



Ebtisam EL Hamalawy
ORE2 Comprehensive Theory
course notes

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SECTION 1

DENTAL TREATMENT PLANNING

Diagnosis and treatment planning

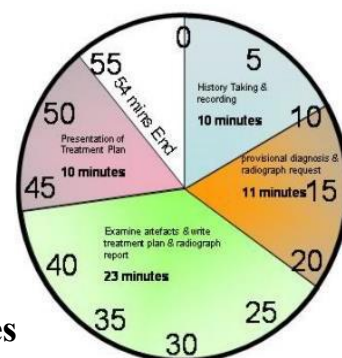
The ORE Diagnosis & Treatment Planning Exercise is a simulated clinical assessment of patient management and care. You will be assessed in 5 separate aspects.

1. Oral History assessed by 2 examiners
2. Provisional diagnosis, special investigations, radiographic request and radiographic report assessed by 1 examiner
3. Contemporaneous notes assessed by 1 examiner
4. Written treatment plan assessed by 1 examiner
5. Oral treatment plan assessed by 2 examiners

Examiners will also be looking at your overall Professionalism during the examination and your communication skills both verbal and non-verbal. You will also be assessed on good clinical judgement and justification of the choice of treatment, the type of any restoration or prosthesis suggested, and any referral you wish to make. If you suggest a referral, it is expected that you will make it clear why it is required.

The examination will be completed during a **54-minute session**. In order to help you with your timekeeping you will be given a clock with the various sections of the exam marked on the clock face.

- **History taking and contemporaneous note making – 10 minutes**
- **Complete provisional (possible) diagnosis, special investigations & radiographic prescription forms – 11 Minutes**
- **Written Treatment Plan – 23 minutes**
- **Presentation of Treatment Plan to the patient- 10 minutes**



Ensure you watch the DTP GUIDANCE VIDEO prior to your exam:

<https://orepart2.org.uk/dtp-guidance-video/>

History taking and contemporaneous note making 10 minutes

You will meet your patient, who will be a role player who has been briefed on the clinical scenario and should in all respects be treated as the “patient”. You will have ten minutes to take the necessary history for this patient. During this time you will be expected to make contemporaneous notes, which will be marked. An examiner, who will remain mainly silent during this part, will observe you and complete a structured mark sheet. The contemporaneous notes will not be collected until the end of the examination and then will be assessed by another examiner.

Introduction:

Good morning or good afternoon, Mr./ Mrs. (Surname)

My name is (.....), I am one of the dentists here and will be seeing you today. How are you today?

Personal history:

Can I start by confirming your personal details?

1. What is your full name?
2. What's your date of birth?
3. What's your Address?
4. What do you do for a living? Do you find it stressful?
5. Are you married or do you have a partner?
6. Do you have any dependents?

Dental complaints:

How can I help you today?

1. Pain complaint
2. Periodontal complaint
3. Oral medicine complaint
5. Tooth surface loss
6. Restorative complaint; failed restoration, broken denture

Dental history:

1. Do you visit your dentist regularly? (Regular/ Irregular attendee)
2. When was your last dental visit? 6 months
3. What kind of dental treatment have you received in the past?

Extraction:

- A. Why were your teeth taken out?
- B. Have there been any complications when the teeth were taken out? **Bridge:**

- A. How long have you had your bridge?
- B. How do you clean under your bridge?

Denture:

- A. Do you remove it out at night?
- B. How often do you clean your denture?
4. How often do you brush your teeth?
5. Do you floss or use mouthwash?
6. Do you grind your teeth?
7. Do you have any discomfort on the side of your face in the morning?
8. Have you noticed any clicking in your jaw joints?
9. Are you anxious about visiting the dentist?

Medical history

Consent must be obtained before proceeding with the medical history questions.
May I ask you a few questions about your health to ensure everything is, okay?

"ABCDEFGHI" mnemonic

A - Allergies & Autoimmune Diseases

1. Do you have any allergies?
2. Do you have any skin, joint, or eye conditions? (e.g., Systemic Lupus Erythematosus, Sjogren Syndrome, Rheumatoid Arthritis, Bechet Syndrome, Lichen Planus)

B - Bleeding & Blood Disorders

3. Do you have any bleeding problems? (e.g., do you bleed excessively after a cut?)
4. Do you have any blood infections? (HIV, HCV, HBV)
5. Have you ever been refused blood donation in the UK before?

