



WINSPERT



OSCE CASES

ORANGE SET

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.

VERSION 3

There is also a version where the patient has almost no posterior teeth in all 4 quadrants.

CASE (version 2):

Introductory paragraph:

Hello Edward, welcome to our clinic. My name is Dr....., and I will be looking after you today. I see, you are here to understand about implants, right?

Certainly I can help you with the same. Before I explain in detail, I would like to know your understanding and awareness about implants.

John, implant is a compatible structure with the human body and thus we can fix it with a surgical procedure within jaws. Let me show it with a diagram. Because of this extensive surgical procedure, it needs to fit several criteria before we consider that as the right fit for an individual.

Are you following so far, John?

Relevant history:

So, what are those criterias? Which I will understand by knowing some detailed information from you and through some tests.

1 Dental history:

Since, how long is it since you lost teeth? How did you lose them?

Were there replacements for these teeth in the meantime?

How often do you visit the dentist, John?/ When was the last time you visited the dentist?

John, do you grind or clench your teeth?

2 Medical History

John, it's great to know you are fit and healthy. Do you visit a GP regularly for the medications you're taking and your heart valve follow up?

Do you recall their (medication) names? It's alright, I can understand a few medicines that have such complicated names. After you go back home, you can send us an email about the details of that medication and we can update it in our system.

Anything else you want to update me with medically?

3 Social History

Do you smoke or have you smoked in the past, John?

Any other forms of tobacco or vaping?

How about alcohol?

Thank you for your patience with all my questions John, anything else you want to add?

Risk assessment:

Just like our teeth, any replacement option too needs care from individuals and follow ups with the dentist.

So, how's your oral hygiene routine, John?

As I mentioned, it's a surgical procedure so success is dependent on internal and external factors. Let me explain with the diagram (Draw a flashcard diagram and explain the risk factors in a concise way).

Internal factors (Factors associated with human body):

Medical condition, gum and bone condition, surgical/ anatomical risks (bone loss, sinus proximity, nerve proximity, remaining height for replacement option).

External factors (Factors associated with habits and are easily modified):

Professional dental clean, regular dental follow ups for an implant. Oral hygiene routine, Smoking, grinding, alcohol, previous replacement options.

Relationship between heart valve and implant surgery:

The key considerations in your case are to be in collaboration with your cardiologist:

- Thorough pre-operative planning.
- Antibiotic prophylaxis: The need to give antibiotics before an implant surgery to prevent infection (infective endocarditis).
- Monitoring of anticoagulants before the procedure to reduce the risk of bleeding.
- Excellent oral hygiene to prevent infections, which could compromise heart health.

Are you okay so far, John?

Investigations:

For today John, we can do a comprehensive check up.

I will start checking the outside of your mouth on the face to check your muscles of mastication and jaw joints.

Inside the mouth, I will do a thorough check of your teeth remaining and the spaces without teeth as well.

I will then do a thorough gum analysis around the teeth with my instrument called a probe. Also check for any loose teeth.

I will also do a few x-rays, mainly panoramic to get me an overview of your teeth, bone levels, proximity to important facial structures.

And if needed specific x-rays called periapical for a few teeth.

Before doing an implant, 3-D imaging to understand the bone density and proximity of important anatomic structures, we call that as CBCT (Cone beam computed tomography).

Also, INR (Internalised Normal Ratio) - which will help us understand your blood clotting potential if you are taking blood thinners.

I will give you a brochure to know in depth about the implants, risks and financial costs involved.

Important links to read to understand this case better:

Dental Implant

<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>

Implant and it's risk factors: (ADJ article)

<https://www.branemarkcenter.com.au/wp-content/uploads/2013/02/Liddelw-Klineberg.-ADJ-2011-Patient-Related-risk-factors-for-implant-therapy.pdf>

