2 appointments. Where adjustments are made on a complete tooth and measurements are sent to the lab to get it fixed in the following appointment.

Important features of the case:

- Age of Kim and urgency of the procedure, understand these aspects well.
- Management involves dealing with her drills and needle anxiety too.
- Consent will be needed if the patient is below or equal to 16 years of age.
- Bleaching is very common for stains, but the patient is below 18 years of age, so we do not recommend bleaching.

Important links to read to understand this case better:

Management of fluorosis:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2883808/

https://www.webmd.com/children/fluorosis-symptoms-causes-treatments

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6857403/

Understanding microabrasion in management of fluorosis:

https://www.tandlaegebladet.dk/media/1zliub00/tb10-2016_890.pdf

https://aacd.com/proxy.php?filename=files/Dental%20Professionals/jCD/Vol.%2034/issue%201/robles_lawson_34-1.pdf

Guidelines for use of fluorides in Australia:

https://onlinelibrary.wiley.com/doi/full/10.1111/adj.12742#:~:text=The%202019%20Guidelines%20on%20water%20fluoridation&text=(2)%20Water%20fluoridation%20should%20be,0.6%E2%80%931.1%20mg%2FL

https://ada.org.au/policy-statement-2-2-1-fluoride-use

WINSPERT

Management of dental anxiety:

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/dental-anxiety-and-phobia#how-to-manage-dental-anxiety-or-phobia

https://www.nhmrc.gov.au/about-us/news-centre/drilling-down-discovering-origins-dental-anxiety

https://researchonline.jcu.edu.au/75644/1/75644.pdf

Questions asked in the exam regarding this case:

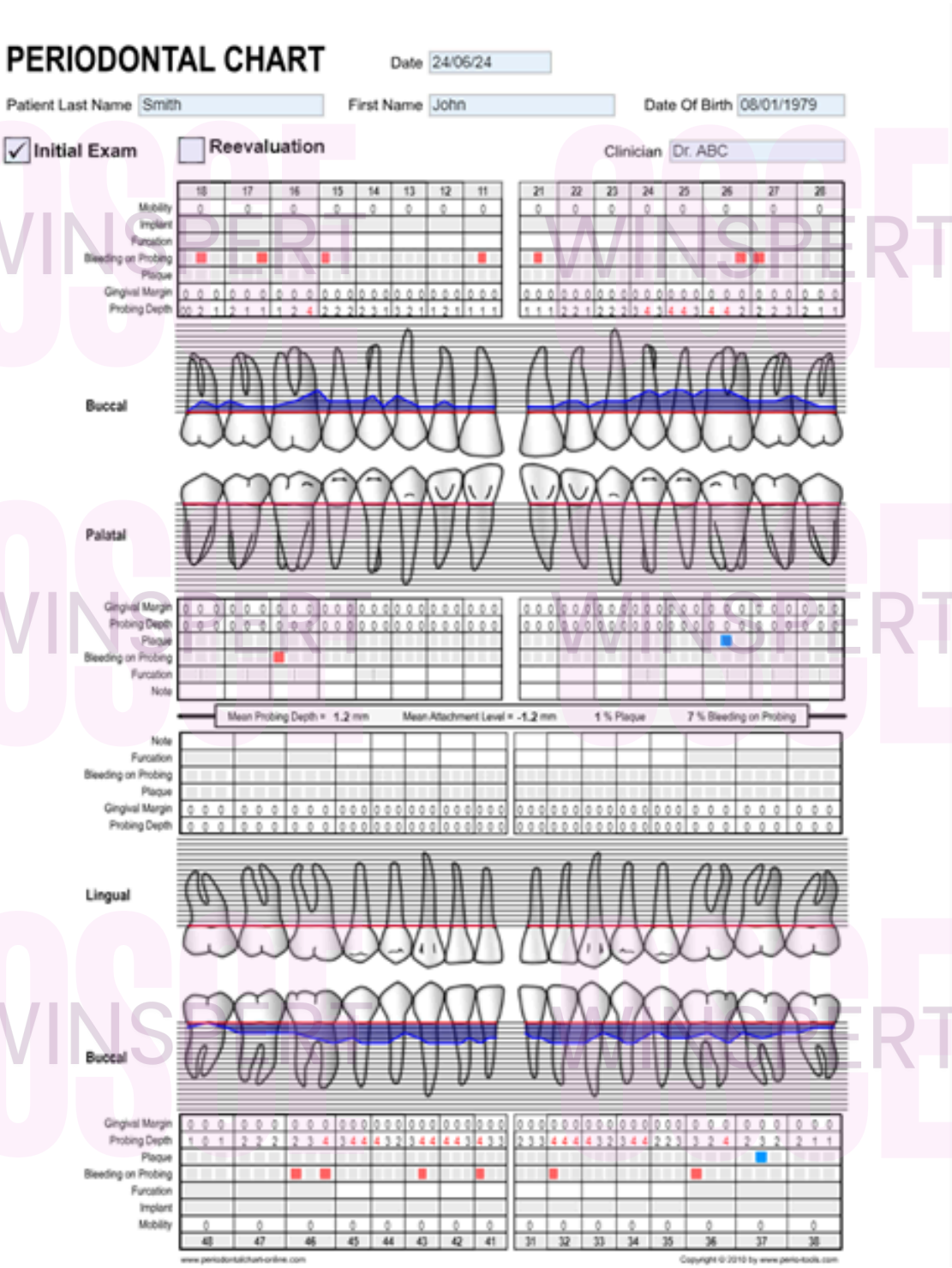
1. Why can't we do bleaching?
2. I live in a boarding school and my parents stay far away, how can we make it happen?
3. How will you know the depth of the stain?
4. My parents don't have access to emails, how could that work ?
5. I'm a grown up child, I have my own credit card and I can pay my own bills. Don't worry about my finances.
6. My sister will supervise bleaching, is that okay?
7. How come my sister has no stains on teeth?
8. Do you think my mother did a bad job by giving tablets?

WINSPERT

SILVER SET: CLUSTER 3

(Clinical Treatment and Evaluation)

PERIODONTITIS PATIENT HAVING DIABETES MELLITUS (VERSION 1)



WINSPERT

SILVER SET: CLUSTER 3

(Clinical Treatment and Evaluation)

PERIODONTITIS PATIENT HAVING DIABETES MELLITUS (VERSION 1)

Mr. John Smith, a 45-year-old regular patient, attended your clinic today with complaints of bleeding gums while brushing and sensitivity to cold. Upon examination, periodontal charting revealed 4 mm periodontal pockets around some teeth, leading to a diagnosis of generalised periodontitis.

His last dental visit was six months ago, during which a cleaning was performed, and he was informed by his previous dentist that he had mild gingivitis. He retired and hence John is visiting you.
His medical records indicate he is a type 2 diabetic who is not currently on any medication and has not visited a GP. He is also a smoker, smoking 10 cigarettes per day.

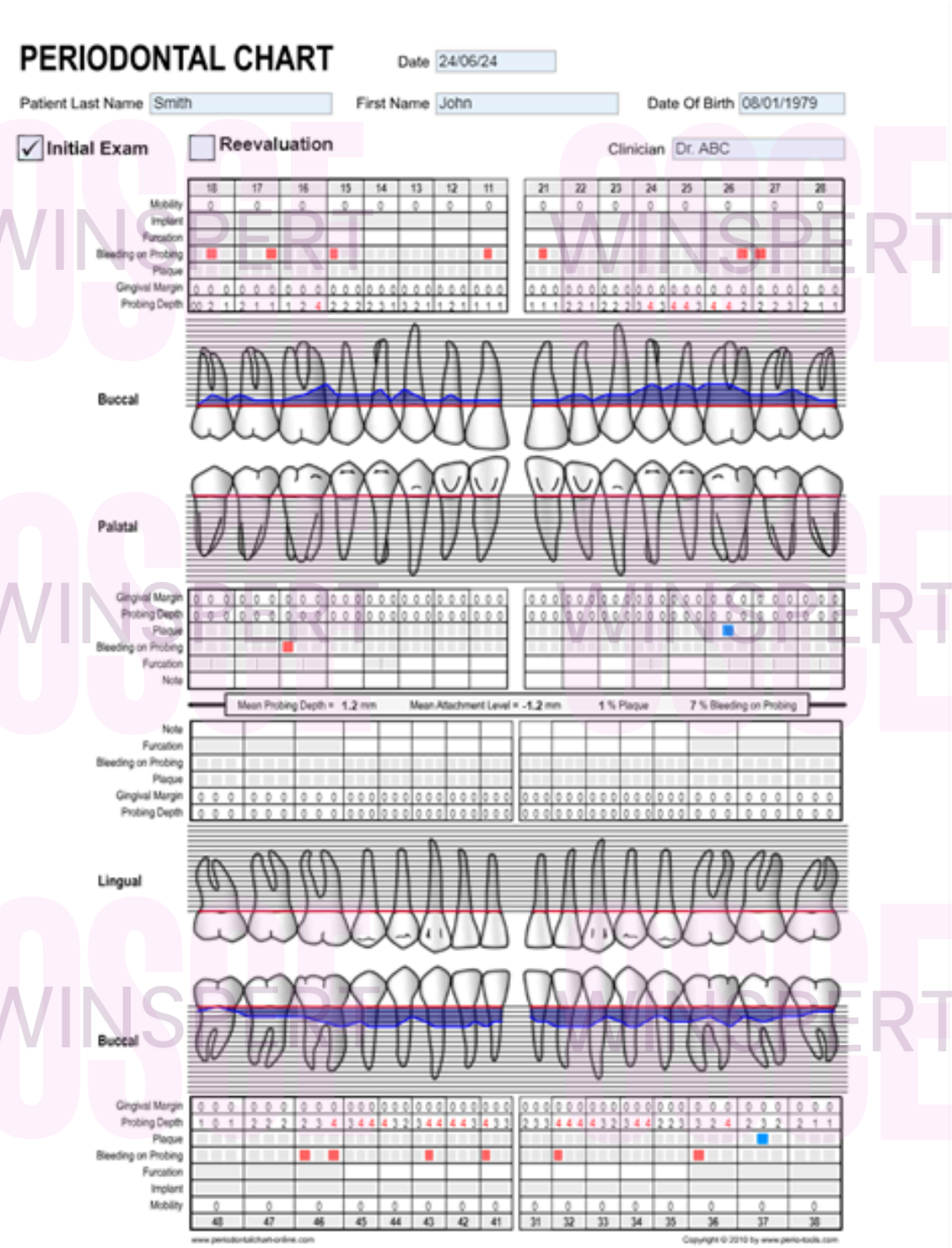
Manage patient concerns and explain treatment plan.

WINSPERT

SILVER SET: CLUSTER 3

(Clinical Treatment and Evaluation)

PERIODONTITIS PATIENT HAVING DIABETES MELLITUS (VERSION 2)



PERIODONTAL CHART

Date 24/06/24

Patient Last Name Smith | First Name John | Date Of Birth 08/01/1979

☑ Initial Exam ☐ Reevaluation | Clinician Dr. ABC

Mobility, Implant, Furcation, Bleeding on Probing, Plaque, Gingival Margin, Probing Depth

Buccal

Palatal

Gingival Margin, Probing Depth, Plaque, Bleeding on Probing, Furcation, Note

Mean Probing Depth = 1.2 mm | Mean Attachment Level = -1.2 mm | 1 % Plaque | 7 % Bleeding on Probing

Note, Furcation, Bleeding on Probing, Plaque, Gingival Margin, Probing Depth

Lingual

Buccal

Gingival Margin, Probing Depth, Plaque, Bleeding on Probing, Furcation, Implant, Mobility

WINSPERT

SILVER SET: CLUSTER 3

(Clinical Treatment and Evaluation)

PERIODONTITIS PATIENT HAVING DIABETES MELLITUS (VERSION 2)

Mr. John Smith, a 45-year-old regular patient, attended your clinic today with complaints of bleeding gums while brushing and sensitivity to cold. Upon examination, periodontal charting revealed 4 mm periodontal pockets around some teeth, leading to a diagnosis of generalised periodontitis.

His last dental visit was six months ago, during which a cleaning was performed with an electric toothbrush. He was informed by his previous dentist that he had mild gingivitis. His last dentist retired and hence he is visiting you now.

His medical records indicate he is a type 2 diabetic who is not currently on any medication and has not visited a GP. He is also a smoker, consuming 10 cigarettes per day.

Manage patient concerns and explain treatment plan.

CASE:

Introductory paragraph:

John, I had a detailed look inside your mouth. I want to appreciate how you have visited the dentist every 6 months. I hope to create such a trustworthy relationship with you like your previous dentist.
Could you tell me more about your concern of sensitivity and bleeding gums? After my examination, there were a few areas which caught my attention.

Explanation of findings and diagnosis:

You heard me call out numbers, those were gum depths. These numbers usually range between 2-3 mm which is considered normal. However, in your case it is ranging 4-5 mm in most areas of your mouth. We term it as generalised moderate periodontitis. I would say generalised because most of the areas of your mouth are affected and moderate periodontitis, because the numbers are in a moderate stage of gum and bone disease which is periodontitis.
Any questions so far, John?

John, it is concerning at this stage because we do not want these borderline numbers to turn into something serious. Moreover, the supporting structure of the tooth which is gums and bone is affected now, we want to maintain it, as these are the foundation of our teeth.

John, what thoughts are going in your mind about this?

Understanding risk factors/ relevant history:

To understand why this could be happening to you, there are few factors which you have mentioned in our form. But, is it okay if I ask you some relevant questions to explain it to you?

1 Medical History

You mentioned having diabetes but are not on medication. Why is it so John? Diabetes has a huge impact on our oral health. Diabetes has a two way relationship with gum and bone disease. Moreover, if it's not controlled it can affect our gums and bone drastically. Hence, John I would highly recommend you to visit your GP and get the blood test done, to understand and control your health as well as your gum disease. What do you think about this, John ?
Any other medical conditions or medications that I should be aware of ?

2 Dental History

You mentioned on our history form, you had fluoride tablets. Thank you for your information on that. (It's hard to recall, but do you remember if water in the rural area was fluoridated ? Also, if you recall about the toothpaste you used as a child? - you can ask these questions, however, history taking has no points in cluster 2, so be mindful if time permits)

2 Social History

Also, John, you happen to smoke around 10 cigarettes per day. Thank you for being honest. John, we all know smoking is not encouraged as it has impacts on our general health but it's more impactful on our oral health by acting on gums and bones. And the effect on oral health would be silent and won't go noticed as smoking also reduces the blood supply and body's response to fight against any foreign agent. Are you with me so far, John ?

I couldn't stress more on how important it is to quit smoking. And John, I do understand it won't be easy to quit smoking, however I want to extend my support to you whenever you are comfortable discussing quitting. We don't even want to take big steps, let's begin slowly by reducing the cigarettes per day. I will provide you with all the brochures on how smoking and diabetes have effects on our oral and general health. If you have any further questions, I will help you John.

3 Dental History

Also, I want to understand how you look after your teeth. Do you use anything to clean in between your teeth? I would highly suggest focusing on cleaning in between teeth well because those areas are missed out and that's where the beginning of gum and bone disease is. (Depending on what he/she says, modify that risk factor accordingly). John, I understand you are trying your best, however, I will go through with you the most effective techniques to clean our teeth.

Clinical treatment and evaluation:

After understanding the possible causes, John, let's look at how we can control and treat you. In your situation, John, we will need combined efforts from you and me.