C - Current Care & Medications

6. Are you currently under the care of a GP or a specialist for any medical condition?
7. Are you currently on any medications, either prescribed or over the counter?

D - Diseases & Family History

8. Do you have a family history of any medical conditions?
9. Do you have any heart, liver, or kidney conditions?
10. Do you have any lung or breathing problems?

E - Events & Emergency History

11. Have you had any faints, fits, or blackouts before?
12. Do you carry any medical warning card?

F - Female-Specific Questions (*For female patients only*)

14. Are you pregnant?
15. Are you on any contraceptive pills?
16. How about your periods? Are they heavy?

G - GIT (Gastrointestinal Tract) Issues

17. Do you have any tummy troubles like acid reflux (heartburn), indigestion, or bloating?
18. Have you ever been diagnosed with a stomach ulcer or gastritis?
19. Do you ever vomit on purpose after eating? (*Self-induced vomiting in lay terms*)

H - Hospitalization & Past Surgeries

- 20. Have you been to the hospital in the past 10 years?
- 21. Have you had any operations in the past?

I - Infections & Immune System

- 22. Do you have any immune-related conditions or systemic diseases?
- Further questions to be included depending on the patient's medical condition

Example (1): Patient with a medical history of asthma

- 1. What medication are you using for your asthma?
- 2. Are you taking any tablets in addition to your inhalers?
- 3. What was the last time you had an asthmatic attack?
- 4. What triggers your asthmatic attacks?
- 5. Have you had any attacks in dental surgery before?
- 6. Are you using a nebulized at home

Social history (SADS)

1. Smoking:

Do you smoke? If the answer is yes.

- How many cigarettes do you smoke a day?
- For how long?
- Are you interested in quitting?

If the answer is no.

- Have you ever smoked before?
- Do you chew tobacco, or have you done so in the past?

2. Alcohol:

- Do you drink alcohol?
- What type of alcohol do you consume?
(White/ red wine is highly acidic (low PH) and can cause tooth surface loss)
- How many units do you consume on a weekly basis?

3. Diet:

- Do you maintain a balanced diet?
- How would you describe your sugar intake? High, medium, low?
- Do you take lots of fizzy drinks and fruit juices?

4. Stress:

A. How do you describe your stress levels? High, medium, low?

Notes:

1. What are your expectations from the treatment?
2. Do you have any specific timeframe in which you'd like the treatment to be completed within?
3. Do you have any concerns regarding the potential cost of the treatment?

Artefacts Provided following Candidate's Request for Information

These artefacts will be present when you first meet the patient.