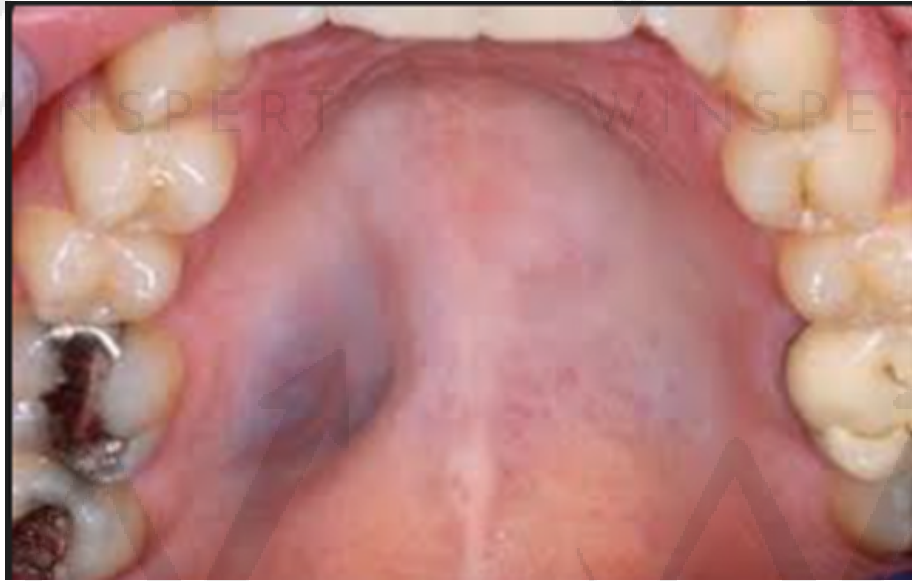
<https://www.healthdirect.gov.au/aortic-valve-replacement>

Antibiotic prophylaxis

<https://australianprescriber.tg.org.au/articles/antimicrobial-prophylaxis-for-dental-surgery.html>

<https://australianprescriber.tg.org.au/articles/antibiotic-prophylaxis-for-dental-procedures.html>

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.

Medical history: Hypertension controlled and is possibly on medication.

Address the patient's concerns and plan for the appropriate investigations. No need for a definitive diagnosis or treatment at this stage.

CASE:

Introductory paragraph:

Mr. Pat, welcome to the clinic, I'm Dr..., and I will be looking after you today. You are here for a check up and clean, right?

You have also mentioned, your daughter wants us to look at a swelling in your mouth. (That's so caring of your daughter, we will certainly look into that too).

Are there any other concerns, Mr. Pat?

Exploring history of presenting complaint/ concern:

It's great you do not have any other concerns. When was your last dental check up? (If it's really a long time ago - So, we will have a detailed look inside your mouth and get the swelling addressed too).

Onset and duration:

- When did you first notice the swelling?
- Has the size of the swelling changed over time?
- Was it sudden or gradual in onset?

Symptoms:

- Is there any pain or discomfort associated with it?
- Any tingling/ numbness in the area?
- How about bleeding or ulceration over it?
- Any symptoms of infection associated, like fever or fatigue?
- Any swelling in the other areas of your mouth or face?
- Any difficulty swallowing or speaking? (Do not ask this if the patient says no concerns from his end at all).
- Have you experienced any nasal congestion or sinus pressure?

Character/ consistency:

- Have you had a similar swelling in the past?
(If so, how was it treated and did it resolve completely?)

Associated experiences:

- Have you experienced any trauma or injury to the area?

Relevant history:

1 Medical history:

Pat, medically are you doing well? Any medical conditions or medications you want to mention? Any history of sinus infections or allergies?
When was your last visit to the GP?
Any blood tests done recently?

2 Dental History

When was the silver filling placed on the tooth? Was it just the filling or a root canal treatment?
Any pain with teeth or gums nearby?

3 Social History

Do you smoke or drink alcohol?
(You can ask this too: Any recent changes in your diet or oral hygiene habits?)
Pat, Is there anything else you want to update me with ?

Possible differential diagnosis:

I appreciate your patience with all my questions. With the swelling present since..., I have come up with few possibilities in your case specific to that location:

Associated to the tooth (Odontogenic causes):

- **Dental abscess:** When the infection from the inflamed nerves is passed onto the end of the tooth involving the supporting structures, we call it dental abscess. It could be drained in the form of a pimple on gums.
- **Dental cyst:** It is a long standing infection that is filled in a sac. It could be associated with the infection from the tooth. It could also be associated with an unerupted tooth.

All good so far, Pat?

Teeth are surrounded by important anatomic structures like sinus or salivary glands and thus possibility of association to it is present.

Unassociated to the tooth (Non-odontogenic causes):

- **Salivary gland associated:** Mucocele - associated with trauma, pleomorphic adenoma and low grade mucoepidermoid carcinoma can have similar sites.
- **Sinus associated:** Growth associated with sinus abnormalities (Use term abnormalities rather than tumour).
- **Systemic cause:** Immunosuppression can lead to few swellings in your mouth and common to this site. (Non-hodgkin's lymphoma).