Your concern of sensitivity and bleeding is because of the gum and bone disease. This will require a holistic approach. Bleeding is happening because of your angry gums. They need to be cleaned thoroughly, by which I mean a deep clean. This clean requires numbing because it won't be comfortable for you. However, what refrains me from going ahead with this is your diabetes status. At this stage, we are not aware whether your diabetes is controlled or uncontrolled. Because you haven't been on medication, chances of having u controlled diabetes is more. If I go ahead with a deep clean today, you are going to bleed a lot and have wounds. Uncontrolled diabetes can leave you with unhealed wounds and that can further be a pathway for infection. Thus, I would suggest we do a superficial clean for you and you can visit your GP, get a blood test done and start with medications accordingly. And once we know the status of your diabetes, we can plan your deep cleaning schedule. How does it sound, John?

For your sensitivity, I would suggest using sensitivity toothpaste and I will review you after 3 months.

John, in the long run. We need to be on top of our oral hygiene habits, looking after our general health and controlling diabetes, controlling and quitting smoking and last but not least regular dentist visits of deep cleaning for 3 months until the condition stabilises.

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Important features of the case:

- Patient is negligent about his medical health, stressing the importance of medical health impact on oral health.
- Patients would want to complain about the previous dentist - because the dentist is retired - complaint process through HCC (Health complaints commissioner) for Victoria and Ombudsman for Queensland.
- Whether as a treatment for today, you decide to perform superficial clean or not, that is okay. As long as you can justify reasoning for your statement.
- Short term and long term treatments both to be explained.

Important links to read to understand this case better:

Dental complaints:

https://ada.org.au/policy-statement-5-4-complaints-resolution

https://www.dentalprotection.org/docs/dentalprotectioninternationallibraries/dental-advice-booklets/dental-advice---handling-complaints-(au).pdf

Diabetes and periodontitis:

https://australianprescriber.tg.org.au/articles/diabetes-and-periodontitis.html

https://treasury.gov.au/sites/default/files/2019-03/australian_dental_association_-_supporting_document.pdf

https://www.diabetesaustralia.com.au/living-with-diabetes/preventing-complications/dental-health/

Smoking and periodontitis:

https://www.betterhealth.vic.gov.au/health/healthyliving/smoking-and-oral-health#smoking-and-gum-periodontal-disease

Smoking and periodontitis:

https://www.betterhealth.vic.gov.au/health/healthyliving/smoking-quitting-tips

Questions asked in the exam regarding this case:

1. What will the GP do?
2. Do you think my dentist did a bad job?
3. How can diabetes be affected?
4. What can you do for me today?

WINSPERT

SILVER SET: CLUSTER 3

(Clinical Treatment and Evaluation)

POST-OP INSTRUCTIONS TO A PATIENT ON ELIQUIS

Mr. Mathew Woods, a regular patient at your clinic, visits you for an extraction of mobile upper canine. You performed the procedure, hemostasis gel was applied, and a suture was placed to ensure proper healing.

Medical history: He is currently on eliquis to prevent stroke, and after consulting it with his GP, it was decided not to discontinue the medication before the extraction. Three years ago, when you performed previous extractions, he was not taking eliquis.
Additionally, he smokes 25 cigarettes a day.

Provide him with post-extraction care instructions and inform him of potential complications that may arise.

CASE:

Introductory paragraph:

Mr. Woods, I will get you to bite down on this gauze piece and sit you up here, how are you feeling? The tooth is out successfully as we planned. I have placed a healing agent in the tooth removal site and have sutured it. Both healing agent and sutures are dissolvable, so don't worry about it. However, we will still have recalls to monitor your healing progress. Any questions as of now Mathew?

Explanation of immediate management:

We have removed tooth for you before, so you are very well aware of how things go about, but there is one important factor of the medication that you are taking. As we have discussed earlier with your GP, eliquis is a blood thinner. And we require blood to form a clot at the extraction site. Therefore, now I'm going to observe your bleeding for 20 minutes more. In the meantime, I will also discuss with you some instructions and precautions.

Are you comfortable Mathew ?

If after 20 minutes, I happen to still see blood oozing, then I will change the gauze and ask you to bite down again with pressure. Remember, always pressure is the first thing to stop bleeding. Hence, I will provide you with 3 sterile gauze pieces for home use. Other than just pressure, I will judge the flow of bleeding and decide whether to soak that gauze in tranexamic acid mouthwash, as it will help with the control of bleeding.
Then, you can throw a gauze piece in the bin after 30 mins of pressure.

Post-operative instructions:

We understand, there are a lot of instructions to follow and understand. Hence, I will be providing a written pamphlet with all details alongside my verbal instructions.

To begin with, the first 24 hours are most crucial. It is because the initial healing process starts and we have to be careful for it.

- The effect of numbness will wear off after 2-3 hours, be careful when you eat or drink while being numb, as you can bite your lips or cheeks. I will advise to not use straw to drink anything as it will prevent healing.
- Eat only room temperature and a soft diet for the 24 hours. Avoid hot because it will trigger bleeding and delay the healing process.
- Before the effect of LA wears off, you can eat an ice cream or smoothie and eat painkiller medication as I will prescribe you.
- Why I said to eat medication, is because pain and swelling is common in the first 72 hours after tooth removal as your body is grieving the loss. You will be at more ease after medication and sleep well. Any updates about the medications or interactions, since the last I saw you? I will prescribe you Paracetamol 1000 mg, you can take that no more than 4 times a day.

- For swelling, you can apply a cold pack on swelling for 10 minutes every hour to help.
- Also, avoid rinsing or spitting out for 24 hours to not disturb the initial clot formation.
- I will still encourage you to brush your teeth however, while spitting or rinsing, just take some water and open your mouth for it to flow naturally out of your mouth rather than actively spitting.
- Take it easy for a day, no vigorous activities.
- Mathew, with smoking. We did discuss it, for healing to be undisturbed. We need to quit smoking for 10 days minimum. These 10 days are most crucial for healing. As smoking it creates heat within the mouth and reduces the blood supply for healing.

Any questions so far Mathew?

- Do you drink alcohol Mathew, same goes to alcohol avoid drinking for a minimum of 2 days, for great healing.

Any questions for me Mathew, all good so far?

- I will review your healing in 3 days, in that appointment, or in one week's we can also discuss the replacement options for your space.

Potential complications:

Each procedure comes with potential complications which can be controlled or managed.

Bleeding is a normal process, after tooth removal. Because of the Eliquis, you are at higher risk of bleeding/ spontaneous bleeding. If at all that happens, with the extra sterile gauze, apply pressure by biting onto it. Make sure you are applying pressure at the area of bleeding. Check for 15 minutes, if it stops then best, however, you can repeat the process for 3 cycles of 15 minutes. Also, please wash your hands and use sterile gauze to avoid decontamination. You can give us a call at the clinic during working hours, if bleeding still doesn't stop. If it's not working hours, I will suggest giving the ambulance a call and going to the hospital. As medical intervention will be needed. Do not worry I will write down all the emergency contact details for you.

Are you okay, Mathew?

Other possible complications in your case could be:

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Important features of the case:

- While explaining, frequently ask how he is doing ? As, he just had an extraction.
- Stepwise explanation and not to forget about recalls, discussion on replacement options and also, regular check up and clean.
- Discuss only complications related to him.

Important links to read to understand this case better:

Eliquis:

https://www.healthdirect.gov.au/medicines/brand/amt,9332341910000036106/eliquis

Risks post extraction if taking eliquis:

https://pdf.sciencedirectassets.com/271043/1-s2

Management of postoperative bleeding:

From Therapeutic Guidelines.

Post Operative instructions after tooth removal by Australian government:

https://www.dental.wa.gov.au/pdfs/DHS14%20Instructions%20following%20extraction%20of%20teeth%20A4_English.pdf

Questions asked in the exam regarding this case:

1. I can't quit smoking, what options do I have?
2. Can't you stop the drug?
3. What will be done in the hospital?
4. Why has my GP switched from warfarin to Eliquis?
5. I'm vegan, which hemostatic gel have you used?
6. How long will it take for bleeding to stop?
7. How will straw prevent my healing?

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GREEN SET: CLUSTER 1

(Clinical Information Gathering)

ULCER PRESENT IN A DENTURE PATIENT VERSION 1

Mr. Abott, a 64-year-old patient, is visiting your clinic for the first time today, seeking new lower denture to replace his missing teeth. Upon examination, you find that he has been using an upper complete denture for the past twenty years but does not have a lower denture after the tooth was removed 3 months ago. He also complains of a loose upper denture.

You also observe an ulcer on the lower right side near site 43, which has been present for the last two months.
His last dental visit was three months ago, during which his lower left canine was extracted. Mr. Abott travels frequently and will be leaving for work in three months, with plans to return after three months. Additionally, he smokes approximately 18 cigarettes per day.

Gather information and address his concerns.

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GREEN SET: CLUSTER 1

(Clinical Information Gathering)

ULCER PRESENT IN A DENTURE PATIENT VERSION 2

Mr. Abott, a 64-year-old patient, is visiting your clinic for the first time today, seeking new lower denture to replace his missing teeth. Upon examination, you find that he has been using an upper complete denture for the past twenty years but does not have a lower denture after the tooth was removed 3 months ago. He also complains of a loose upper denture.

You also observe an ulcer on the lower right side near site 43, which has been present for the last two months.

He also complains of burning or pain sensation around the corners of mouth.

His last dental visit was three months ago, during which his lower left canine was extracted. Mr. Abott travels frequently and will be leaving for work in three months, with plans to return after three months. Additionally, he smokes approximately 18 cigarettes per day.

(Sometimes, he is not keen for lower denture and doesn't want to get any replacement. He just wants to replace the upper denture).

Gather information and address his concerns.

CASE:

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Introductory paragraph/ Rapport building:

Mr. Abott, I had a brief look, can you brief me more about concerns in regards to your dentures? Without a bottom denture and a loose upper, it must have been difficult for you to eat, how did you manage, Mr. Abott?
Also, Mr. Abott, you have mentioned, you travel for work purposes. For how long have you been doing this? (If it's for long, appreciate his work dedication)

Exploring the chief complaint:

With the time constraint and your difficulty with eating, I want to make sure I understand your needs properly. So, Mr Abott, I will be asking you a few questions to help you best.

What are your expectations with dentures? We struggle with complete dentures the most as they take support from the gums and bone.
And this denture you have been using for 20 years, that's a long time, Mr. Abott. As I said dentures rest on bone and gums which tend to change with the pressure applied, however, dentures stay static. Let me explain with a diagram, with this non-uniform contact, dentures don't fit properly. Hence it's advisable to change between 10-15 years.

I do understand you did not have a great experience with lower denture (if this is positive in history) and want to just fix an upper. However, upper denture is mainly for an aesthetic purpose and the functional needs will only be met with lower denture present in unison.

Are you following so far, Mr Abott?

Have you experienced any pain or discomfort with dentures or anywhere in the mouth, Mr. Abott? Having said that, I noticed a wound on your lower jaw gums, were you aware of it ?
(Patient will give some history regarding that unhealed ulcer - which will be risk factors)
Mr. Abott, if I proceed with the denture and ignore ulcer, it might have repercussions on ulcer and chances are the denture won't fit appropriately. The red flags for me to proceed without considering ulcer is it's been more than 2 weeks, stressful events and the number of cigarettes you smoke. And this to get it properly checked I will have to refer you to an oral surgeon for a test called biopsy. Biopsy is done to rule out any suspicious activity within tissues.

I respect your decision Mr. Abott, but we all are aware of how smoking could be dangerous for our overall health, and I'm concerned for your health. If you feel comfortable, I want to extend my support in quitting smoking and also dealing with stressful situations.
Moreover, you will be spending so much money and time for dentures, I want them to be a success. Thus, we will get all the suspicions and doubts cleared before we give dentures to you.
What are your thoughts, Mr. Abott?

Post-operative instructions:

Post-operative instructions:
We understand, there are a lot of instructions to follow and understand. Hence, I will be providing a written pamphlet with all details alongside my verbal instructions. To begin with, the first 24 hours are most crucial. It is because the initial healing process starts and we have to be careful for it. The effect of numbness will wear off after 2-3 hours, be careful when you eat or drink while being numb, as you can bite your lips or cheeks. I will advise to not use straw to drink anything as it will prevent healing. Eat only room temperature and a soft diet for the 24 hours. Avoid hot because it will trigger bleeding and delay the healing process. Before the effect of LA wears off, you can eat an ice cream or smoothie and eat painkiller medication as I will prescribe you. Why I said to eat medication, is because pain and swelling is common in the first 72 hours after tooth removal as your body is grieving the loss. You will be at more ease after medication and sleep well. Any updates about the medications or interactions, since the last I saw you? I will prescribe you Paracetamol 1000 mg, you can take that no more than 4 times a day.

Angular cheilitis discussion:

I also happen to notice your corner of the mouth look fiery. We call this as angular cheilitis, meaning the angle of the mouth is inflamed. There are several reasons for it and one of them is deficiency in vitamins. Because of your recent change in diet, it would be best to visit a GP, to get a baseline blood profile.

Investigations:

Mr. Abott, with your permission, I will perform a few investigations. To start, with a careful look at the facial profile of yours and your mouth opening. And check for any tender points on your face or lymph nodes.

Inside the mouth, I will check all the soft tissues thoroughly.
I will have a careful look at the unhealed ulcer. Feel around the ulcer for how the border is felt on touching with gloved hands, look for any bleeding or pus coming.
I will also check for your tongue movements, and if numbness is appreciated near the ulcer. I will also take a few pictures of an ulcer as reference.

Once I get your blood test and biopsy test reports, we will go from there. Any questions for me Mr. Abott?

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Important features of the case:

- Mainly focus on patient concerns.
- Examiner will lead you in this case, as there are a lot of risk factors and discussions like - unhealed ulcer, denture concerns, angular cheilitis, or sometimes denture stomatitis.
- Biopsy, blood test should be the highlight for investigations. Also, checking for any signs of malignancy.
- However, never use term malignancy, as this is done via a sensitive approach. We can call out names as red flags or suspicious lesions.

Important links to read to understand this case better:

Angular cheilitis:

Detailed description in therapeutic guidelines.

Oral cancer:

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/mouth-cancer

Red flag features explained in therapeutic guidelines

Work- related stress:

https://www.betterhealth.vic.gov.au/health/healthyliving/work-related-stress

Smoking and management purposes:

https://www.betterhealth.vic.gov.au/health/videos/smoking-understand-your-smoking-addiction

https://www.betterhealth.vic.gov.au/health/healthyliving/smoking-quitting-tips

https://www.betterhealth.vic.gov.au/health/healthyliving/smoking-kills

Denture care and dental visits for dentures:

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/dentures

https://www.teeth.org.au/dentures

https://www.healthdirect.gov.au/dentures

How long do the dentures last:

https://www.agedcaredentistry.com.au/how-long-do-dentures-last/

https://www.ncbi.nlm.nih.gov/books/NBK596306/

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Questions asked in the exam regarding this case:

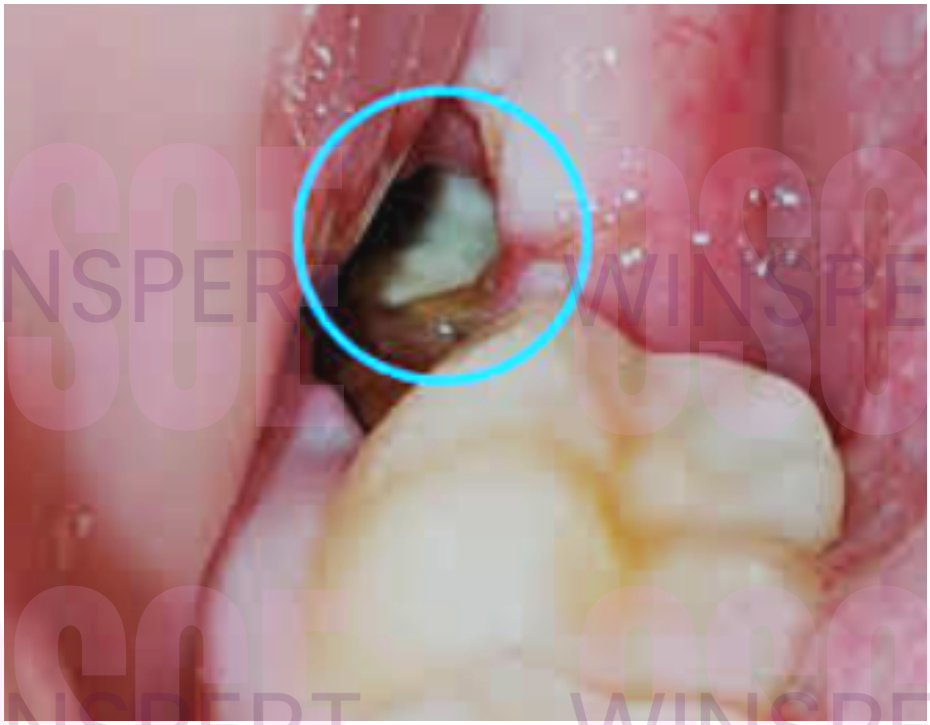
1. Why can't you give me the denture now?
2. I don't want to wait for a specialist. Is there any other way?
3. Can you prescribe me antifungal?
4. Can I wait for 3 months to do a biopsy?
5. Do you mean I have cancer?
6. I'm worried if we can make dentures sooner (If history is given to leave for work in 1 or 2 weeks?