1. Intra Oral photographs

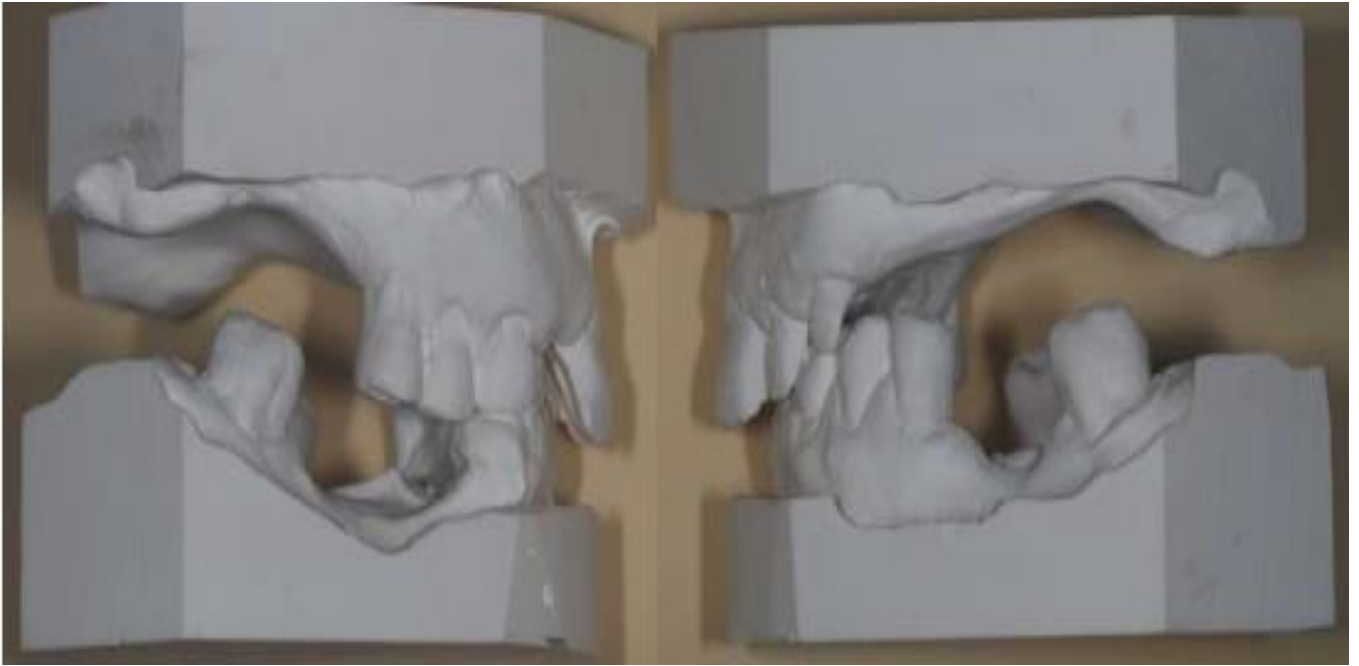


2. Information seen from Simple Dental Examination

Oral Hygiene Fair with small amounts of generalized plaque and a little calculus lingual to the lower incisors Some bleeding on probing

BPE 2/2/- 2/2/2 **Periodontal status** Generalized recession **Occlusion**

Class 2 div 1 (Casts enclosed) There is a slight loss of vertical height approximately 2 mm at the incisal edge with a similar increase of the freeway space.



PAIN

Dentist: Rest assured we will do something about the pain today, can I ask you a couple of questions regarding the nature of your pain to help identify its cause?

Pain questions:

1. Can you point to the site of pain, is it from a specific tooth?
- (localized/ non-localized)
2. Is it the first time or have you had this pain before?
3. Can you describe the pain is it sharp, throbbing, dull?
4. Is it the same or getting worse?
- Course: (Progressive, Regressive, constant)
5. What causes the pain?
- (Continuous, Intermitted)
6. Do you have any pain on biting?
7. How long does the pain last for?
-Duration
8. On a scale of 1 to 10 with 1 being the least and 10 is the most severe how do you grade the pain?
- Severity scale 5/10
9. Are you taking any medication, is it helping?
10. Do you have any Swelling?
11. Do you have any bad taste in your mouth?
12. Do you have a boil on your gums next to that tooth?
13. Is that tooth wobbly?
14. Have you had any dental treatment done on that tooth?
15. Do you grind your teeth?
16. Has anyone told you before that you grind your teeth?
17. You have any discomfort on your side of your face?
18. Have you had any treatment for it before?
19. Do you have any pain when you bend forward?
20. Do you have a congested nose?

American Association of Endodontists**Endodontic Diagnosis****Pulpal diagnosis:****Normal Pulp**

A clinical diagnostic category in which the pulp is symptom-free and responds normally to pulp testing. Although the pulp may not be histologically normal, a clinically normal pulp exhibits a mild or transient response to cold thermal testing, lasting no more than one to two seconds after the stimulus is removed.

Reversible Pulpitis

Patients generally present with:

- Non-localized pain triggered by hot, cold, or sweets
- Duration lasts for a few seconds
- Nature: sharp pain
- Course: intermittent or constant
- Does not disturb sleep
- No radiation
- Relieved by analgesics or does not require analgesics

Common causes include exposed dentin (dentinal sensitivity), caries, or deep restorations. Radiographs typically do not show significant periapical changes, and the pain is not spontaneous. After addressing the underlying cause (e.g., caries removal and restoration, covering exposed dentin), further evaluation is needed to determine if the pulp has returned to a normal state.