Any questions for me, Pat?

Investigations:

So for today, we need to understand your complete profile and perform necessary tests. I will start checking outside your mouth for any swellings or asymmetry of your face. Check your jaw joints and muscles on your face too.

I will thoroughly check the swelling for its consistency and look for any ulcerations.

Inside your mouth I will have a thorough check of your teeth (check missing teeth) and specially the teeth in the region of swelling. I will check if they are wobbly or tender on tapping.

To check the nerve response of teeth, I will perform a cold test and check how you react to each tooth. (I will place a cotton bud that has cold sprayed onto it.

I will also check the gum depths around all your teeth.

Other than these, I will take few x-rays:

- Panoramic radiograph for an overview of all your teeth, bone, and nearby structures.
- Periapical x-ray for the area near the swelling.
- Bitewings to understand the status of your rest of the teeth.
- Occlusal radiograph of maxillary jaw, to have a different view and understand the extent of the swelling.

Pat, I would like to refer you to an oral medicine specialist because you have a swelling that's present for...and most likely associated with salivary gland. The specialist will do their examinations and perform a specific test called biopsy to know its cause.

Important features of this case:

- Referral to an oral medicine specialist as swelling associated with salivary gland is a possibility, which is a red flag feature.
- Asking right questions associated with swelling.
- Differential diagnosis which are relevant only to the swelling in that site and based on nature.
- Mentioning biopsy as an important investigation.

Important links to read to understand this case better:**Site specific swellings:**

<https://www.researchgate.net/publication/373267295>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10576611/>

Common causes of swelling in oral cavity:

<https://www1.racgp.org.au/getattachment/1a458ded-2ea3-47f7-b5eb-4a7f0a433820/Common-causes-of-swelling-in-oral-cavity.aspx>

Immunosuppression and palatal swellings:

https://www.researchgate.net/publication/41467277_Palatal_swelling_as_the_first_and_only_manifestation_of_extranodal_follicular_non-Hodgkin_lymphoma_A_case_presentation

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9504409/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3220059/>

Oral manifestations with Hypertension and anti-hypertensive drugs:

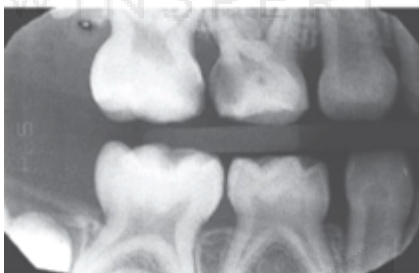
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9348220>

ORANGE SET: CLUSTER 2

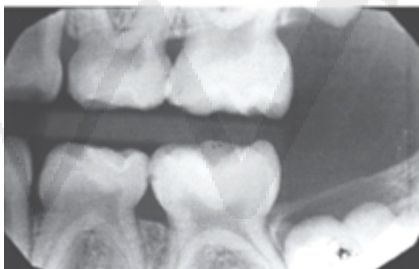
(Diagnosis and Management)

4 YEAR OLD UNCO-OPERATIVE CHILD

VERSION 1



(a)



| My Weekly DIET CHART | | | | |
|----------------------|---------------------------|--------------------------------------|---------------------------------|------------------------------|
| NAME: William James | | WEEK OF: Starting from | | |
| | | 24th June to 29th June 2024 | | |
| | BREAKFAST | LUNCH | DINNER | SNACKS |
| MONDAY | orange juice, cookies | flat bread with chicken soup, hummus | herbed rice | cake slices |
| TUESDAY | milk, cookies | pumpkin soup, toasted bread | chocolate milk, flavoured pizza | 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 | 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. He only drinks tank water.

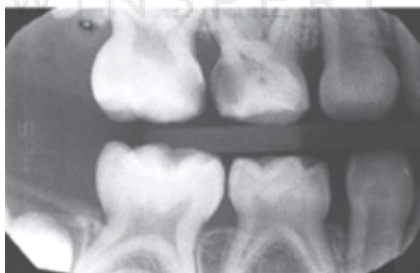
Explain the management plan for William and the reasons for each step.