WINSPERT

GREEN SET: CLUSTER 1

(Clinical Information Gathering)

NON-HEALING EXTRACTION SOCKET



Ms. Sally James, a 55-year-old patient, is visiting your clinic today, complaining of persistent throbbing pain in her lower right posterior area. After taking her history, she informs you that her lower right third molar was extracted 4 days ago and the pain began shortly thereafter.

Upon examination, you observe food debris filling the extraction socket.

Explain the possible causes to the patient and manage her pain.

CASE:

Empathetic beginning:

Sally, I'm so sorry to see you in this pain, I can understand how upsetting that must be.
Is your eating or sleep bothered by this? (If she is upset, just validate her emotions).
Can you brief me with how the pain started ?

Sally, I did have a look inside and the area looks really angry there. I want to explain the possible causes for this, but I will need your help with some answers. (If a patient did not eat well, or did not have painkillers, offer her - Sally, do you want some painkillers and something to eat, as I don't want you to be uncomfortable at any stage.

Exploring the chief complaint:

(If any question you ask in the opening remarks, if mentioned in the scenario or while initial description by patient, do not ask them again).

Site

- "Where is the pain?"
- "Can she point to the tooth or area in question?"

Onset

- "When did the pain start?"
- "Did it come on suddenly or gradually?"

Character

- "How would she describe the pain?" (e.g. achey, sore, throbbing, sharp)
- "Is the pain constant or does it come and go?"
- "Does pain aggravate on biting down ?"

Radiation

- "Does the pain spread elsewhere?"

Associations

- "Are there any other symptoms that seem associated with the pain?" (e.g. bad taste, fever, discharge)
- "Any swelling around the gums or on the face observed?"

Time Course

- "How has the pain changed over time?"

Exacerbating or relieving factors

- "Does anything make the pain better?" (e.g. analgesics)
- "Does anything make it worse or trigger it?" (e.g. cold, touch, lying down, while biting, bending down)

Severity

- "On a scale of 0-10, how severe is the pain, with 0 being negligible and 10 being the worst pain you've ever experienced?"

Relevant history:

Sally, how did you go following instructions after tooth removal? And yes, I agree they were a lot to understand.

What did you eat for the whole day? (You can get hints of what she ate, if she used straw, if it was hot) How did you manage to clean your teeth, as it must be difficult for you?(patient might give you hint here, if she must have rinsed)

1 Medical History

Sally, when we did extraction, your medical health was all clear, have there been any updates? Just to double check when was your last blood test ? Any medications that you might have taken? (Oral contraceptives are also cause for dry socket)

2 Social History

Sally, if I'm not mistaken, you don't smoke or drink alcohol right?

Sally, are you alright?

Explanation of possible causes:

Sally, I appreciate your help in this painful situation. From all the information with me, there could be few possible reasons for you to experience this unbearable pain.

- **Dry socket**: if patient says, smoking or rinsed and did not brush teeth at all or contraceptives. These could be possible reasons having a cumulative effect for this. Pain develops after 3-4 days, when the initial layer of healing which we call a clot failed to form. In your case, lower tooth removal and .....(mention all the positive factors for her to give a valid explanation).
- **Post-operative infection**: If she has swelling and pain, which hasn't settled down. And from the photo, looks like there is a lot of debris, also she mentions having a bad breath, pus. And there are no possible causes of dry socket. Then, explain this. Mention, how postoperative infection could be because of internal factors like within our body or because of external factors.
- **Pain from another tooth**: Rare possibility, but we will rule out this as well. When was your last dental check Sally? (Promote health, about visiting dentists regularly to intervene in any situation at the earliest).

Sally, any questions for me ?

Investigations:

Sally, I will confirm our possible causes by having a look at swelling on your face, also look for any tender spots in the area like lymph nodes.
Then, I will have another careful look, and use my monojet instrument to flush out all the debris accumulated, if needed I can also numb the area. Then, I will take one X-ray, which we call a periapical X-ray - to check for any suspicious activity within the gums.

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Managing pain:

However, until we figure out any particular reason, Sally, I'm going to clean the area of tooth removal, place a pain relief and healing agent which we call as alveologyl. Double checking with you Sally, any allergies or reactions in the past ?
Also, I'm going to give you medications for pain relief. (Depending on knowing if medication you prescribed after tooth removal is working or not, decide to give oxycodone as prescribed in TG - double check medical history and medications and only then prescribe).
I'm going to review you in 2 days in person and will also give you a call tomorrow to understand your situation.

Important features of this case:

- The possible cause of non healing tooth socket could be anything. Make sure to be detailed with history by being sensitive in asking. Do not blame the patient for the cause.
- About prescription of medicines, be mindful of medical history and allergies.
- Patient is in a lot of pain, is very empathetic and validate her emotions. Also offer something to eat or painkillers to feel better.

Important links to read to understand this case better:

Understanding dry socket:

https://www.healthdirect.gov.au/amp/article/dry-socket

Diagnostic dilemma for non-healing extractions socket:
(Not australian guideline approved article, but very thorough and relevant)

https://www.lenus.ie/bitstream/handle/10147/620676/ART4.pdf?sequence=1&isAllowed=y

Alveologyl and other substitute for unhealed socket:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6327816/

Questions asked in the exam regarding this case:

1. Do you think he/you removed the wrong tooth?
2. I'm allergic to fish, which dressing will you give me?
3. What is alveolgyl?
4. I want to lodge a complaint.
5. Do you think it could be a retained portion of the tooth?

WINSPERT

GREEN SET: CLUSTER 1

(Diagnosis and Management)

DISCOLOURED TRAUMATIC TOOTH IN A 3 YEAR OLD

Chris, a 3-year-old boy, is visiting your clinic today with his mother, who is concerned about discoloration in one of his teeth. She reported that Chris fell off a swing a week ago, resulting in some bleeding from his lips, which she managed to stop by applying pressure.

This morning, she observed that one of his front teeth had turned dark grey in colour, which worries her alot.

Address mother's concerns, explain diagnosis and manage it.

OTHER VERSIONS:

Be prepared with other cases of trauma in a primary tooth. Familiarise with key symptoms presented by the patient's mother or father.

CASE:

Introductory paragraph:

Chris's mum, how brave of you to have acted and managed Chris at the time of fall, as a Mum it wouldn't have been easy / Chris's mum it must be so hard for you to see Chris in this state (wait for her response and validate her concerns by saying yes and nodding).

How do you want me to address you today ?

Mrs..../ Ms...., your concerns and emotions are all valid, all is well now that you are here, and we will make sure he is going to be better.

Relevant history:

Mrs../Ms...from the information that you have provided me with, I want to make sure I understand what exactly Chris is experiencing.

Did he experience pain at any stage after the incident? Did you give him any medications ?

1 **Medical History**

Other than that Chris is well medically? Any medical conditions or additional medications I should be aware of ? Is he uptodate with his vaccinations?

Explanation of diagnosis:

Mrs.../Ms...., let me explain with the photo that I have taken. Would you say that this tooth was in a similar position?

Mrs..../Ms...from the information you provided and from my judgement this possibly is a form of dental trauma, we call it dental concussion. It means as a form of dental trauma, it has limited changes to the position of it, however the extent of its effects on the tooth can be varied. I will explain to you with the help of a diagram.
Can you appreciate how a tooth is embedded within a bone and covered by gums? Effects of a trauma get transferred to the neighbouring structures or sometimes even teeth. So, the effects on everyone won't be seen immediately but a matter of how each one tries to fight back to the effects of trauma.

Management Approach:

With any dental trauma, there are varied effects seen on teeth affected over a long period of time. Thus, reviews and monitoring play a crucial role in its management.

For a dental concussion, because it's affected Chris' baby tooth, regular monitoring will fade away the discoloration, although the time frame is not clear, it will happen eventually.
And Mrs../Ms...for your concern regarding the effects on adult teeth, I want you to be assured adult teeth in this area will erupt around 7-8 years of age. So, the effects of today's trauma won't be passed onto adult teeth. But, I couldn't stress enough on the importance of dental visits, even when there are no symptoms.

Do you have any questions for me Mrs.../Ms...?

When I say monitoring and reviews, in those I have to look out for signs of any pimple on gums, or pain while particularly touching gums in that area or continued wobbly tooth/teeth.
Similarly, I will write down these symptoms to keep in mind if you notice those for him at any stage.
When will I monitor him - it will be as follows:

Are you following so far Ms./Mrs....? Please do not hesitate to stop me and if anything needs to be repeated. I'm here to help you, without your understanding, we will not proceed with any step.

Important features of the case:

- Understand what are the main features of a trauma presented by mother.
- Depending on the trauma - assure mother if it's going to impact adult teeth.
- Stress the importance of recalls in the management of dental trauma. And also the importance of regular dental health check ups.
- Australian trauma guidelines for primary teeth - read them thoroughly. Understand if investigations are necessary before management appropriately.

Important links to read to understand this case better:

Trauma guidelines for permanent teeth fractures and luxations:

https://onlinelibrary.wiley.com/doi/full/10.1111/edt.12578

Trauma guidelines for permanent teeth avulsion cases:

https://onlinelibrary.wiley.com/doi/full/10.1111/edt.12573

Trauma guidelines for primary teeth injuries:

https://onlinelibrary.wiley.com/doi/full/10.1111/edt.12576

Importance of recalls after dental trauma (understanding sequelae of trauma):

https://iadt-dentaltrauma.org/IADT_Case_Report_2022_2nd_Prize_Thikrayat_Bani-Hani.pdf

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Important links to read to understand this case better:

Importance of ruling out the medical concerns beforehand:

https://onlinelibrary.wiley.com/doi/full/10.1111/adj.12396

Questions asked in the exam regarding this case:

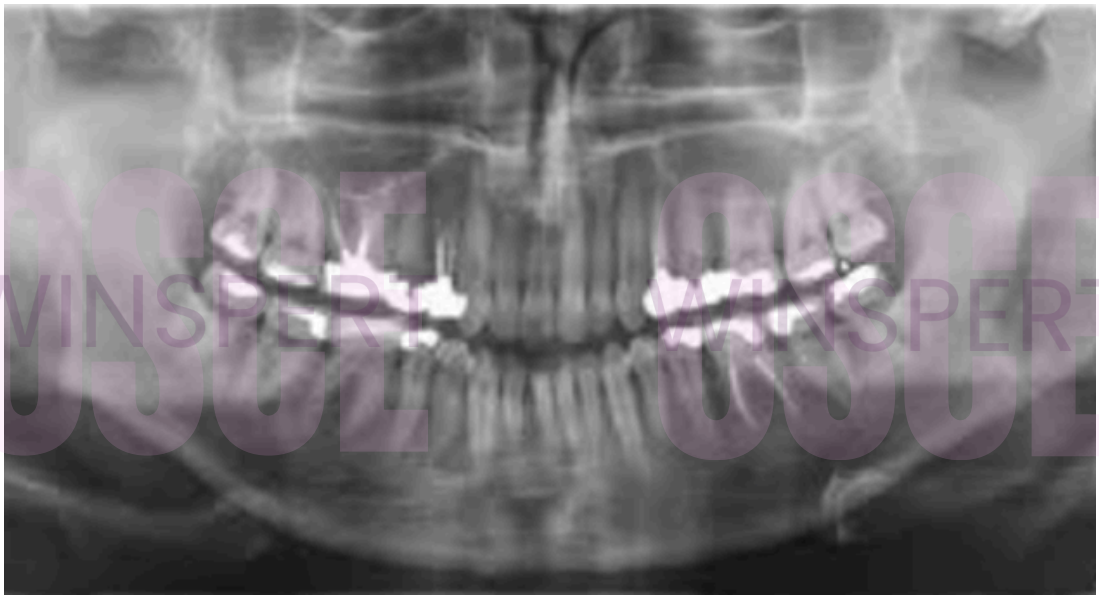
1. Why no treatment for Chris today?
2. Can you do bleaching for his tooth?
3. Would the treatment differ if I would have got him some other day?
4. Will adult teeth be affected?
5. Can you give him a mouthguard because he has injuries all the time?
6. How long does it take for the discolouration to reverse?

WINSPERT

GREEN SET: CLUSTER 2

(Diagnosis and Management)

PATIENT REQUESTING REPLACEMENT OF AMALGAM FILLINGS



Mrs. May Watson, a regular patient at your clinic, is here today for her routine check-up and scaling. She is concerned about potential mercury toxicity from the silver fillings. She has them for the past 8-10 years and is inquiring about replacing them with white fillings.

Her recent beliefs on naturopathy led her to lean towards this decision.

Explain to the patient why it's not good to change all the silver fillings. Provide her advice and precautions related to this procedure and how to proceed?

CASE:

WINSPERT

Introductory paragraph/ Rapport building:

May, I'm glad to see you again for your regular checkup and clean appointment. You are a role model to so many patients for your regular attendance to the dentists.

I have had a detailed look inside your mouth, good news is everything looks alright to me. However, I do understand you are here for concerns regarding your silver fillings too, right May? What are you not mainly happy about/ What bothers you the most? Have you developed these concerns recently?

All your concerns regarding the silver fillings are totally understandable. I will give you detailed answers and also help you with the brochures approved by the Australian government to read.

Dental history about fillings:

Have you experienced any pain/ sensitivity/ discomfort from them or other issues at all? Have they caused you any trouble in the mouth?

Detailed explanation on amalgam/ silver filling concerns:

May, I do understand there is a lot of controversy going around them, however we do follow Australian guidelines. Lots of studies are done and it's been proven for silver fillings to be safe in the mouth. Dental amalgam which we also call as silver filling has been used as a dental restorative material for more than 150 years. It is a clinically well-proven and successful filling material for teeth. Again, the Australian dental association brochures with detailed explanations will help you to understand them the best.

Now, there are situations in clinical settings where we change the silver fillings. And the criteria for that is when we notice any decay under them on x-rays, or cracks, when they are not in perfect condition and last but not the least any changes on your mouth lining because of that.

Why do we not change if the criteria is not met because: 1. Lot of tooth structure is removed in-itself to fit silver filling within the tooth, sometimes making the tooth with a bigger filling weak. And if we have to remove that filling, imagine weakening more of the tooth.
2. Other than that, sometimes, in the removal process we can remove a lot of tooth structure which could result in nerve exposure of the tooth, and thus more invasive treatment options would be needed.

