



WINSPERT



OSCE CASES

GREEN SET

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.

GREEN SET: CLUSTER 1

(Clinical Information Gathering)

ULCER PRESENT IN A DENTURE PATIENT VERSION 2



Mr. Abbott, 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. Abbott 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:

Introductory paragraph/ Rapport building:

Mr. Abbott, 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. Abbott?

Also, Mr. Abbott, 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 Abbott, 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. Abbott. 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 Abbott?

Have you experienced any pain or discomfort with dentures or anywhere in the mouth, Mr. Abbott? 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. Abbott, 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. Abbott, 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. Abbott?

Relevant History:

With all these years of travel because of work, how did you manage your GP and dentist visits?

I can completely understand it must be so hard on your tight schedule. However, Mr. Abott, we all work so that we can enjoy life. And neglect to our health, won't be ideal for this. I'm concerned, because your compromised diet can impact your health. Thus, I would highly advise you to visit your GP for a blood test. And also, with the dentures a combined effort to check for functioning while home maintenance by patients, will make dentures a success in mouth.

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?

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>

<https://health.adelaide.edu.au/arcpoh/dperu/ua/media/45/practice-sheet-oral-cancer.pdf>

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/>

Nutrition and oral health:

<https://health.adelaide.edu.au/arcpoh/dperu/ua/media/215/practice-sheet-nutrition-and-oral-health.pdf>

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.

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/>

GREEN SET: CLUSTER 2

(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 a lot.

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://iadtdentaltrauma.org/IADT_Case_Report_2022_2nd_Prize_Thikrayat_Bani-Hani.pdf

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>

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:

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 accommodate 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.
- Understand the SMART approach in depth, so you can explain important points.

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>

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 ?

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 Hygiene 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:**Peri-implantitis:**

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9804916/>

https://bdizedi.org/wp-content/uploads/pdf/GuidelinesEuropeanConsensusConference/2020_EuCC_en_final_JN.pdf

Implant risk factors:

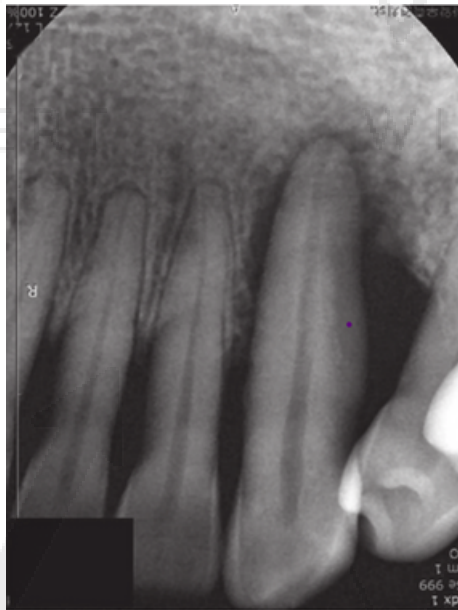
<https://www.dva.gov.au/sites/default/files/files/providers/alliedhealth/AHcareproviders/osseointegrateddentalimplantpolicy.pdf>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7558189/#:~:text=Most%20common%20treatment%20modalities%20were,and%206%2Dmonth%20radiographic%20evaluation.>

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? Anything in particular that triggers your asthma? 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>