ORANGE SET: CLUSTER 2

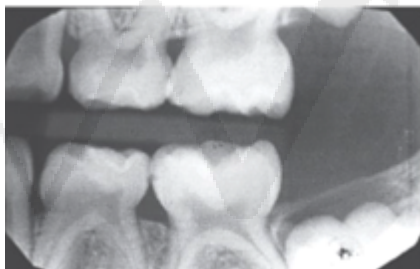
(Diagnosis and Management)

4 YEAR OLD UNCO-OPERATIVE CHILD

VERSION 2



(a)



| My Weekly DIET CHART | | | | |
|----------------------|---------------------------|---|---------------------------------|------------------------------|
| NAME: William James | | WEEK OF: Starting from 24th June to 29th June 2024 | | |
| | BREAKFAST | LUNCH | DINNER | SNACKS |
| MONDAY | orange juice, cookies | flat bread with chicken soup, hummus | herbed rice | cake slices |
| TUESDAY | milk, cookies | pumpkin soup, toasted bread | chocolate milk, flavoured pizza | 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 | 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 on the primary molars.

They are visiting you for the first time after travelling for hours. They reside approximately 200 kms away. 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.

CASE:

Introductory/ Empathetic paragraph:

It must be really difficult for you, William's mum, to see him go through these painful episodes. Moreover, travel must have made it more challenging. How do you want me to address you today?

Understanding the patient's concerns/ history of presenting complaint:

Mrs./ Ms....I have managed to get x-rays done. But can you elaborate on William's pain experience? Did he have any swelling? Did it affect his sleep/ eating/ playing time?

Explanation of findings and possible diagnosis:

Mrs./Ms ... let me show it to you on those x-rays taken (Depending on the tooth affected and the symptoms mentioned give the diagnosis)(Most likely diagnosis in the exam is of reversible pulpitis).

Can you see a dark shadow on the outer surface of the tooth and how it is approaching the nerve present within the tooth? The nerve is getting irritated because of the nearing decay, but it hasn't involved the nerve yet. This condition we call reversible pulpitis. Most likely it's the same for him. Pulpitis means inflammation of the nerves and reversible because the insults due to decay on nerves are reversible.

I also happened to notice several dark shadows within William's teeth, which raises my concern he could be at high risk of developing caries.

Relevant history:

Mrs/ Ms...I really want to get him out of this painful situation today but understanding why this could be happening to him is important as we don't want him to be having any painful episodes in the future.

I appreciate you bringing the diet chart. As we know bacteria are primarily responsible for decay, however it's a combination of factors. Thus I would like to understand the same for William.

1 Diet

On diet charts Mrs./Ms...we know sugary foods are more responsible for decay. However, it's sticky nature and the increased frequency can aggravate decay progression. (Discuss about the food items that you observe on the diet chart in exam).

2 Oral Hygiene

What is William's oral hygiene routine? Do you supervise him? What toothpaste does he use? Is there fluoride in his toothpaste? How about floss?

3 Medical History

Medically he is fit and well? Any medications?

4 Dental History

How often does he visit the dentist?

5 Water

How is his water intake?

Correlation of caries risk factors:

Mrs./Ms...I appreciate your patience with my questions. As I mentioned about the diet, we need to make sure he limits the sugar intake by tapering it down for him. Moreover, drinking more water to flush the effect of sugars on teeth.

Water and saliva - can't remove the food stuck completely thus optimising oral hygiene is important. Supervision while kids brush their teeth, will help them be more efficient. And once they become efficient, we can just check after they are done brushing teeth.

And despite the individual efforts there could be some missed areas of the start of the decay, which are noticed by dentists. Thus, regular dental visits are crucial.

What are your thoughts on this Mrs./Ms...?

(If any other positive risk factors are present, try to correlate and modify those).

Short term management options:

For today, it's very important we take William out of the pain. As we know he was slightly unco-operative while taking x-rays. So, I will try one more time to familiarise him with dental settings, and while performing the procedure I will adopt Tell-Show-Do and positive reinforcement practice.

So, he knows what's happening inside his mouth. Other than that, you can hold his hand and we can play some of his favourite videos or cartoons with your permission.

This can help him be more calm and co-operative. I will try to make the procedure quicker, so he doesn't have to be seated on the chair for long. Also, if I don't get ideal conditions to do a permanent filling, we can do a temporary one for now as our focus is relief from pain.

But, for some reason if none of the options work. I don't want to force him as William should have a positive relationship with the dentist and not a traumatising one.

We can also try using a nitrous oxide analgesia commonly known as happy gas. In this technique, there is a nasal mask involved, it could be uncomfortable for a 4 year-old to have such a mask on their face. However, we can give it a go, if he feels relaxed.

What are your thoughts on this Mrs./Ms...?