I do have an x-ray here, however I will do a detailed investigation to check the integrity of these fillings. There are situations where if a crack is noticed, we have to intervene more invasively. However, May let's go stepwise and understand if there are any similar criteria for your fillings.

For any aesthetic concerns, I will check your smile line and understand which all fillings lie within the range. If needed, we can consider only changing them.

What are your thoughts, May?
Any questions for me?

Management for safe removal of silver fillings:

Remember when I said dental amalgams are safe in the mouth, however when we remove them, there is release of mercury vapours, which could be possibly harmful for you as well as me. Hence, when we have to remove them, we follow a SMART technique, which is the Safe Method of Amalgam Removal Technique.

In that technique we follow it as:

- By using a rubber dam sheet over your mouth, to isolate only those teeth.
- High speed suction for harmful vapours.
- Well-ventilated space of work.
- Using a lot of water to flush it out.
- Wearing appropriate PPE to prevent mouth and nasal ingestion.

Management:

There is no perfect material to meet all the requirements, and thus I will give you a wide range of options for the replacement with tooth coloured materials. Also, it will depend on the remaining tooth structure left after removal.

Direct filling option is:
Composite filling - If no need for extra support, this material gives similar shade and also binds to the tooth. However, it can stain over time. Thus, I would suggest that if your diet contains a lot of teas and coffees, then take a sip of water to prevent the stain drying on the tooth surface. The price range could be much lower than lab-made options.

For a tooth which has less of its structure after removing silver filling, to prevent it from developing cracks or breaking down. A more stronger option like:

Indirect onlay restoration: in this option, after minimal preparation to accomodate a tooth coloured stronger material like porcelain. This is comparatively lower in price range than a full crown.

Indirect crown: This will need more thorough preparation of tooth after a composite core in the middle. We can use several materials like zirconia, porcelain which are much stronger for stronger forces of biting or chewing and also avoids the need of stain removal. It's stronger yet more expensive.

May, do you know if you happen to grind your teeth ?

Because, with the stronger forces on a weak tooth structure, chances of it breaking down or developing cracks can occur. Thus, I would advise a splint to prevent the effects of grinding on teeth and restoration. However, to treat the root cause of grinding, we both will explore causes in your case and talk in detail about that.
(If time permits, talk about how stress can affect grinding, there could be other factors like smoking or caffeine which are contributing to grinding effect, and you can create a plan accordingly for them).

May, I do understand it's a lot to understand, I will provide a detailed brochure on these treatment options too. You take your time to read and do not hesitate to ask me questions at any stage.
Moreover, if you need a second opinion, please feel free and I will always be there for any questions.

Important features of the case

- Understanding the patient's needs and what's her worries with the silver fillings.
- Never, say no directly to the patient's needs, after understanding, mention, yes your concerns are valid but let me walk you through the steps and the possible outcomes.
- We do remove silver fillings too, if esthetician concerns are there. Providing brochures to understand the details of silver fillings, treatment procedures to remove amalgam and also options to replace silver fillings.

Important links to read to understand this case better:

Dental amalgam Australian guidelines:

https://ada.org.au/policy-statement-6-18-dental-amalgam

https://ada.org.au/getmedia/1735f560-35d0-4fe8-a000-dd760ca4a71a/ADA-Guidelines-for-Clinical-Handling-of-Dental-Amalgam-FC0823.pdf

https://www.teeth.org.au/should-i-remove-my-amalgam-fillings

https://www.health.qld.gov.au/__data/assets/pdf_file/0028/1265077/qh-gdl-975.pdf

SMART amalgam technique:

https://iaomt.org/resources/safe-removal-amalgam-fillings/

Vaping:

https://www.health.vic.gov.au/tobacco-reform/e-cigarettes-and-vaping

https://lungfoundation.com.au/lung-health/protecting-your-lungs/e-cigarettes-and-vaping/

https://www.tga.gov.au/products/unapproved-therapeutic-goods/vaping-hub/vapes-information-prescribers

Quitting vaping:

https://www.health.gov.au/topics/smoking-vaping-and-tobacco/how-to-quit

https://www.health.gov.au/topics/smoking-vaping-and-tobacco/how-to-quit/why-quit-vaping

https://www.vichealth.vic.gov.au/our-health/vaping

WINSPERT

Questions asked in the exam regarding this case:

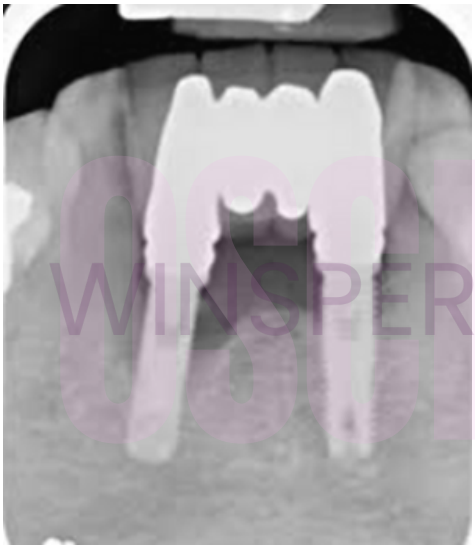
1. I replaced smoking with e-cigarettes. They are healthy right?
2. Why is amalgam banned in other countries?
3. Do you think I should remove amalgam?
4. Grinding means mercury leaking, right?
5. Why remove more tooth structure for silver fillings?
6. How will I know I have mercury toxicity?

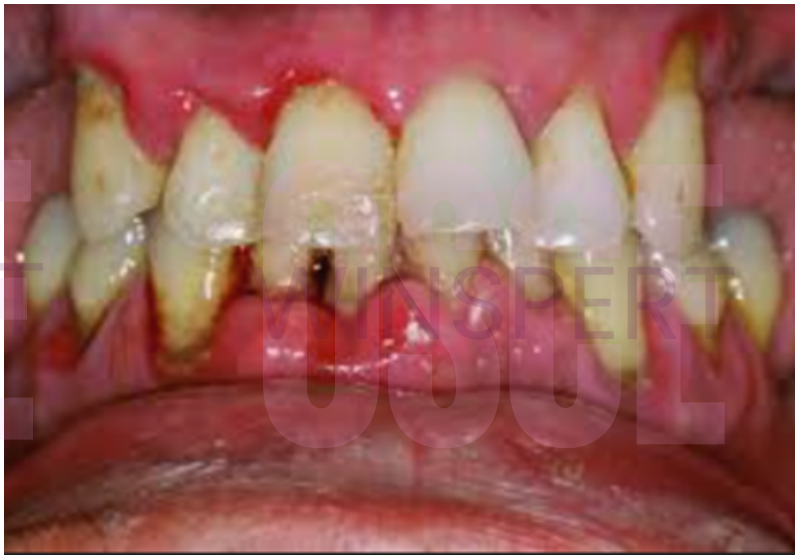
WINSPERT

GREEN SET: CLUSTER 3

(Clinical Treatment and Evaluation)

PATIENT WITH PERI-IMPLANTITIS





Mr. Daniel, a 60-year-old patient, is visiting your practice for the first time with complaints of bleeding gums. He has an implant-supported bridge spanning from teeth 32 to 42. Upon examination, you observe red, inflamed gums, with pocket depths varying between 6-8mm. On x-ray taken, there is peri-implantitis. He used a removable partial denture before getting these implants for around 6 years.

Additionally, Mr. Daniel smokes at least 15 cigarettes daily.

Explain the diagnosis, provide appropriate treatment options, and address the patient's concerns.

CASE:

Introductory paragraph:

Daniel, I understand you are visiting us with the concerns about the bleeding gums. Can you tell me more about it?

I had a detailed look inside your mouth, and there are noticeable signs which concern me. Before I ask you about them, have you ever experienced any issues other than bleeding gums?

Wobbly teeth/implant?
Continuous bad taste ?
Pus appreciated ?

Explanation of findings:

Daniel, I have taken one X-ray as well other than having a detailed look. The area of concern has really angry gums as we can see on the photo that I have taken. These angry gums are not just bleeding but also have gum depths which are higher than normal 2-3mm. I could also appreciate food accumulated in the area and some has been transformed to a calculus. Sorry for the jargon Daniel, calculus is a calcified bacteria which adds pressure on the gum in the long run and that's how gum and bone disease starts.

Moreover, on the X-ray here, we can see there is a support of bone around the teeth. Similarly, for implants, bone has a vital role in its support. Can you appreciate how bone levels have gone down in this region ?

Daniel, are you following so far ?

As the gums and bone are affected to a greater extent around the implants, we term that as peri-implantitis, which is the inflammation of bone and gums.

I can totally understand, all this information has come to you suddenly, however, the gums and bone get affected because of long term effects on them. And because it all happens below the gums it gets missed out by individuals.

Relevant history:

1 Dental history:

You mentioned having diabetes but are not on medication. Why is it so John? Diabetes has a huge impact on our oral health. Diabetes has a two way relationship with gum and bone disease. Moreover, if it's not controlled it can affect our gums and bone drastically. Hence, John I would highly recommend you to visit your GP and get the blood test done, to understand and control your health as well as your gum disease. What do you think about this, John ?
Any other medical conditions or medications that I should be aware of ?

WINSPERT

Relevant history:

1 Dental history:

Just wondering, when was your last dental visit, Daniel ?
When were these implants placed ? How have the visits to the dentist been following implants ?

Regular visits to dentists are so important as the effects happen silently within gums and not appreciable until very serious. And we do not want anyone to land up in any serious situation. Also, implants are expensive procedures, thus we do not want anyone to lose them.

How did you lose teeth in this region?

What was your experience with dentures for this area?

As I mentioned, the effects on gum and bone are long term and can be because of several factors. I want to understand your case so we can plan an appropriate management plan for you.

2 Medical History

When was your last GP visit ? Any medical conditions, medications that I should be aware of?

3 Oral History

How do you look after your teeth Daniel ? And how are you managing to clean between implants and teeth ?

Food usually gets accumulated between the teeth or between teeth and implant, and if it's missed out by us while cleaning, that's how the start of gum and bone disease is.

4 Social History

Moreover, what caught my attention is the number of cigarettes which you have mentioned. How long have you been smoking for ? Daniel, I totally respect your decision but as your clinician, I would like to let you know smoking has some serious effects on our overall health. Also, quitting is not easy, but I would extend my support to you and give you all the details of various approaches. The main reason for me to say this is because smoking impacts gum and bone levels, as well as it delays the healing potential of our body.

So, whenever you are comfortable we can have a detailed discussion on quitting approaches.

Correlation of risk factors:

Daniel, there are few risk factors I noticed for your situation: (all the positive risk factors from history correlate with the help of a diagram).

Most impactful is smoking as it has deteriorating effects as well as suppresses healing potential.
(Previous history of gum disease, add this if a patient says teeth were wobbly over time and fell).
(Also, if medical history is not known, the patient hasn't been to the GP and is unaware of its medical status - explain on how interplay between body health affects oral health).

(Removable dentures add pressure on our bones if used for a long time)

Treatment options and evaluation:

For your concerns Daniel, we need a multidisciplinary approach. It will combine efforts from you, me and a gum specialist who we call a periodontist. My scope of practice limits the treatment for implants. So, to understand stepwise:

For today, I will explain to you important areas on toothbrushing and how to maintain any replacement.
The efforts for longevity of any replacement option is combined, with maximum efforts from individuals. I understand you are trying your best Daniel, however, the majority of the time key areas are missed out.

Furthermore, to understand if we can save implants and to treat, I will refer you to a periodontist. He will perform, special procedure with his specialised equipment and experience. He can consider giving you antibiotics too.

With specialists, they have a specialist fee and also waiting times are involved.

So Daniel, I will go through all the crucial tooth brushing movements with you and also provide you with some brochures, as we really want to keep your mouth healthy. Do you think we can do this Daniel ?
Also, bleeding will be lessened over the time, I will see you for recalls every 3 months after your specialist appointments until your condition is stabilised.

Important links to read to understand this case better:

https://bdizedi.org/wp-content/uploads/pdf/GuidelinesEuropeanConsensusConference/2020_EuCC_en_final_JN.pdf

https://www.dva.gov.au/sites/default/files/files/providers/alliedhealth/AHcareproviders/osseointegrateddentalimplantpolicy.pdf

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7558189/#:~:text=Most%20common%20treatment%20modalities%20were,and%206%2Dmonth%20radiographic%20evaluation.

WINSPERT

Questions asked in the exam regarding this case:

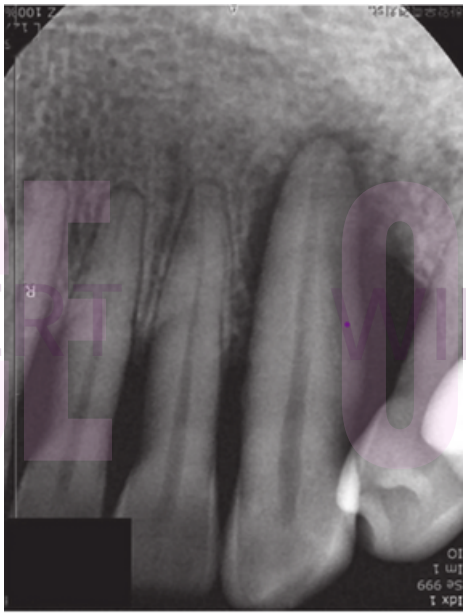
1. Do you think I will lose my implant?
2. My dentist mentioned, implants are a lifetime replacement. How can it fail?
3. I can't quit smoking. I can afford implants again. When can I do it?

WINSPERT

GREEN SET: CLUSTER 3

(Clinical Treatment and Evaluation)

PATIENT REQUESTING ANTIBIOTIC PROPHYLAXIS



Mr Daniel is a new patient at your practice, presenting today with complaints about his extremely mobile upper canine. On a periapical x-ray you took, there is a significant bone loss around 23 and some around 24, 25. You decide to extract tooth 23.

The patient had a joint replacement 6 years ago and is allergic to penicillin. He requests antibiotic prophylaxis, as his previous dentist provided this before dental treatments.

He also has asthma and hypertension.

Take consent before extraction and manage patient concerns.

CASE:

Introductory paragraph:

Daniel, it's not the best feeling to have a wobbly front tooth that can fall off anytime. (Patient will comment) I have had a thorough look, however I want to understand your hopes and expectations Daniel.

Daniel, are you carrying your asthma inhaler today?

Other than being wobbly, do you have any pain? Any swelling on your gums or face?
Do you feel unwell/ have a fever?

Discussion of findings:

Daniel, while having a look, I happened to notice the tooth of concern is really wobbly and the bone support on the x-ray doesn't look promising either. Let me show you with the help of an x-ray. Also, the other two teeth look compromised. Are you following so far, Daniel?

As disappointing as it looks, I would have done my best to save your teeth. However, teeth take support from the bone and gums. Unfortunately, they do not possess potential to regrow if damaged to a severe extent. This is what I'm afraid has happened in your case. And thus, this specific tooth (23) can't be saved.
I hope everything is clear so far Daniel. Do not hesitate to ask any questions at any stage.

Relevant history:

1 Dental history:

Have you had any teeth removed in the past? How did the procedure go? You also had antibiotics before the treatment, was it mentioned by your treating medical practitioner/GP? The reason I ask is that the current and updated guidelines do not prescribe antibiotics for joint replacement, unless specified by your practitioner for any/ specific dental procedure.

As antibiotics, if taken for each step, it does impact your body balance, and then we can be resistant to antibiotics when actually needed. Moreover, our day-to-day oral hygiene routine has more chances of causing bacteremia, which is the introduction of microbes in our mouth than the procedure most of the time.

Because your tooth is really wobbly, the chances of a tooth removal procedure is going to be straightforward, limiting the invasive treatment.