Symptomatic Irreversible Pulpitis

Patients typically present with:

- Non-localized pain triggered by hot or cold
- Pain that persists for more than 5 minutes
- Severity: typically rated above 5 on a scale of 1 to 10
- Pain may radiate and disturb sleep
- Not relieved by analgesics
- Spontaneous (unprovoked) pain and referred pain
- Sometimes worsened by postural changes such as lying down or bending over
- Over-the-counter analgesics are typically ineffective

Common causes include deep caries, extensive restorations, or fractures exposing the pulpal tissues. Diagnosing symptomatic irreversible pulpitis may be challenging, as inflammation might not have reached the periapical tissues, leading to an absence of pain or discomfort upon percussion. A detailed dental history and thermal testing are essential for diagnosis.

Pulp Necrosis

A clinical diagnostic category indicating complete death of the dental pulp, requiring root canal treatment. The pulp is non-responsive to pulp testing and asymptomatic. However, necrotic pulp does not cause apical periodontitis (pain upon percussion or radiographic evidence of bone destruction) unless infected. Some teeth may not respond to pulp testing due to calcification, recent trauma, or patient-specific variations. Comparative testing is crucial, as some patients may not respond to thermal testing in any teeth.

Previously Treated

A clinical diagnostic category indicating that the tooth has undergone endodontic treatment, with the canals obturated using various filling materials. The tooth typically does not respond to thermal or electric pulp testing.

Previously Initiated Therapy

A clinical diagnostic category indicating that the tooth has undergone partial endodontic therapy, such as pulpotomy or pulpectomy. Depending on the extent of therapy, the tooth may or may not respond to pulp testing.

Apical Diagnoses**Normal Apical Tissues**

Apical tissues that are not sensitive to percussion or palpation. Radiographically, the lamina dura surrounding the root is intact, and the periodontal ligament space appears uniform. As with pulp testing, percussion and palpation testing should be compared to normal teeth for an accurate assessment.

Symptomatic Apical Periodontitis

An inflammatory condition, usually affecting the apical periodontium, characterized by:

- Painful response to biting and/or percussion or palpation
- May or may not be accompanied by radiographic changes (periapical radiolucency or normal periodontal ligament width)
- Severe pain upon percussion or palpation, highly indicative of degenerating pulp
- Root canal treatment is required

Asymptomatic Apical Periodontitis

Inflammation and destruction of the apical periodontium due to pulpal origin.

Radiographically appears as an apical radiolucency but does not cause clinical symptoms (no pain upon percussion or palpation).

Acute Periapical Abscess

Patients typically present with:

- Severe localized or diffuse swelling
- Throbbing and continuous pain
- Progressive or constant pain

- History of previous dental treatment, caries, or a broken tooth
- Extreme tenderness to pressure
- Pus formation and associated tissue swelling
- Systemic signs of infection: fever, malaise, lymphadenopathy, lymphadenitis, trismus
- Pain not relieved by analgesics

Chronic Periapical Abscess

Patients typically present with:

- Localized dull ache
- Associated foul taste and halitosis
- History of previous swelling, antibiotics, or dental treatment
- Pain alleviated by analgesics
- Gradual onset, intermittent pus discharge via sinus tract
- Radiographic evidence of osseous destruction (periapical radiolucency)

To identify the source of a draining sinus tract, a gutta-percha cone is inserted into the opening until resistance is met, and a radiograph is taken.

Condensing Osteitis

A diffuse radiopaque lesion representing localized bony reaction to a low-grade inflammatory stimulus, usually found at the tooth apex.

Non-Odontogenic Pain

Myofascial Pain Dysfunction Syndrome (MPDS)

Patients typically present with:

- Bilateral, non-localized dull ache on the side of the face
- Symptoms worsen in the morning but improve throughout the day
- Associated with bruxism and stress
- TMJ clicking may be present
- History of night guard treatment

Osteomyelitis (OM)

Patients typically present with:

- Deep-seated throbbing pain
- Initial soft swelling due to edema, later firm with periosteal involvement
- non-healing necrotic bone with sequestrum formation
- Trismus, fever, halitosis, extraoral draining sinuses, and lymphadenopathy

Pericoronitis

Patients typically present with:

- Localized dull ache or severe throbbing pain
- Foul taste and halitosis
- Food lodgment around a partially erupted third molar
- Previous episodes of infection
- Systemic involvement: fever, malaise, lymphadenopathy, trismus
- Pain usually relieved by analgesics

Localized alveolar osteitis:

Patients generally present localized -sever throbbing pain-non relieved by analgesics-foul taste-halitosis-history of recent extraction- predisposing factors: smoking, difficult extraction, poor oral hygiene, poor compliance with postoperative instructions and medical history of oral contraception.