Long term management options:

As I mentioned Mrs./Ms., it's important for us to even manage his rest of the teeth. Because, there is still a long way to go before adult teeth erupt and we do not want the infection spreading to adult teeth.

I would suggest he be seen by a kid's specialist, because pedodontists have a kids friendly setting and the staff is kids oriented. So, an overall experience for a child is very comforting.

Moreover, they have an option of going under general anaesthetic and can do all the treatments and thus, we can stabilise his condition. This is an option if you want to consider. But, they have waiting times and more finances involved.

If you want to consider this option by the Government, where in the VPTAS scheme you get incentives for travel, accommodation, and some consideration for treatment with specialists at the Royal Dental Hospital.

I can provide you with the details about it.

After the treatment, to maintain his healthy mouth, we have to work in unison. Maximising oral hygiene routine, tooth friendly diet and his water intake. Additionally, regular dental visits can help us optimise his health.

I will give you brochures about how we can optimise oral hygiene in kids and also about tooth friendly diets or substitutes.

Any questions for me, Mrs./Ms.?

Important features of this case:

- Understanding the patient's mother's concerns and aspects of long travel.
- Knowing the pain symptoms as they will help you with the diagnosis.
- Understanding risk factors for caries and modifying them .
- Short term management along with behaviour modification.
- Long term management with the inclusion of right referrals and stress on the importance of modification of risk factors.

Important links to read to understand this case better:

Kids and oral health care:

<https://www.health.nsw.gov.au/baby-teeth>

<https://www.dhsv.org.au/oral-health-advice/dental-health-advice/preschool-children>

<https://www.healthdirect.gov.au/dental-care-for-babies-and-children>

<https://www.dhsv.org.au/oral-health-advice/dental-health-advice/preschool-children>

https://www.health.qld.gov.au/__data/assets/pdf_file/0020/1130717/happy-teeth-manual-web.pdf

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

Management for dental decay in kids:

<https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/tooth-decay-young-children>

<https://www.dhsv.org.au/our-services/dental/services-for-children-and-teens>

[Behavior Guidance for the Pediatric Dental Patient](#)

Remote/ rural dental services in Australia:

<https://www.ruralhealth.org.au/sites/default/files/publications/nrha-oral-health-fact-sheet-2023.pdf>

https://www.flyingdoctor.org.au/what-we-do/?gad_source

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.

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 severe 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.

CASE (version 2):

Introductory paragraph/ exploring history of presenting complaint:

James, with the pain and swelling at the same time, it must be a few difficult days for you. I hope you have eaten and slept well.
How would you describe the pain experienced? Did you take any medication for it? Is it helping?
Did you have pus coming out from the swelling/area?
You also have a fever. And antibiotics are not helping either, right James?
The reason being, antibiotics prevent the spread of infection however, they do not treat the cause. So, I'm glad you are here, so we can help you out.

Assessing the risk of medical urgency:

Now, you mentioned James, there are no symptoms of the swelling spreading rapidly. But, I will still check for a few signs to understand medical urgency.
Are you having any difficulty with breathing or swallowing? How about difficulty in opening the mouth? (I will also double check by checking how many of your fingers can fit while opening the mouth at maximum - you can explain this).

Explanation of findings and Diagnosis:

James, let me explain with the x-ray that I have taken and from my examination (point on the tooth involved) Can you appreciate how there is a dark shadow starting from the top of the tooth and extending towards the middle. In the middle there are nerves and vessels and once this is involved with the decay, that's when you start experiencing pain.
Is it understandable James?

And when your infection from the decay spreads to the rest of the tooth and it starts to drain out from the tooth to the underlying area, this is when the swelling is appreciated.

This condition is common in a dental practice, we call it a spreading odontogenic infection with systemic and no severe features.

Spreading because the infection has started at the top of the tooth and now reached the end of it spreading further, and odontogenic means associated with the tooth.

James, I hope I'm making it clear. Please do not hesitate to ask me anything.

Management:

Let's understand how we could manage this condition of yours. From my examination and the x-ray taken, this tooth does not have promising results and unfortunately can't be saved.

What are your thoughts, James?

I understand, it must be disheartening to know we can't save this tooth. Additionally, on the x-ray I notice a few more concerning aspects. (Point to the x-ray again and show the sinus floor). Can you see this dark white line running across the tooth? That is a portion of bone cavity on our face, called the maxillary sinus.

Usually, this x-ray is a 2-D representation of a 3-D structure, so we cannot judge the exact proximity of these 2 structures.

However, it's overlapping to a maximum extent, raises our suspicion of developing a complication called oro-antral communication.