2 Medical History

I will check with your GP and if possible also request records from your previous dentist about the need of antibiotics before the procedure. Does that feel okay to you?
How are your follow ups going for joint replacement ?
Other than asthma and hypertension, are there any medical conditions or medications I should be aware of?
Have you had any issues with anaesthetic before?

Clinical treatment and evaluation:

While we await the need of antibiotics from your medical practitioner and also from your previous dentist, we can do temporary management.

(If a patient has systemic signs - give antibiotics as we are not doing an active treatment within the next 24 hours

I will prescribe you: Clindamycin 300mg 8 hourly for no more than 5 days).

In the meantime, If the feeling of the tooth being wobbly is bothering you, I can splint the teeth, meaning take support from adjacent teeth, for them to be stable. How does this sound to you Daniel?

The most important thing for you to understand is the tooth removal procedure. I will explain to you the procedure steps, risks involved and complications in detail. Unless you understand, I won't proceed. Please don't hesitate to ask me all the questions that come to your mind.

Also, do you smoke or drink alcohol? (if yes - mention about its impact of tooth removal)

I will start by numbing the area, first by anaesthetic gel to ease the procedure of injection (local anaesthetic). I will confirm if you are numb and by differentiating the feeling of numbness within your mouth.
You will feel the pressure but no pain. At any stage if you feel the pain, I will stop immediately and add a numbing solution. Tooth can be removed after that. In the follow up appointment I will review as well as discuss the replacement options for you.

And after the tooth removal procedure I will also provide you with all sets of instructions verbally as well as written to refer.

Management:

What concerns me, Is how did your teeth become so wobbly? When was your last dental visit Daniel?
I understand Daniel, we are very busy and life becomes tough to manage everything. But, looking after health is going to be worth it, as it can avoid dealing with serious complications, right?
From the x-ray that i have taken and the findings of your teeth, it appears to me that your gums and bone are affected.

No matter how great your teeth are but if their foundation is compromised,like gums and bone, we will lose teeth. And no replacement is as good or better than our natural teeth. Daniel, thus I would highly encourage you to visit dentists regularly. I would like to create a positive and trustworthy relationship with you, so that we can work towards your better oral and general health.

Important features of this case:

- Understand why the patient is after antibiotics.
- If a patient says antibiotics were given previously, do not directly say we avoid antibiotics, understand if the medical practitioner requested or the procedure itself demanded for antibiotics like surgical procedures.
- Discussion of replacement options in the following appointment of review.
- Not to forget, the patient probably has periodontitis, thus managing the rest of the teeth and explaining the importance of regular visits and helping create a healthy mouth for the patient.

Important links to read to understand this case better:

Reading therapeutic guidelines or referring to the videos of therapeutic guidelines to understand antibiotic prophylaxis.

https://www.epworth.org.au/newsroom/major-study-in-the-use-of-antibiotics-with-joint-replacement-surgery

https://www.nps.org.au/assets/6843163bc5c342e9-aa90dacc5c6c-antibiotic-prophylaxis-for-dental-procedures-40-184.pdf

Questions asked in the exam regarding this case:

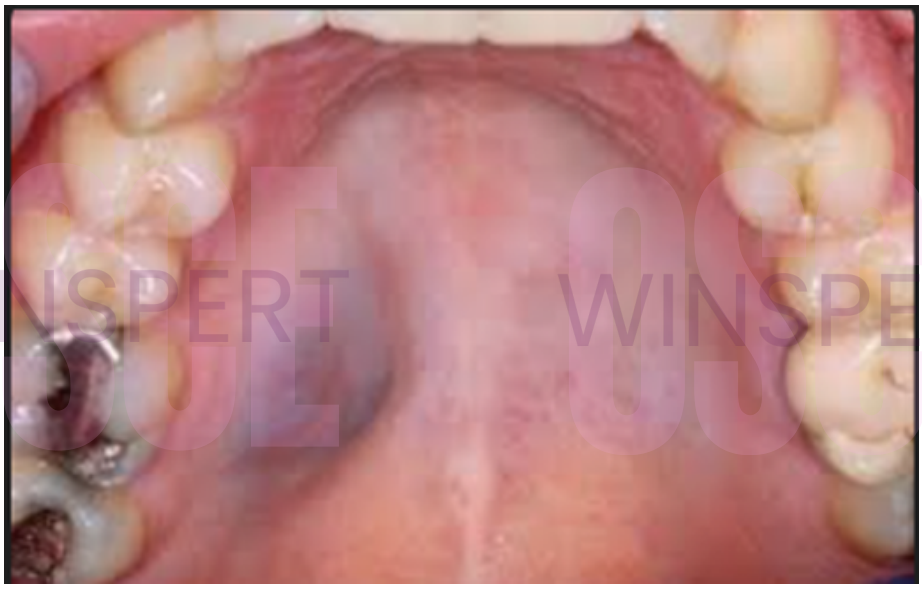
1. **If a specialist is not available, then what could be my options?**
2. **Why therapeutic antibiotics do not cause resistance?**
3. **Why did the specialist/ GP/ other dentist give me antibiotics?**

WINSPERT

ORANGE SET: CLUSTER 1

(Clinical Information Gathering)

BLUISH SWELLING ON THE PALATE



Mr. Pat is here today for a check-up as a new patient. His last dental visit was four years ago. He is here with his daughter and she wants you to look at the swelling. He has a large bluish/dark red swelling on the right side of his palate, measuring between 4-7 mm, which has been present for four years. During his last dental visit, an amalgam filling was placed on tooth 16.

Address the patient's concerns and plan for the appropriate investigations. No need for a definitive diagnosis or treatment at this stage.

WINSPERT

Important links to read to understand this case better:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10576611/

https://www1.racgp.org.au/getattachment/1a458ded-2ea3-47f7-b5eb-4a7f0a433820/Common-causes-of-swelling-in-oral-cavity.aspx

Questions asked in the exam regarding this case:

1. **Can it be cancer?**
2. **How can trauma cause swelling?**
3. **What is F.N.A.C.?**

WINSPERT

ORANGE SET: CLUSTER 1
(Clinical Information Gathering)
PATIENT WANTS IMPLANTS

VERSION 1

Mr. John Edward is a new patient at your clinic, seeking to replace all his upper back teeth on the right side, which were removed a few years ago. He is interested in implants as a fixed option.
Medically, he is fit and healthy. He had heart valve replacement surgery two years ago and is on medication for it. He remembers it as white pills.

Address John's concerns, complete risk assessment for him and perform investigations

VERSION 2

Mr. John Edward is a new patient at your clinic, seeking to replace all his upper back teeth on the right side, which were removed a few years ago. He is interested in implants as a fixed option.
Medically, he is fit and healthy. He had heart valve replacement surgery two years ago and is on medication for it. He remembers it as white pills.

Address John's concerns, complete risk assessment and explain the relationship between heart valve and implant surgery.

WINSPERT

Important links to read to understand this case better:

https://www.healthdirect.gov.au/dental-implant

https://teeth.org.au/dental-implants

https://www.dva.gov.au/sites/default/files/files/providers/alliedhealth/AHcareproviders/osseointegrateddentalimplantpolicy.pdf

https://www.healthdirect.gov.au/aortic-valve-replacement

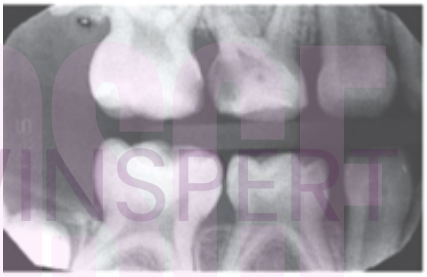
Questions asked in the exam regarding this case:

1. **Would the specialist be able to check bone quality with a scan?**
2. **Why did my friend not have these problems?**

WINSPERT

ORANGE SET: CLUSTER 2
(Diagnosis and Management)
4 YEAR OLD UNCO-OPERATIVE CHILD

VERSION 1



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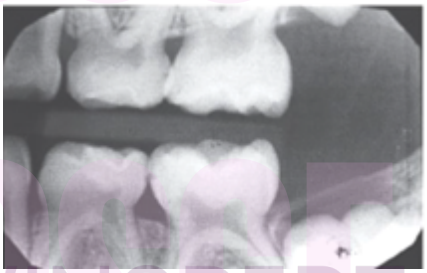


	BREAKFAST	LUNCH	DINNER	SNACKS
MONDAY	orange juice, cookies	flat bread with hummus	chicken soup, herbed rice	cake slices
TUESDAY	milk, cookies	pumpkin soup, toasted bread	chocolate milk, pizza	flavoured yoghurt
WEDNESDAY	honey puffs and milk	chick peas fry noodles	soft drink, roast chicken	cookies, sultanas
THURSDAY	cereals	Savoury pancake	fish and rice	gummy chocolates, soft drink
FRIDAY	toastie and glass of milk	chicken and rice	vegetable soup pasta	cheese sticks brownie
SATURDAY	choco puffs and milk	chicken noodles	soft drink noodles	cookies, fruit juices
SUNDAY				

William James, a 4-year-old boy, is visiting your clinic today with his mother, complaining of pain in a tooth on the lower left side. He is uncooperative and did not agree to sit in the chair, but you managed to take two bitewings. It revealed multiple caries, mainly involving the primary molars.

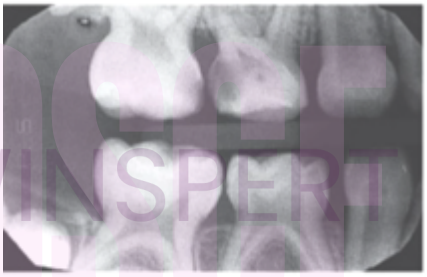
This is his second visit, and his mother has brought a diet chart. Honly drinks tank water.

Explain the management plan for William and the reasons for each step.

WINSPERT

ORANGE SET: CLUSTER 2
(Diagnosis and Management)
4 YEAR OLD UNCO-OPERATIVE CHILD

VERSION 2



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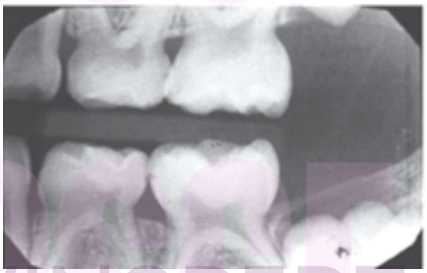

	BREAKFAST	LUNCH	DINNER	SNACKS
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SUNDAY				

William James, a 4-year-old boy, is visiting your clinic today with his mother, complaining of pain in a tooth on the lower left side. He is uncooperative and did not agree to sit in the chair, but you managed to take two bitewings. It revealed multiple caries, mainly on the primary molars.
They are visiting you for the first time after travelling for hours. They reside approximately 200 kms aways. His mother has brought a diet chart. Additionally, he is drinking tank water.

Explain the management plan for William and the reasons for each step.

WINSPERT

Important links to read to understand this case better:

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/tooth-decay-young-children

https://www.health.nsw.gov.au/baby-teeth

https://www.dhsv.org.au/oral-health-advice/dental-health-advice/preschool-children#:~:text=Milk%2C%20yoghurt%20and%20cheese%20(and,of%20sugar%20causes%20tooth%20decay.

Questions asked in the exam regarding this case:

1. Can you please do something for him today?
2. Will the specialist be able to do everything in one appointment?
3. I have tried several times, but he cannot quit eating sweet food. What should I do?
4. I don't think I can come for regular check-ups or reviews, is that okay?
5. Do you think I'm not giving him a healthy diet?
6. I believe in natural and vegan alternatives. What toothpaste or tooth mousse can we use?

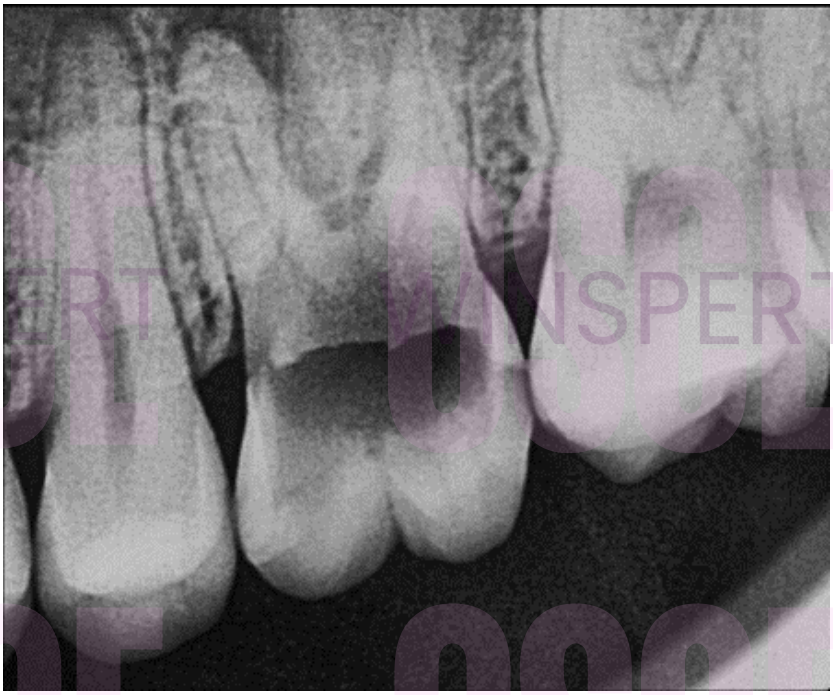
WINSPERT

ORANGE SET: CLUSTER 2

(Diagnosis and Management)

A PATIENT WITH UNCONTROLLED DIABETES AND SWELLING PRESENT

VERSION 1



James Oliver, a 46-year-old new patient at your clinic, presents with swelling on his face and pain originating from an upper left molar for the past 2-3 days. He previously consulted his GP, who prescribed antibiotics, but they have not been effective. The swelling persists, and his GP has referred him to you.

His medical history includes diabetes mellitus.
You take a periapical x-ray and examine clinically, it doesn't appear to be savable. The roots of the tooth are in close proximity to the maxillary sinus.

Address his concerns and manage Mr. Oliver's condition.

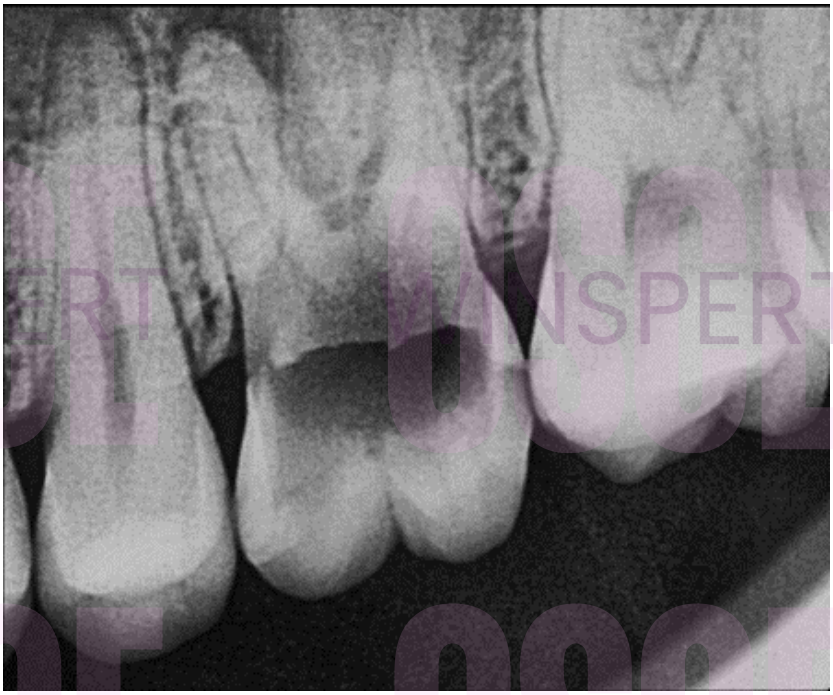
WINSPERT

ORANGE SET: CLUSTER 2

(Diagnosis and Management)

A PATIENT WITH UNCONTROLLED DIABETES AND SWELLING PRESENT

VERSION 2



James Oliver, a 46-year-old new patient at your clinic, presents with swelling on his face and pain originating from an upper left molar for the past 2-3 days. He has a fever but no signs of spreading odontogenic infection. He previously consulted his GP, who prescribed antibiotics, but they have not been effective. The swelling persists, and he is in the middle of his antibiotic course.