Radiographs

The reason for carrying out a radiographic investigation

1. Confirm a condition, the presence of periapical pathology, caries, or alveolar bone loss
2. Rule out a condition, periapical pathology, caries, periodontal involvement, or an impacted tooth

Example:

-A patient presents with 3 episodes of pericoronitis and is to be referred to OMFS for extraction. An OPG should be requested to confirm the status of the impacted tooth, presence of caries, angulation, association with a periapical pathology and proximity to the alveolar nerve.

-Parallax technique: Is requested to evaluate the positioning of an impacted canine
Vertical parallax: Periapical and an OPG- Horizontal parallax: Periapical and Occlusal x-ray

Special Investigation

- Vitality testing: To localize the symptomatic tooth & confirm pulp status.
- Percussion test: To rule out periodontal and periapical involvement.
- Mobility: To rule out periodontal involvement/ alveolar bone loss
- Tooth sleuth test: To confirm and localize the cracked tooth.
- Muscles of Mastication: To rule out MPDS.
- TMJ examination: Rule out TMJ involvement
- Articulated study casts: Rule out occlusal trauma
- Body temperature: To rule out systemic involvement.
- Dietary chart: Diagnostic for causes of dental caries.

Radiographic report

Quality assurance of clinical image quality

TABLE 5.2 Subjective image quality ratings of dental radiographs and CBCT images

Quality rating	Basis	Target (percentage of radiographs or CBCT images in sample)	
		Digital imaging	Film imaging
Diagnostically acceptable ('A')	No errors or minimal errors in either patient preparation, exposure, positioning, image (receptor) processing or image reconstruction and of sufficient image quality to answer the clinical question	Not less than 95%	Not less than 90%
Diagnostically not acceptable ('N')	Errors in either patient preparation, exposure, positioning, image (receptor) processing or image reconstruction which render the image diagnostically unacceptable	Not greater than 5%	Not greater than 10%

Please report the x-ray shown in the box below

The radiograph will be provided in the artefacts folder

Example:

Radiograph: Horizontal bitewing radiograph Side: (upper and lower right posterior quadrant)

Bone level: Pattern and amount of bone loss Teeth: UR7, UR6, UR5, LR7, LR6, LR5

Restorations: occlusal restoration in relation to the UR5, UR6, UR7, LR5, LR6, LR7

Caries: Proximal mesial caries in relation to the UR5, distal caries in relation to UR4, Secondary caries in relation to LR5, LR6

Other: Pulp stones in relation to UR6, UR7

Other features include Endo-period lesions, widening in the periodontal membrane space, calculus, over hanged restoration

Film Quality: A



SHEET 7

A sample of treatment plan structure

Immediate/ Emergency Treatment

1. Explain the cause of the chief complaint
2. Alleviation of any pain condition (pulp extirpation, incision and drainage, local debridement)
3. Prescribe analgesics and/or antibiotics if clinically indicated.
4. General medical practitioner referral for management of underlying medical condition if clinically indicated

Initial/ Stabilization Treatment

1. Explain chronic generalized gingivitis
2. Oral hygiene instruction/ tooth brushing/ mouth wash/ interdental brushes
3. Supra-gingival scaling, sub-gingival scaling, root surface debridement, removal of plaques retentive factor.
4. Referral to a periodontist if clinically indicated
5. Referral for (smoking cessation, stress management, orthodontic treatment...)
6. Monitoring: periodontal condition with a 6-point pocket chart, tooth surface loss with BEWE index, silicon index, study models, clinical photographs.
7. Diet assessment via a dietary chart and customized dietary advice
7. Explain treatment option for the main chief complaint

Preferred Definitive Treatment

- Clinician's preferred choice based on clinical diagnosis and patient factors
- Referral to a restorative specialist:

Root canal treatment complexity assessment:

- a) Single/multiple root canals with curvature $> 40^\circ$
- b) Single/multiple root canals that are NOT considered negotiable from radiographic or clinical evidence through their entire length
- c) Periradicular surgery
- d) Teeth with iatrogenic damage or pathological resorption
- e) Teeth with difficult root morphology

Fixed Prosthodontics complexity treatment assessment

- a) Extra coronal restoration of the complete anterior guidance including pontic units.
- b) Extra coronal restoration of opposing sextants (all teeth)
- c) Restorations that are supported by Osseo integrated implants

Long Term & Maintenance Treatment: 3Rs

1. Recall every (3,6,12) month as per the NICE GUIDELINES
2. Review and reinforce oral hygiene instructions
3. Review restorations, smoking status, diet, alcohol consumption

Sheet 7 Green Treatment Plan Form Continued

Considering this patient, briefly describe what has led you into choosing this overall care plan and the benefits (likely success, cost, time, etc.) to the patient

Reasons for the overall care plan

1. Young age
2. Adequate oral hygiene
3. Regular dental attender
4. non-smoker
5. Low carbohydrate diet
6. non-financial or time constraints

Benefits

1. High success rate 95%
2. Preserve alveolar bone
3. Restore aesthetics and functions
4. Last for a long time

Considering this patient are there any potential disadvantages of this treatment (complicated, high risk of failure, short life of restoration, etc.) for the patient

Disadvantages:

1. Multiple visits
2. Expensive
3. Surgical complications (bleeding/ swelling/ damage to roof of the mouth)
4. Long treatment

Would you provide all or part of the treatment for this patient yourself? If so which part or parts? (Give your reasons)

- Yes, I will carry out part of the treatment
- List the parts to be carried out

Would you refer the patient for all or part of the treatment? If so which part or parts and to which Specialist/s? (Give your reasons.)

- Yes, I will refer to a periodontal specialist for surgical debridement, and /or regenerative periodontal surgery: (Guided tissue regeneration/ Bone graft)

Reasons:

The periodontal condition is a complexity 3, which is indicated for referral
Generalized periodontitis, Stage IV, Grade: B - Currently Unstable - Risk factor(s):
Diabetes, hypertension, and smoking

Last page of the treatment planning

Medical link:

- a. Medical condition affecting the treatment plan
- b. Medication affecting oral condition
- c. Medical emergency

Type II diabetic patient on oral hypoglycemic

1. Ensure the patient takes medication and meals prior to appointment.
2. Stress reduction protocols (short and midday appointments).
3. Diabetes is a risk factor for periodontitis and candida infection.
4. Oral hypoglycemic associated dry mouth/ Lichenoid reaction.
5. Risk of a hypoglycemic attack (Oxygen/ Glucose gel/ Glucagon) Patient with a history of Myocardial infarction

1. Ensure the patient take medications prior to appointments
2. Stress reduction protocol (short and early morning appointments)
3. Ensure the presence of GTN, Aspirin and oxygen prior to dental treatment
4. Patients on antiplatelet or anticoagulated medication, hence increased risk of bleeding following surgical procedures
5. Avoid prescription of NSAIDS potentiate bleeding risk
6. Differ invasion non urgent dental treatment to 6-month post MI attack Patient on systemic Steroids

1. Ensure the patient takes medication prior to appointments
2. Stress reduction protocol (short and early morning appointments)
3. Liaise with the General Medical Practitioner to double the dosage of steroid prior to surgical interventions
4. Avoid Aspirin and NSAIDS due to increased risk of peptic ulcers
5. Patients on steroids exhibited significantly higher levels of candidiasis and clinical attachment loss of the periodontal ligament, impairing bone metabolism leading to a considerable decrease in the mandibular bone mineral density.

Patient with HBV (Hepatitis B Virus)

1. Consider consulting the patient's physician regarding liver function status.
2. Use caution with medications metabolized in the liver.
3. Patients may have increased bleeding tendency due to liver dysfunction.

Patient with HIV

1. Evaluate immune status (CD4 count and viral load).
2. Consider antibiotic prophylaxis for invasive procedures if neutropenic.
3. Be aware of oral manifestations such as candidiasis, Kaposi's sarcoma, and necrotizing gingivitis.