What that means, oro stands for mouth and antral stands for sinus cavity, and there is a higher possibility of developing communication between them.

Are you following so far?

Because there is a higher risk of developing it, it's best to be seen by an expert oral surgeon for extraction and management of complications. (He/She being an expert in the field performs procedures in a certain way to minimise the risk of developing complications and are also experienced to manage them effectively).

Another risk is if the tooth breaks down further while taking out, the proximity to sinus can also lead the portion of the tooth to break and slip into the sinus.

Oral surgeons because they are specialists, they do have waiting times and also have little more finances involved.

What are your thoughts so far, James?

Relevant history and it's correlation:

James, as tooth removal is a surgical procedure. We need to make sure, your medical condition is stable for the better healing of the wound.

1 Medical History:

Do you take medications regularly for your diabetes? And also thank you for being honest about not visiting GP in a long time.

Any other medical conditions?

Why knowing if your diabetes is stable or not is important as I said it will impact healing of wounds after tooth removal if unstable. There is an interplay of factors within our body that prevent healing and increase the chances of infection at the site.

And thus, we would not want you to have more complications and pain.

Where could we go from this?

I would recommend seeing a GP and getting the blood test done to check the status of your diabetes, while we wait for an appointment with an oral surgeon.

2 Social history:

Do you smoke or drink alcohol, James? (If positive - educate accordingly).

Continued management:

For today, I would not prefer you to leave with this painful and swelling condition. In the meantime, we can do a temporary management of relieving the pressure built because of inflamed nerves. We call that an emergency pulpectomy. There is an added expense with this measure.

Are you okay so far, James?

I will prescribe you medication:

Are you allergic to any medications? Any interactions in the past?
(Based on the history you can prescribe)

Oral antibiotics:

Rx

Tab Amoxicillin 500 mg 8 hourly (for 5 days)

Tab Metronidazole 400 mg 12 hourly (for 5 days)

Oral analgesics:

Rx

Tab Ibuprofen 400 mg 8 hourly (for 3 days) until pain subsides.

Tab Panadol 1000 mg 6 hourly (for 3 days) until pain subsides.

Your GP, oral surgeon and me will be taking the decision when to remove this tooth and assess your medical condition.

After a successful tooth removal, I would suggest coming for a review and discussing the replacement option for this tooth.

(Option of referral to the hospital as a patient could be a case of having uncontrolled diabetes).

Important features for this case:

- Understanding the given periapical x-ray for the proximity of the tooth to the maxillary sinus.
- Explaining the findings and possible management options.
- Medical history correlation with the management.
- Temporary measure by doing pulpectomy.

Important links to read to understand this case better:**Management for spreading odontogenic infection:**

Understanding the chapter of odontogenic infections in Therapeutic guidelines.

<https://onlinelibrary.wiley.com/doi/pdf/10.1111/adj.12538>

Diabetes and spreading odontogenic infection:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5464582/>

<https://www.sciencedirect.com/science/article/abs/pii/S2212555822001569>

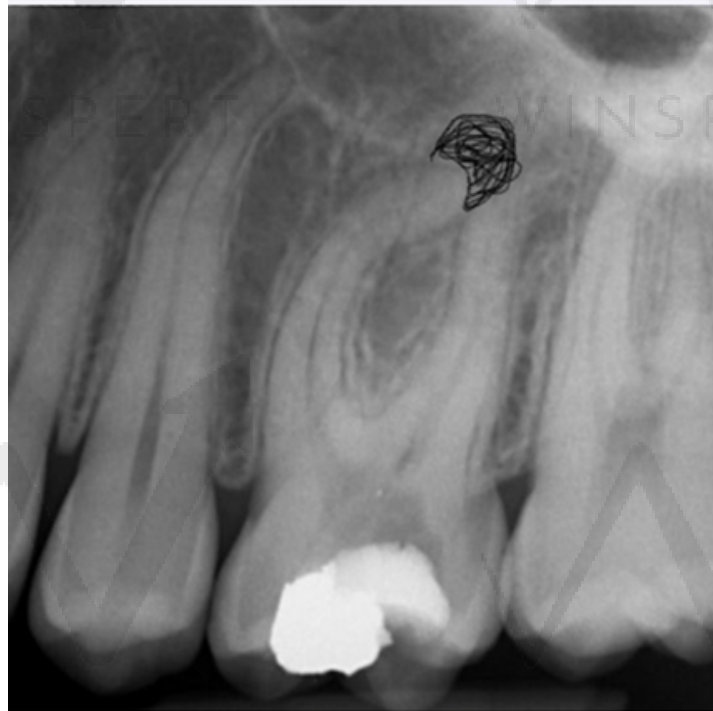
Risks associated with proximity to sinus:

[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8479434/#:~:text=An%20oroantral%20communication%20\(OAC\)%20is%20an%20unnatural%20space%20that%20forms,OAF\)%20or%20chronic%20sinus%20disease.](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8479434/#:~:text=An%20oroantral%20communication%20(OAC)%20is%20an%20unnatural%20space%20that%20forms,OAF)%20or%20chronic%20sinus%20disease.)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7806358/>

<https://sa.ada.org.au/the-top-five-complaints-oral-surgery>

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.

CASE (version 2):

Introductory/ Empathetic paragraph:

Harry, I'm sorry to know that this has been your experience. Moreover, with the filling chipping off 2 days later, it must have been uncomfortable since then. How are you coping with everything, Thomas?

I understand this is frustrating, but we appreciate your trust with us. And you are our regular patient, we won't lose your faith and are here to help you.

Is the pain affecting your sleep or eating?

Have you taken any medications for the pain? Are they helping? How often did you take those?

Understanding the patient's concerns:

Harry, I have had a thorough look. But before my explanation, do you want to mention anything to me?

I appreciate your patience while I was taking x-ray in this painful situation. How would you describe this pain? Did you have any pain experience before the previous dental visit? Any swelling appreciated?

Explanation of findings:

Let's look at the x-ray together. This dark white portion is the filling and the discrepancy over the surface is the chipped portion of the filling. And at the end of the tooth there is a dark shadow surrounding it, we call that as periapical radiolucency.

Peri-apical means the surrounding end of the tooth and radiolucency is the x-ray term for dark shadow. This shadow is usually associated with infection and pain on biting. And this infection to develop at the end of the tooth takes a few months.

I can understand how upsetting it can be and your feelings are absolutely valid. But, we will find the solution for you.

With the filling that is done for you Harry, it takes about 24 hours to completely set. And some triggers like hard food substance and grinding can be responsible for chipping.

Relevant history and it's correlation:

1 Social history:

Do you recall biting hard food substances in the area? Was there any particular trigger when the filling chipped off?

2 Dental history:

Are you aware if you happen to grind your teeth? (Ask the symptoms if patient is unaware of grinding like mild headaches in the morning, stiffness of the jaw muscles, tenderness over the jaw joints when you wake up)

Clinical treatment options:

Our main focus is on managing your pain and taking you out of this. From the x-ray and my examination, this situation will provide us with 3 options:

First, to do no treatment. But, we do not want to deal with pain and spreading infection.

Second, root canal treatment followed by the crown. In this, we take the inflamed nerves out and fill it. To protect this tooth from breaking down, we place the crown. Advantages: You save the tooth and chewing efficiency is maintained.

Disadvantages: Multiple visits and additional cost of crown makes the process expensive.

This treatment either we can do or you have an option of seeing an endodontist, a specialist in the field for this treatment.

As with the specialist, there are waiting times and additional finances involved.

Are you okay so far, Harry?

Lastly, extraction of the tooth. I will not just suggest this option because you will lose a natural tooth and no replacement is as close to your tooth.

What are your thoughts, Harry? Please do not hesitate if you want me to repeat. I will also provide you with the brochures to read about it in detail)

(Patient will be upset and can hint you towards a complaint - in that scenario. You will say - Harry, your feelings are valid and you have full right to complain

- However, you have an option to confront the dentist if you want.
- If you do not want to be confronted, me and the centre manager can walk you through the process.

You can mention institutions like AHPRA - Australian Health Practitioner Regulation Agency or HCC - Health complaints commissioner).

Prescribe analgesics if he wants to take time to decide for treatment. If a patient is having systemic features then prescribe oral antibiotics as well.

(Always check medical history and allergies before prescription)

Important features for this case:

- Hearing your patient is the most important for this case. He/ she is upset.
- Giving them all the options of management after hearing their concerns.
- Appreciate their faith by coming back to us and giving the appropriate support.
- Prescribe medications if he wants to take time to decide on management.
- Patient has the right to complain, but walk through the steps as mentioned in our notes. Do not throw any dentist under the bus.