His medical history includes diabetes mellitus and hasn't visited a GP in a long time.
You take a periapical x-ray and examine clinically, it doesn't appear to be savable. The roots of the tooth are in close proximity to the maxillary sinus.

Address his concerns and manage Mr. Oliver's condition.

WINSPERT

Important links to read to understand this case better:

Understanding the chapter of odontogenic infections in Therapeutic guidelines.

https://onlinelibrary.wiley.com/doi/pdf/10.1111/adj.12538

https://aci.health.nsw.gov.au/networks/eci/clinical/clinical-tools/dental-emergencies

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5464582/

https://www.sciencedirect.com/science/article/abs/pii/S2212555822001569

Questions asked in the exam regarding this case:

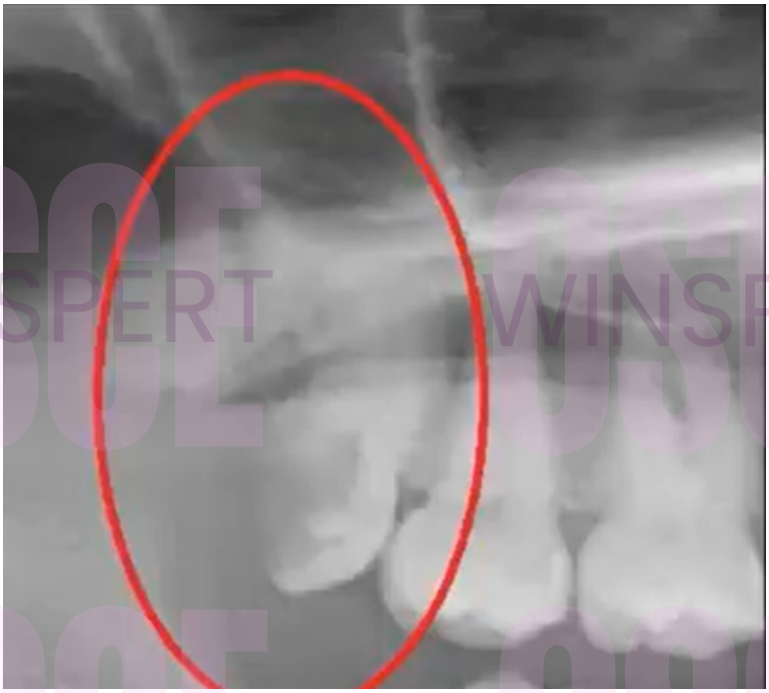
1. **I'm scared to take another set of antibiotics, can we do something else?**
2. **I can't go to a specialist tomorrow, can we do it now?**
3. **Hospitals have long waiting times, is there any alternative?**
4. **If you give me medicine, I don't need to go to hospital?**

WINSPERT

ORANGE SET: CLUSTER 3

(Clinical Treatment and Evaluation)

PAIN AND SWELLING EXPERIENCED IN A PATIENT HAVING ASTHMA



Mr. Thomas Edison is attending your clinic today, complaining of pain and swelling on the top right side of his mouth. Upon examination, you find that he has facial swelling, swollen lymph nodes, and a fever. An X-ray reveals deep caries in tooth 18. You have spoken to the surgeon, and the next available appointment is in three days.

His medical history includes an allergy to penicillin and asthma.

Manage the patient's concerns and provide an appropriate treatment plan.

WINSPERT

Important links to read to understand this case better:

Understanding spreading odontogenic infection in therapeutic guidelines by reading and watching videos.

https://australianprescriber.tg.org.au/articles/management-of-acute-dental-pain-a-practical-approach-for-primary-health-care-providers.htmlhttps://

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/wisdom-teeth

Questions asked in the exam regarding this case:

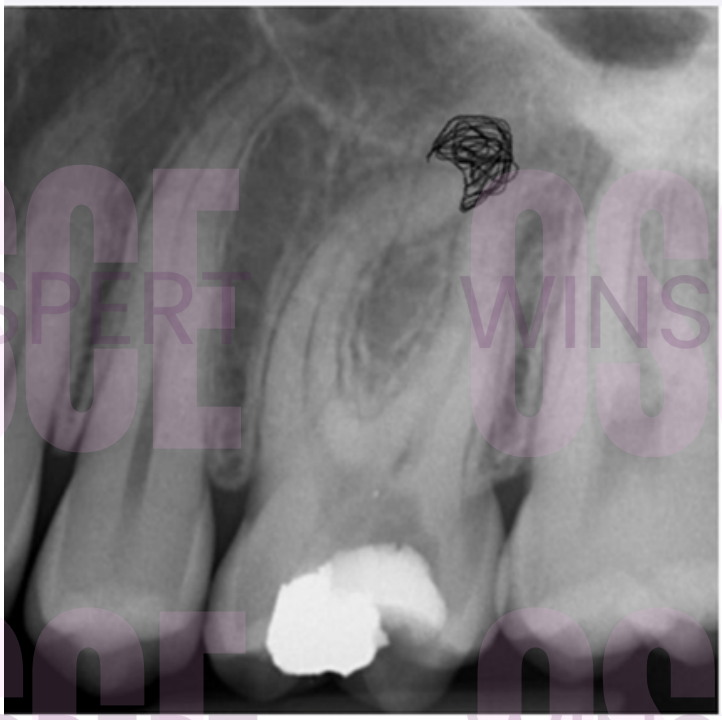
1. **If my diabetes is controlled and I have done the HbA1c test recently, will you perform the treatment today?**
2. **If I want to do it only today. Can I go to the hospital?**
3. **If you can do pulp extirpation/ first stage of RCT without any test, why you cannot do extraction without any test?**
4. **Can you give me painkillers?**
5. **What antibiotics will the hospital give?**

WINSPERT

ORANGE SET: CLUSTER 3

(Clinical Treatment and Evaluation)

PAIN EXPERIENCED WITH AMALGAM FILLING DONE BY A COLLEAGUE



Mr. Harry, a regular patient at your clinic, is attending today with a complaint of severe pain from a tooth on the top left side. He is really upset. His last dental visit was two weeks ago to your clinic with a colleague who performed an amalgam filling on tooth 26, which chipped off two days later.

An X-ray taken today shows periapical radiolucency along the mesial root and some below on the filling.
He is medically fit and healthy.

Address the patient's concerns and outline a plan to manage his pain.

WINSPERT

Important links to read to understand this case better:

https://www.prestigedentalcarefl.com/post/dont-let-your-silent-cavities-go-undetected

https://dentalparadiso.com.au/tooth-decay-the-silent-epidemic-and-what-we-can-do-about-it/

https://www.dentalprotection.org/australia/publications-resources/dentolegal-articles/articles/handling-dissatisfied-patients-and-their-complaints

https://www.dentistryiq.com/front-office/patient-records/article/16349832/handling-angry-patients-in-the-dental-office

https://thedentalreview.com.au/business/2512/

Questions asked in the exam regarding this case:

1. **Why were the x rays not taken before?**
2. **Why did I not experience pain before the treatment and suddenly it intensified?**
3. **Why do I have to pay for additional treatment now? (Indicating RCT)**
4. **I'm upset, you have all the records, will you check everything and tell me?**

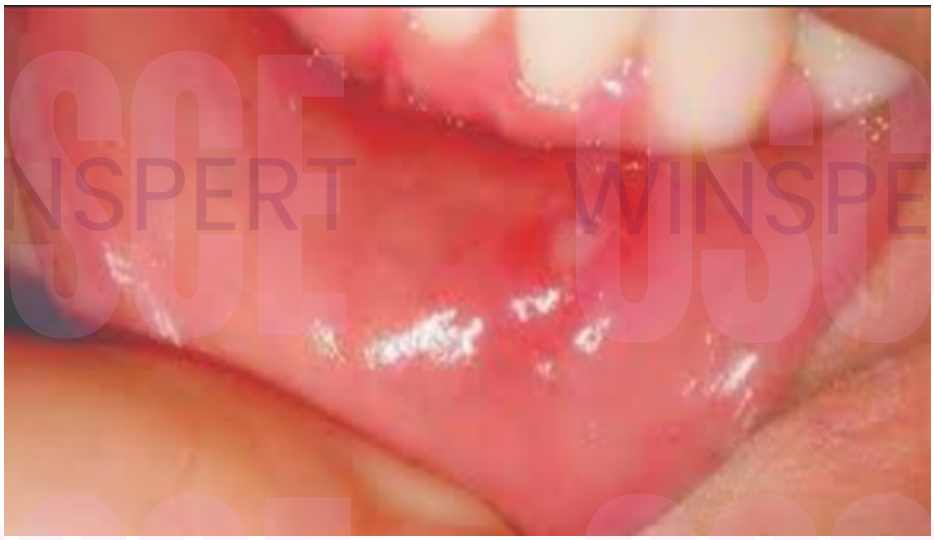
WINSPERT

RED SET: CLUSTER 1

(Clinical Information Gathering)

APHTHOUS ULCER IN A PATIENT

VERSION 1



Charlotte, a 20 year old law student, has come to your clinic today with a complaint of mouth ulceration. Ulcers have persisted for more than the past 5 days. She is under considerable stress due to her upcoming final exams in two months. Upon examination, you observe an ulcer on the inner side of her lips. She mentions that her sister also experiences similar ulcers.

Describe the special tests you would conduct and provide your differential diagnosis along with your provisional diagnosis.

WINSPERT

RED SET: CLUSTER 1

(Clinical Information Gathering)

APHTHOUS ULCER IN A PATIENT

VERSION 2

Charlotte, a 20 year old law student, has come to your clinic today with a complaint of mouth ulceration. Ulcers have persisted for more than the past 5 days. She is under considerable stress due to her upcoming final exams in two months. Upon examination, you observe an ulcer on the inner side of her lips. She mentions that her sister also experiences similar ulcers and has a history of coeliac disease.

Describe the special tests you would conduct and provide your differential diagnosis along with your provisional diagnosis.

WINSPERT

Important links to read to understand this case better:

Read a section on aphthous ulcers in Therapeutic guidelines and watch videos to understand better.

https://www.healthdirect.gov.au/mouth-sores-and-ulcers

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/mouth-ulcers

https://www.aafp.org/pubs/afp/issues/2000/0701/p149.htm

Questions asked in the exam regarding this case:

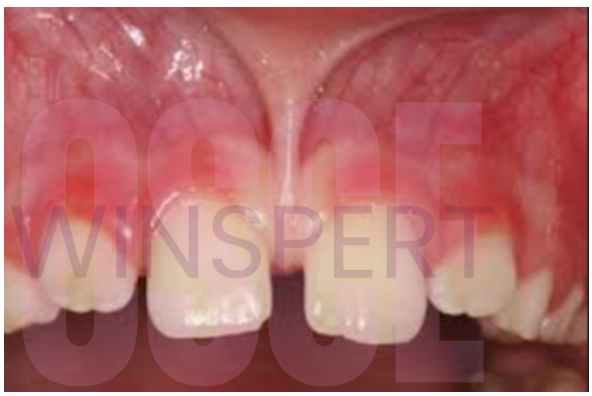
1. **How will the blood test be helpful?**
2. **Can you give me a steroid?**
3. **I don't have any symptoms of coeliac disease even if my sister has it. How can that be a cause for me?**

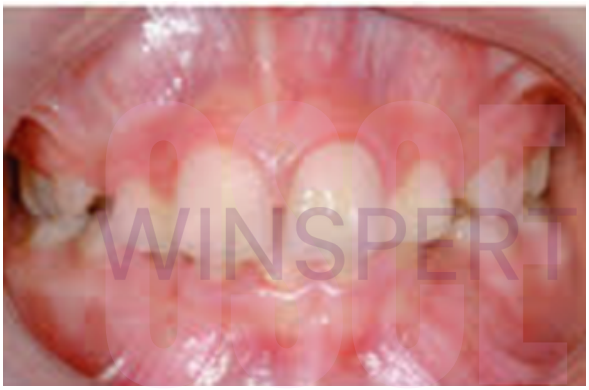
WINSPERT

RED SET: CLUSTER 1

(Clinical Information Gathering)

10 YEARS OLD MISSING CANINE IN A PATIENT





Julie, a 10 year old girl, visits the clinic with her mother. She has bilaterally missing canines in both her upper and lower jaws. Her mother is concerned about Julie's appearance due to her splayed front teeth, which they believe are too large. Additionally, the canines are absent in both jaws. The parent can feel a bulge in the lower jaw, indicating that the canines might be erupting, but there is no similar bulge in the upper jaw.

Gather information, explain and respond to mum's concerns.

WINSPERT

Important links to read to understand this case better:

http://firstsmiles.com.au/wp-content/uploads/2018/08/The-Impacted-Maxillary-Canine-Revisiting-the-Clinical-Guideline-with-Case-Illustrations.pdf

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5376450/

Questions asked in the exam regarding this case:

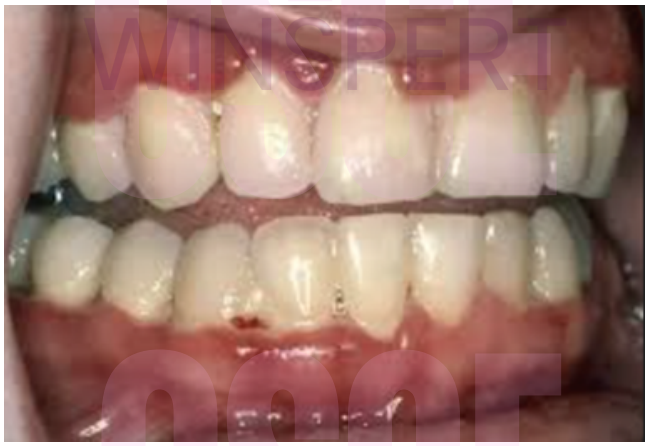
1. Why do I feel the bulge in her lower jaw?
2. What is the x-ray dose? Is it necessary to take x-rays?
3. How can missing teeth be genetic?
4. Will the specialist start the treatment immediately?
5. Can we skip taking an OPG?
6. On OPG is it possible to understand if a tooth is impacted or not?
7. How can we understand the exact position of impaction?

WINSPERT

RED SET: CLUSTER 2

(Diagnosis and Management)

PATIENT WITH NECROTISING GINGIVITIS



Michael Sean, a 25-year-old law student, has come to your clinic today complaining that his gums are bleeding and painful, making it difficult to eat. He reports that these symptoms have been occurring intermittently over the past year and have worsened in the last two months. He saw his GP this morning, who prescribed penicillin, but he has not yet purchased it.

During your examination, you observe ulcers around the gum margins. John is otherwise healthy but had a viral infection 10 days ago. He smokes 10 cigarettes daily and consumes alcohol once a day. Given his situation and with an upcoming law exam, he is restless.

Provide a diagnosis and management plan for his condition.