4. Avoid prescribing medications that interact with antiretroviral therapy.
5. Maintain strict infection control procedures.

Patient with Anemia

1. Assess for symptoms of fatigue and pallor.
2. Monitor oxygenation levels and consider shorter appointments.
3. Avoid excessive blood loss during surgical procedures.
4. Ensure adequate iron or vitamin B12 intake for recovery.
5. Check for potential causes such as chronic disease or nutritional deficiency.

Patient with COPD (Chronic Obstructive Pulmonary Disease)

1. Avoid the use of rubber dams if the patient has severe dyspnea.
2. Schedule short, morning appointments.
3. Keep the patient in a semi-supine position to avoid breathing difficulty.
4. Avoid the use of nitrous oxide sedation.
5. Be cautious with respiratory depressants such as benzodiazepines and opioids.

Patient with Artificial Heart Valve

1. Requires antibiotic prophylaxis before invasive dental procedures.
2. Avoid prolonged dental procedures that induce stress.
3. Ensure anticoagulation status is monitored if the patient is on warfarin.
4. Risk of infective endocarditis – strict oral hygiene reinforcement.
5. Avoid NSAIDs if the patient is anticoagulated.

Patient with Addison's Disease

1. Patients may require stress-dose steroids before surgical procedures.
2. Morning appointments are preferred to minimize stress.
3. Avoid long procedures and ensure good pain control.
4. Watch for signs of adrenal crisis (hypotension, dizziness, nausea).
5. Liaise with the patient's physician regarding steroid management.

Patient with Hypertension

1. Monitor blood pressure before and after dental procedures.
2. Avoid excessive use of epinephrine in local anesthesia.
3. Short and stress-free appointments are recommended.
4. Be cautious of postural hypotension when raising the dental chair.
5. Avoid NSAIDs, as they can interfere with antihypertensive medications.

Type 1 Diabetic Patient

1. Ensure the patient has eaten and taken insulin before appointments.
2. Morning appointments are preferred.
3. Be prepared for hypoglycemia (glucose gel, oxygen, glucagon).
4. Reinforce oral hygiene due to increased risk of periodontitis.

5. Monitor healing following surgical procedures.

Type 2 Diabetic Patient

1. Ensure the patient has taken medication and meals before appointments.
2. Short, midday appointments to avoid fasting periods.
3. Risk of delayed healing and increased susceptibility to infections.
4. Oral manifestations: xerostomia, burning mouth syndrome, candidiasis.
5. Monitor blood sugar levels pre- and post-procedure if indicated.

Patient with Clinical Depression on Amitriptyline

1. May experience xerostomia due to medication.
2. Increased risk of bruxism and TMJ disorders.
3. Monitor for reduced pain tolerance.
4. Be cautious with prescribing additional CNS depressants.
5. Encourage good oral hygiene to prevent caries and periodontal disease.

Patient Diagnosed with Bulimia

1. Monitor for enamel erosion due to frequent vomiting.
2. Recommend fluoride rinses and remineralizing agents.
3. Avoid brushing immediately after vomiting to prevent further erosion.
4. Encourage professional mental health support.
5. Reinforce good oral hygiene and dietary counseling.

Patient with Fibromyalgia

1. Patients may have increased pain sensitivity.
2. Schedule short and low-stress appointments.
3. Be aware of temporomandibular disorders and myofascial pain.
4. Avoid long procedures due to fatigue and discomfort.
5. Ensure comfortable positioning in the dental chair.

Patient with Von Willebrand Disease

1. Assess bleeding history before invasive procedures.
2. Consult a hematologist if necessary for clotting factor replacement.
3. Avoid aspirin and NSAIDs.
4. Use local hemostatic measures (e.g., tranexamic acid, sutures).
5. Consider desmopressin (DDAVP) therapy in consultation with a physician.

Patient on Bisphosphonates for Osteoporosis

1. Risk of bisphosphonate-related osteonecrosis of the jaw (BRONJ).
2. Avoid extractions if possible; prefer conservative treatments.
3. Consult with a physician regarding drug holidays before surgical procedures.
4. Maintain strict oral hygiene to prevent infections.
5. Be cautious with implant placement due to impaired bone healing.