Important links to read to understand this case better:**Post-op care after silver filling (Just for understanding):**

<https://michianasmiles.com/wp-content/uploads/2021/04/Composite-Amalgam-Post-Op.pdf>

What are silent cavities/ infections (Just for understanding):

<https://www.prestigedentalcarefl.com/post/dont-let-your-silent-cavities-go-undetected#:~:text=Sometimes%20small%20cavities%20form%20in,great%20for%20years%20to%20come!>

<https://dentalparadiso.com.au/tooth-decay-the-silent-epidemic-and-what-we-can-do-about-it/>

Dealing with angry patients:

<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/>

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.

CASE:

Introductory/ Empathetic paragraph:

Thomas, with pain and swelling at the same time, it must be few difficult days for you. Moreover, tender neck swelling and fever must be increasing your discomfort. Have you taken any medication for this? How often are you taking those? Are these symptoms affecting your eating or sleep at all?

Assessing the risk of medical urgency:

Thomas, I could judge the infection you are having in the form of swelling is spreading. Is it affecting your breathing or swallowing? How about mouth opening? I will also judge your mouth opening by asking you to place 3 fingers in the vertical direction. And do you have your inhaler with you today, Thomas?

Explanation of situation/ findings:

Thomas, let me explain you with the x-ray taken by me. Can you see how this very back tooth, which is your wisdom tooth has advanced decay and it has spread from the tooth to the surrounding structures leading to spreading odontogenic infection. Odontogenic means associated with the tooth. Wisdom teeth because of their position and the difficulty in accessing to clean, are more prone for decay. On x-ray, we can see how the root portion of the tooth is curved, making it prone for a difficult treatment.

Clinical treatment options:

Thomas, for today we need to focus on addressing the spread of your swelling, because if it is increasing rapidly, there are important structures around the face. And this spreading infection could also lead to life threatening condition, which we want to avoid for you. Moreover, you have asthma, it could exacerbate your asthmatic situation. So, it is best we arrange a transfer for you to the hospital, to manage those on a priority basis.

What are your thoughts on this, Thomas?

Additionally, in your case, this tooth doesn't look promising and unfortunately needs to come out. The complexity of the tooth removal is not only associated with curved tooth and advanced decay, but also depends if you can open mouth for the tooth removal. Because of such factors, it is best to be seen by an oral surgeon who have expertise in managing difficult extractions.

Any questions so far, Thomas?

If you are in a hospital setting, and your medical situation is stabilised, then on-board oral surgeon depending on the availability and judgement of your situation, can perform the extraction for you.

Relevant history:

1 Medical history:

How are your follow ups going with GP for Asthma? What medications are you taking for that? Is your penicillin allergy reported by GP?

2 Social history:

Do you smoke or drink alcohol?

Continued clinical treatment:

For today, I can prescribe you pain medications and arrange for a transfer to the hospital.

(If patient is taking paracetamol 1000mg 4 times a day, then you can prescribe Celecoxib with it. Otherwise prescribe paracetamol 1000 mg 6 hourly until pain subsides or for the shortest duration).

Celecoxib 100mg twice daily until pain subsides (no more than 5 days).

If patient is hesitant to visit hospital, then mention about the risk of severe spreading odontogenic infections and give it to them in written as well. And steps to follow if the situation arises.

Until then, you will prescribe antibiotics:

Clindamycin 300mg 8 hourly for 5 days.

And then review appointment, for a regular dental visit and it's importance. As, we do not want this situation arising again with respect to any other tooth.

Important features of this case:

- Understanding severe spreading odontogenic infection features.
- Explanation of the findings with the help of x-ray.
- Importance on how it could be a life threatening situation to avoid the severe symptoms.
- Understanding medical history, to prescribe medications appropriately.

Important links to read to understand this case better:**Important management:**

Understanding spreading odontogenic infection in therapeutic guidelines by reading and watching videos.

Wisdom teeth:

<https://www.dentalprotection.org/australia/publications-resources/dentolegal-articles/articles/risk-of-third-molar-extractions-aus-dental>

<https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/wisdom-teeth>

Management at public hospitals:

<https://onlinelibrary.wiley.com/doi/pdf/10.1111/adj.12538>

Public dental clinics:

<https://www.dhsv.org.au/>

Public dental clinics:

<https://www.health.vic.gov.au/hospitals-and-health-services/public-hospitals-in-victoria>

Asthma medications with colour code:

[Asthma medications and inhaler devices \(healthywa.wa.gov.au\)](https://www.health.wa.gov.au/asthma/asthma-medication)