WINSPERT

Important links to read to understand this case better:

The best reference in detail would be in the therapeutic guidelines.
Thorough reading and understanding video on the portal.

https://www.ncbi.nlm.nih.gov/books/NBK562243/

Questions asked in the exam regarding this case:

1. I don't want to take medication twice a day. Is that okay?
2. I use listerine without alcohol. Can I use that?
3. Do I need to stop penicillin?
4. Why to use metronidazole & not penicillin?
5. What happens if metronidazole and alcohol are taken together?
6. Can you give me any medication once daily?
7. Can I pass on this condition to my partner?
8. What are the differential diagnosis to this condition?
9. Hydrogen peroxide mouthwash is used as toilet cleaners, are you prescribing this to me?

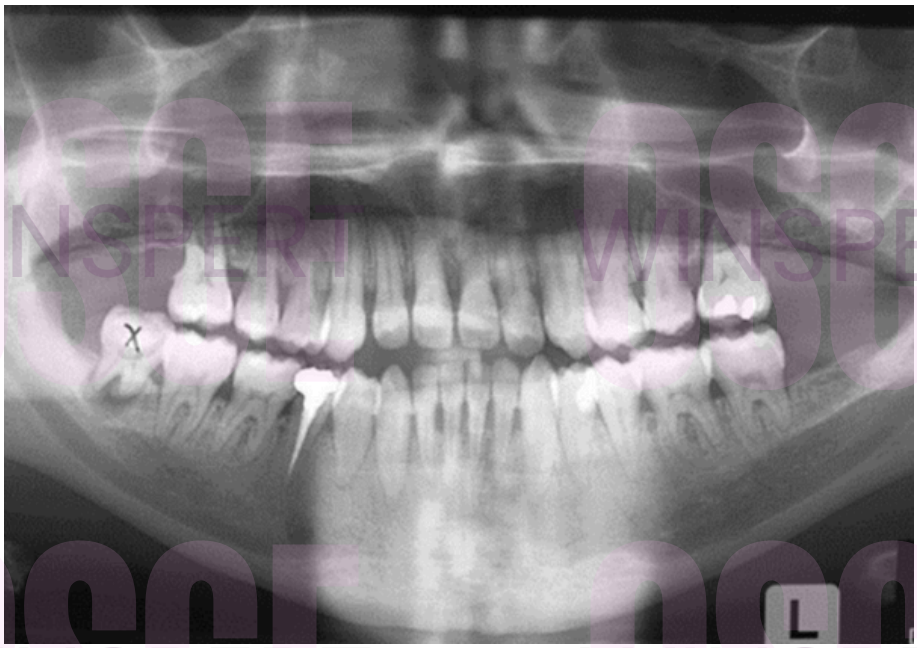
WINSPERT

RED SET: CLUSTER 2

(Diagnosis and Management)

PATIENT WITH CHRONIC GENERALISED PERIODONTITIS

VERSION IN PRACTICAL HANDBOOK:



Mrs Wilson is 45 years-old and is a new patient to your practice. She attends today requesting a scale and clean as her previous dentist of 20 years has recently retired. You note that Mrs Wilson's medical history is clear but she reports that she smokes 10 cigarettes a day and has a family history of early tooth loss. Mrs Wilson has brought along an orthopantomograph (OPG), taken at her last dental appointment where she had tooth 48 extracted. Today, you have performed a full periodontal examination including periodontal charting. You find heavy plaque and calculus deposits, with some bleeding on probing at deeper sites. You record generalised probing depths of 5-6mm and recession of up to 2mm on the lower anterior teeth.

Explain your diagnosis to Mrs Wilson and work towards gaining informed consent for your management plan.

WINSPERT

Important links to read to understand this case better:

https://www.healthdirect.gov.au/gum-disease

https://www.perio.org/wp-content/uploads/2019/08/Staging-and-Grading-Periodontitis.pdf

https://www.betterhealth.vic.gov.au/health/healthyliving/smoking-and-oral-health

https://www.cdc.gov/tobacco/campaign/tips/diseases/periodontal-gum-disease.html

https://hcc.vic.gov.au/public/about-complaints

https://www.dentalprotection.org/australia/for-members/membership-faqs/what-happens-when-i-retire-or-cease-dental-practice-in-australia

Questions asked in the exam regarding this case:

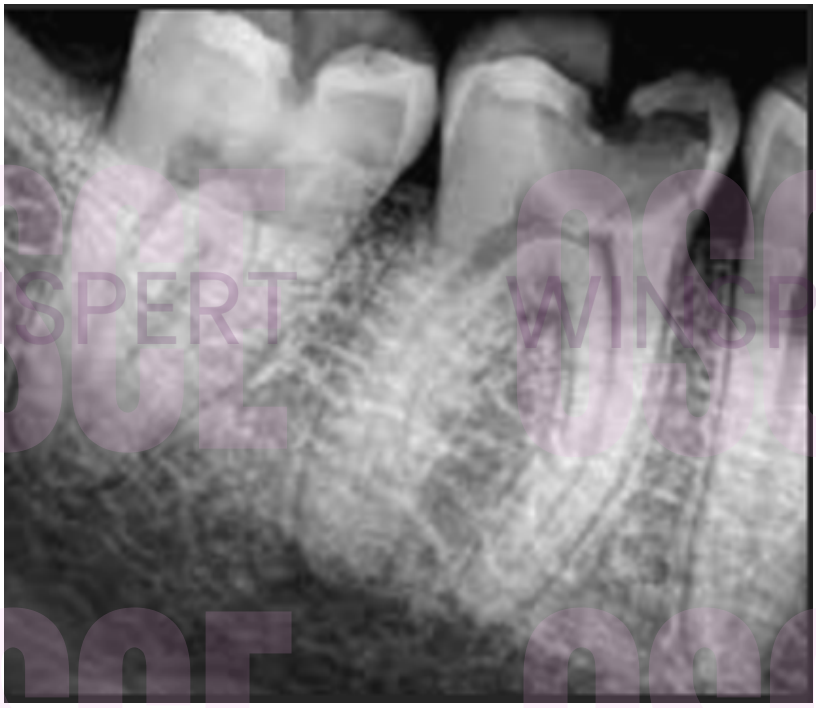
1. **Why didn't the previous dentist inform me about my condition?**
2. **How can I lodge a complaint against my retired dentist?**

WINSPERT

RED SET: CLUSTER 3

(Clinical Treatment and Evaluation)

INFORMED CONSENT FOR ENDODONTIC TREATMENT



Mr. John, a 29 year old regular patient at your clinic. He was diagnosed with irreversible pulpitis in tooth during his last visit. He has returned, still in pain, and prefers not to have tooth extracted.
His medical history is clear and is fit and healthy.

Explain the procedure of root canal treatment and obtain his informed consent.

WINSPERT

Important links to read to understand this case better:

https://www.health.qld.gov.au/__data/assets/pdf_file/0035/363977/dental_10.pdf

https://www.mitec.com.au/products/ada-root-canal-rct-pamphlet

https://www.healthdirect.gov.au/root-canal-treatment

https://www.teeth.org.au/root-canal-treatment

Questions asked in the exam regarding this case:

1. After hearing the details of the procedure, I do not want to do RCT, can we take the tooth out?
2. Why will it fracture?
3. Why can't you perform all steps in one procedure?
4. Do I need antibiotics?
5. I'm paying so much, what if the tooth breaks?
6. Is this a lifetime treatment?
7. What is the success rate with RCT?
8. Any other ways to save this tooth?
9. Are you giving me the guarantee of success?
10. If the treatment is unsuccessful, will you give me money back?
11. Can I delay the crown on top of the tooth by 1 year?
12. Do you think my insurance will cover everything?

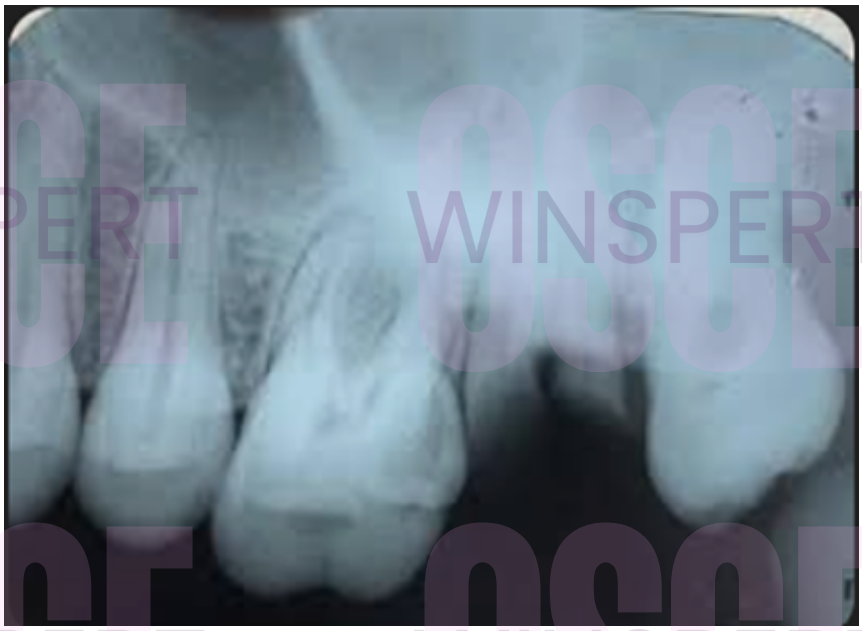
WINSPERT

RED SET: CLUSTER 3

(Clinical Treatment and Evaluation)

APICAL 3RD OF THE ROOT BROKE IN THE MIDDLE OF EXTRACTION

VERSION 1



Mr. Singh, a 43-year-old male new patient, visited your clinic on a friday afternoon. He resides two hours away by car. He reported experiencing pain and swelling on the upper right molar, which was severely decayed. Extraction was recommended, and he consented to the procedure.

During the extraction, the palatal root fractured, leaving an approximately 4 mm piece of the root inside. The radiograph indicated that the root fragment was in close proximity to the maxillary sinus.

Inform the patient about the broken tooth and discuss the next steps for further management.

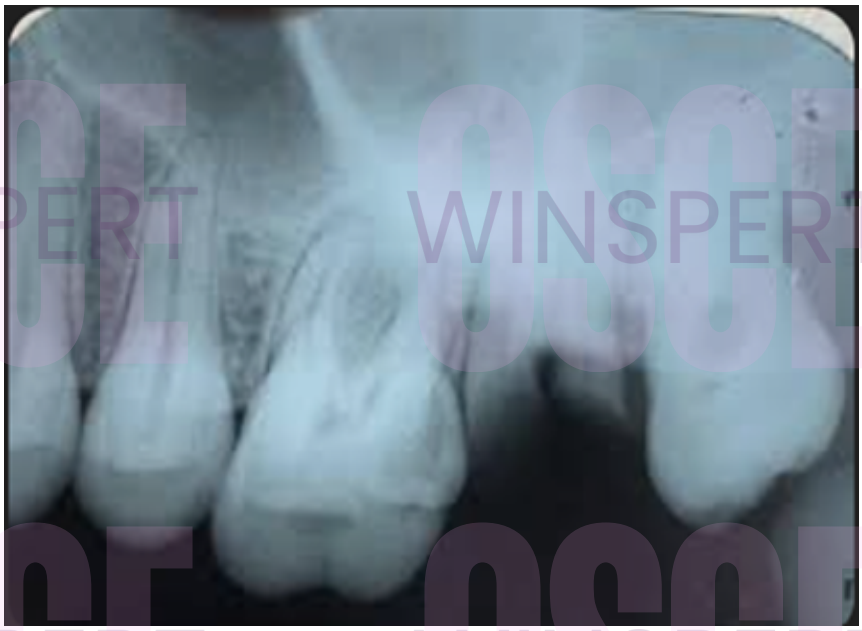
WINSPERT

RED SET: CLUSTER 3

(Clinical Treatment and Evaluation)

APICAL 3RD OF THE ROOT BROKE IN THE MIDDLE OF EXTRACTION

VERSION 2



Mr. Singh, a 43-year-old male new patient, visited your clinic on a friday afternoon. He resides two hours away by car. He reported experiencing pain and no facial swelling on the upper right molar, which was severely decayed. Extraction was recommended, and he consented to the procedure. He was given the option of an oral surgeon.

During the extraction, the palatal root fractured, leaving an approximately 4 mm piece of the root inside. Infected root is removed. The radiograph indicated that the root fragment was in close proximity to the maxillary sinus.

Inform the patient about the broken tooth and discuss the next steps for further management.

WINSPERT

Important features of this case:

- It is essential that a patient understands what to expect from treatment, both in terms of the procedure itself and any likely outcomes.
- A clear record of the consent process, as well as the pre and postoperative advice given to a patient must be entered in the notes.

Important links to read to understand this case better:

https://www.dentalprotection.org/uk/articles/a-failed-extraction-handled-appropriately

https://aci.health.nsw.gov.au/networks/eci/clinical/clinical-tools/dental-emergencies

Questions asked in the exam regarding this case:

1. I can visit specialists only on monday. What can I do until then?
2. Will you be giving me sutures?
3. Do I have to pay a specialist now?
4. How do you know how much of a tooth is remaining?
5. No specialist is available till monday, moreover I have fever as well as swelling, what can i do?
6. Do you think complications won't happen with the specialist?

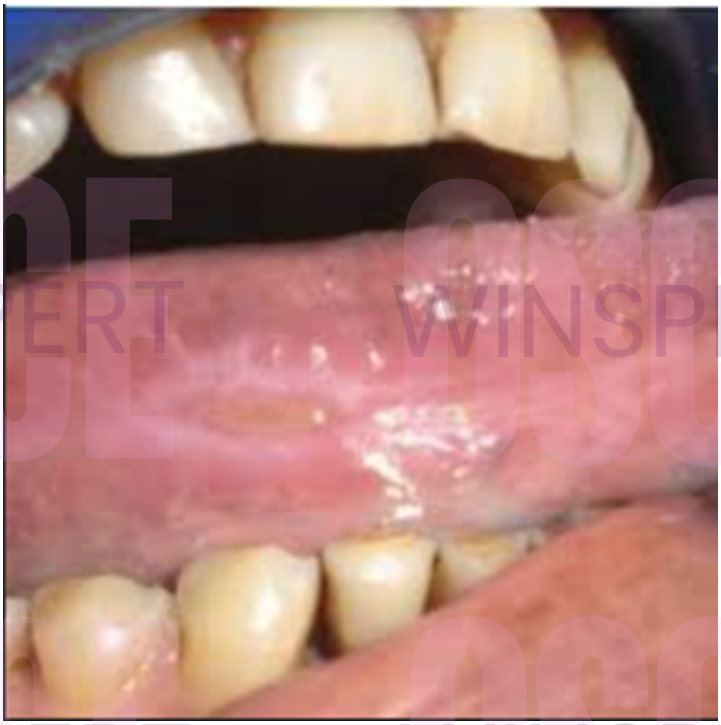
WINSPERT

PINK SET: CLUSTER 1

(Clinical Information Gathering)

NON-HEALING ULCER ON LATERAL BORDER OF TONGUE

VERSION 1



Ms. Amy Watson, a 32-year-old school teacher, is visiting your clinic today with a complaint of an ulcer on the lower right side of her tongue. She first noticed the ulcer a month ago and is concerned about it. Her last dental appointment was two years ago, during which her dentist placed a filling in tooth 46. This filling fell out a few weeks ago, but it hasn't caused her any discomfort. She is here for a filling to be done.

Medical history: Fit and healthy.

You have not yet performed an examination.

Seek additional information from Ms. Watson, address her concerns, explain the investigations you have planned, and provide a differential diagnosis.

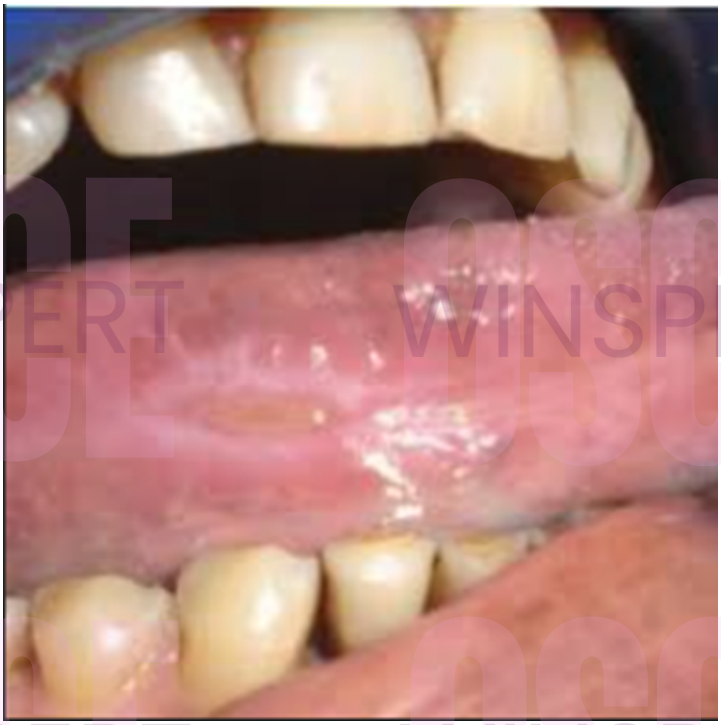
WINSPERT

PINK SET: CLUSTER 1

(Clinical Information Gathering)

NON-HEALING ULCER ON LATERAL BORDER OF TONGUE

VERSION 2



Ms. Amy Watson, a 35-year-old school teacher, is visiting your clinic today with a complaint of a broken filling. She also noticed the ulcer on her lateral side of tongue a month ago and is not too concerned about it. Her last dental appointment was two years ago, during which her dentist placed a filling in tooth 46. This filling fell out a few weeks ago which catches her tongue every now and then, so hopes for a filling to be done.

Medical history: Fit and healthy.

You have not yet performed an examination.

Seek additional information from Ms. Watson, address her concerns, explain the investigations you have planned, and provide a differential diagnosis.

WINSPERT

Important links to read to understand this case better:

Therapeutic guidelines: Understand the red flag features and traumatic ulcer.

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/mouth-ulcers

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/mouth-cancer

https://www.healthdirect.gov.au/mouth-cancer

Questions asked in the exam regarding this case:

1. **Biopsy is for cancer. I do not want to go for a biopsy, will it be okay?**
2. **What do you recommend I do in my situation?**
3. **I can't go to 2 doctors today, is it okay?**
4. **Will you give me a specialist appointment?**

WINSPERT

PINK SET: CLUSTER 1

(Clinical Information Gathering)

YOUNG KID WITH MISSING PERMANENT LATERAL INCISORS

Annie, a 7-year-old girl, is attending your clinic today with her mother. They are concerned about her missing upper lateral incisors. Her mother is particularly worried about the small space available and the size of Annie's front teeth, as well as the impact on Annie's appearance in front of her classmates. The history reveals that Annie lost her deciduous lateral incisor a year ago, and the permanent tooth has not yet emerged. Annie is fit and healthy with no pain or swelling in the affected area.

Gather more information, address her mother's concerns, and provide differential diagnoses for the problem.

WINSPERT

Important links to read to understand this case better:

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/teeth-development-in-children

https://www.dentalprotection.org/australia/publications-resources/case-studies/case-studies-display--/the-dilemma-of-missing-maxillary-lateral-incisors

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5376450/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10461125/

Questions asked in the exam regarding this case:

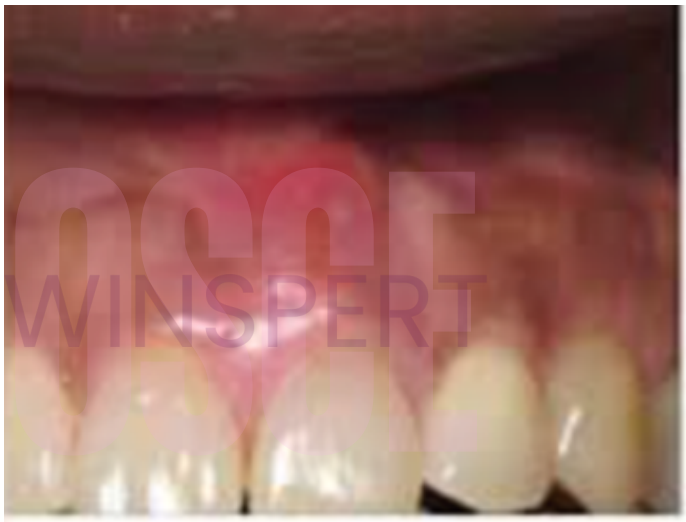
1. Why do the teeth appear big?
2. I'm really worried about the radiation exposure, can we avoid it?
3. What will you do today?
4. Why is there a gap present?
5. Can we wait for 1 year and monitor her?
6. Will the specialist start the treatment immediately?
7. What if on x-ray it is not present?

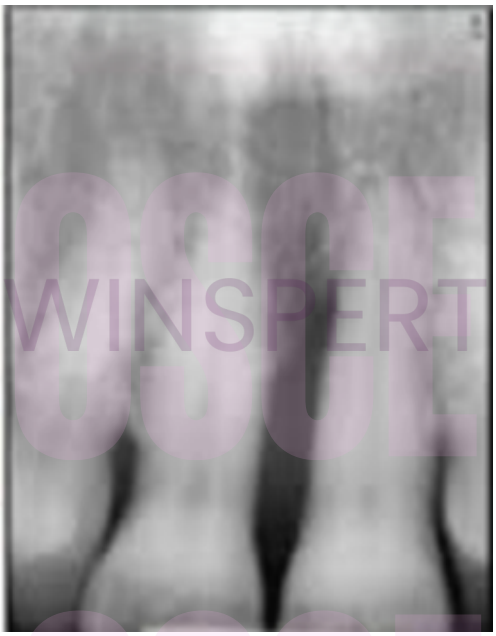
WINSPERT

PINK SET: CLUSTER 2

(Diagnosis and Management)

PATIENT WITH A PERIODONTAL ABSCESS





Mrs. Amy Highland, a 55-year-old regular patient at your clinic, presents today with a complaint of a sore tooth on the upper left side. Upon examination, you observe that tooth 21 exhibits grade 2 mobility and is vital. A periapical radiograph reveals horizontal bone loss around teeth several teeth with significant bone loss around tooth 21. The probing depth for tooth 21 is 8 mm on the mesial side, while the rest of the mouth shows 4-5mm probing depths. Tooth appears slightly extruded and slight gums are swollen in that tooth region.
The patient is generally fit and healthy but smokes around 25 cigarettes per day.

Manage the case by providing a diagnosis and explaining the treatment options.

WINSPERT

Important links to read to understand this case better:

Therapeutic guidelines - management and understanding signs and symptoms. Refer to videos of TG.

https://clik.dva.gov.au/ccps-medical-research-library/sops-grouped-icd-body-system/n-p/periodontal-abscess-f088-k052

https://www.ncbi.nlm.nih.gov/books/NBK560625/

Questions asked in the exam regarding this case:

1. Why is only 1 tooth severely affected?
2. Will this tooth go back to its position?
3. If no pus is there scaling then?
4. How many visits for scaling?
5. What will the specialist do?

WINSPERT

PINK SET: CLUSTER 2

(Diagnosis and Management)

PATIENT TRAVELLING AND IN UNBEARABLE PAIN

VERSION 1

Mr. Daniel is a new patient at your clinic who has booked an emergency appointment due to pain from a broken tooth on the lower right side. Upon examination, you observe a severely decayed tooth with no gingival or apical swelling and no lymphadenopathy.
Mr. Daniel is scheduled to leave for an interstate trip in two hours and will be away for two days. Unfortunately, your schedule is fully booked for today. You are unable to provide an immediate treatment.
Medical history: Fit and healthy.

Explain the diagnosis, and outline both emergency and definitive management plans.

VERSION 2

Mr. Daniel is a new patient at your clinic who has booked an emergency appointment due to pain from a broken tooth on the lower right side. Upon examination, you observe a severely decayed tooth with no gingival or apical swelling and no lymphadenopathy.
Mr. Daniel is scheduled to leave for an interstate trip in two hours and will be away for two days. Unfortunately, your schedule is fully booked for today. You are unable to provide an immediate treatment.
Medical history: Fit and takes cartia medication once a day.

Explain the diagnosis, and outline both emergency and definitive management plans.

WINSPERT

Important links to read to understand this case better:

Pain and management:

https://www.nps.org.au/assets/p39-Timmerman-Parashos-v2-POPUPS-REMOVED.pdf

https://onlinelibrary.wiley.com/doi/full/10.1111/iej.14020

https://www.researchgate.net/publication/363805889_The_treatment_of_mature_permanent_teeth_with_irreversible_pulpitis_by_cervical_pulpotomy_A_systematic_review

Cartia:

https://www.cartia.com.au/

Questions asked in the exam regarding this case:

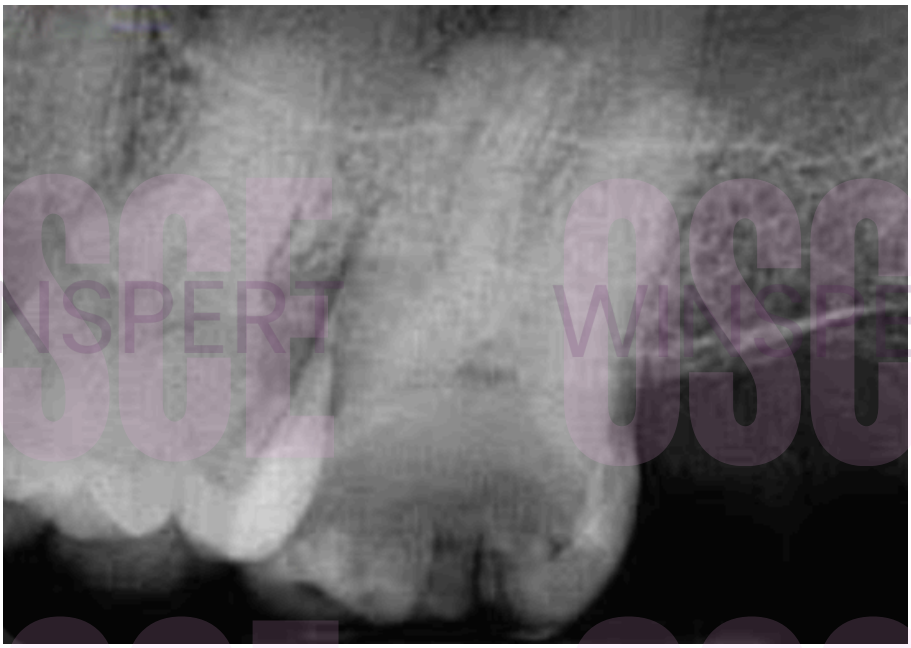
1. Is there an infection?
2. How much time does the procedure take?
3. Can I take panadeine forte?
4. How to take panadol and ibuprofen?
5. Can you just give me painkillers?
6. If you have to do the procedure, what medication will apply inside the tooth?
7. Not ready to give details about himself and asking only for pain killers.
8. Can you give me oxycodone?
9. I'm going by and will be sitting, can I get oxycodone now?
10. Can I take ibuprofen and paracetamol separately or as a combined dose?

WINSPERT

PINK SET: CLUSTER 3

(Clinical Treatment and Evaluation)

INFORMED CONSENT FOR TOOTH REMOVAL



Mr. Mackenzie, a regular patient at your clinic, is here today for the removal of a badly broken upper left second molar.
Upon examination, you note that the palatal root of the tooth is in close proximity to the sinus. You also notice the canals are thin or calcified.

He smokes around 3-5 cigarettes/ day.

Describe the procedure for tooth removal, explain the associated risks, and obtain the patient's consent for the extraction.

WINSPERT

Important links to read to understand this case better:

https://oasisdiscussions.ca/2013/03/19/oc-2/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8479434/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8692004/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5339603/

Questions asked in the exam regarding this case:

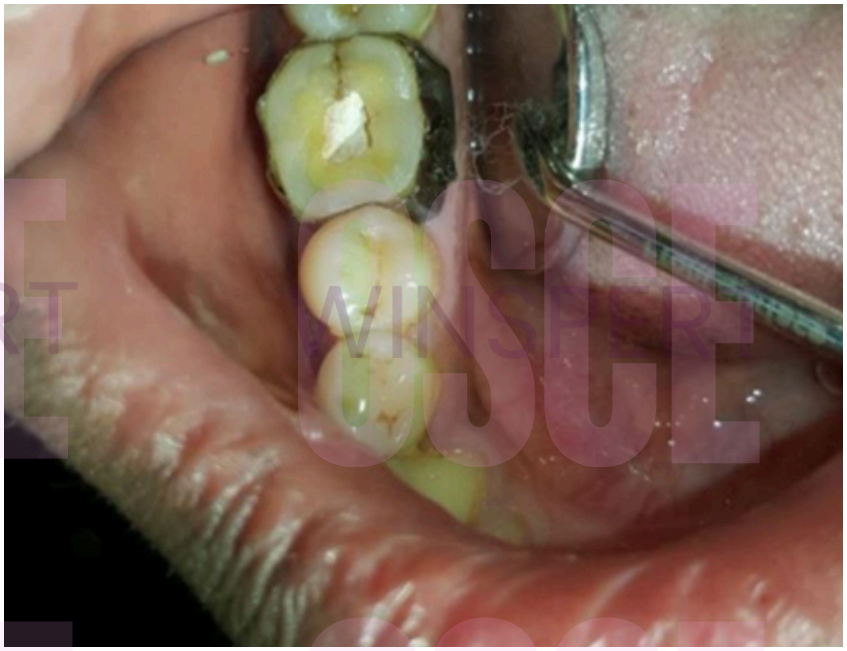
1. Can I save this tooth?
2. Patient states - I'm anxious.
3. Will you be able to remove it by yourself?
4. How does smoking cause problems?
5. What will you do if a dry socket happens?

WINSPERT

PINK SET: CLUSTER 3

(Clinical Treatment and Evaluation)

TOOTH CRACKED WITH RESPECT TO RCT DONE BY ANOTHER DENTIST



Mr. Burke had a root canal treatment on a lower right molar three days ago by another dentist. Mr. Burke has a follow-up appointment with that dentist in two weeks but came to see you today due to post-treatment pain. Pain is mainly from biting. He mentions, the previous dentist did not explain potential complications. Upon examination, you found a stainless steel band and glass ionomer cement (GIC) used as a temporary restoration. He experiences pain when biting and sensitivity to hot and cold. An X-ray reveals slightly inadequate obturation in one of the roots and radiolucency in the furcation area.

Provide a differential diagnosis for his pain and address the patient's concerns.

WINSPERT

Important links to read to understand this case better:

https://www.researchgate.net/publication/352858571_Crown_or_not_to_Crown_after_RCT

The following links are for reference with good understanding but not as direct Australian guidelines:

https://parramattagreendental.com.au/root-canal-tooth-cracked/

https://www.wahroongadentalgroup.com.au/cracke-tooth-after-root-canal/

Questions asked in the exam regarding this case:

1. On that day the previous dentist checked with the blue art paper, is it the same thing?
2. Why is there a band on that tooth?
3. Is my pain because of the short duration?
4. Can you re-do RCT for this?
5. I have spent too much money already, how should I manage now?
6. Why is there a short filling on one of the roots?
7. Do you think this is a failed treatment?
8. Any idea why there is pain, do you think he did a bad job?
9. Can I get my money back?
10. I do not want to pay twice, how can we go from here now?
11. What will the specialist do?
12. What will you do for me?