Patient with Celiac Disease

1. Monitor for enamel hypoplasia and aphthous ulcers.
2. Ensure gluten-free products are used in dental materials.
3. Patients may have associated deficiencies (iron, folate, B12).
4. Reinforce good oral hygiene to prevent caries and periodontal disease.
5. Be aware of increased risk for oral cancers.

Patient with Crohn's Disease

1. Monitor for oral manifestations such as cobblestone mucosa and aphthous ulcers.
2. Avoid NSAIDs due to gastrointestinal irritation.
3. Short appointments to reduce stress.
4. Reinforce oral hygiene to prevent secondary infections.
5. Patients may be immunosuppressed if on biologics or steroids.

Patient with Ulcerative Colitis

1. Be cautious with NSAIDs and aspirin.
2. Monitor for oral lesions and aphthous ulcers.
3. Reduce stress during dental visits.
4. Consider antibiotic prophylaxis if immunosuppressed.
5. Short and well-planned appointments.

Patient on Anticoagulants (Warfarin)

1. Check INR levels before invasive procedures.
2. Avoid NSAIDs and aspirin.
3. Use local hemostatic measures (sutures, hemostatic agents).
4. Plan extractions or surgery accordingly.
5. Consult with a physician if necessary.

Patient on Aspirin

1. Increased bleeding tendency.
2. Avoid NSAIDs due to additional bleeding risk.
3. Use local hemostatic measures if needed.
4. Monitor post-operative bleeding.
5. Discuss discontinuation before major surgical procedures with a physician.

Patient on Rivaroxaban

1. Increased bleeding risk.
2. Check clotting status before surgery.
3. Use local hemostatic measures.
4. Avoid NSAIDs.
5. Consult with a physician before stopping medication.

Patient with Liver Cirrhosis

1. Increased risk of bleeding due to reduced clotting factors.
2. Monitor for jaundice and fatigue.
3. Avoid hepatotoxic drugs (e.g., acetaminophen).
4. Consider reduced metabolism of local anesthetics.
5. Consult with a physician for liver function status before major procedures.

Presentation:

Based on the clinical case create the presentation point

Example:

Mr. Harry Potter is an irregular dental attendee, presented with complaints of severe pain in relation to the upper right first molar and Myofascial pain dysfunction syndrome. Clinical examination revealed the presence of caries in relation to the UR6, you performed further investigations which confirmed the diagnosis of irreversible pulpitis. In addition, further periodontal examination revealed the presence of periodontal disease, which was diagnosed as generalized periodontitis Stage IV, Grade: B - Currently Unstable - Risk factor(s): diabetes, hypertension, and smoking. Radiographic investigation revealed the presence of active carious lesions in relation to the lower left second premolar. He is diabetic and hypertensive on metformin, Propranolol, and statins.

Presentation points:

1. Medical link: Diabetes and hypertension
2. Chief complaint: Irreversible pulpitis
3. Second complaint: MPDS
4. Periodontal Status
5. Incidental findings
6. Prevention: (Dietary chart / fissure sealant/ fluoride application/ impacted third molars / alcohol advice/ smoking referral)

Oral presentation script:

Dentist: Thank you, Mr. Harry, for waiting

I have the results of your investigations we will go through it together and I will be explaining to you the treatment plan available and what options we have for it. How does that sound?

Patient: sounds okay

Dentist: You have mentioned having high blood pressure and diabetes and you are on propranolol, statins, and metformin, please continue to take your medication regularly and ensure that you have a good meal and take your medication prior to dental appointments. If there is any change in your medical history, please let me know and I will update your medical records accordingly. How does that sound? Do you have any questions so far?

Patient: Yes, thank you.

Dentist: your main complaint was pain in the upper right side of your face and our investigations revealed the cause to be tooth decay in relation to your upper right molar which is one of the big back teeth on that side.

Unfortunately, the decay has reached the nerve of the tooth, and it's now irritating beyond repair. Is everything clear so far Mr. Harry?

Patient: yes

Dentist: What I am going to do today to get you out of pain, is to numb that tooth and take the nerve out and I will give you some painkillers to use that will relieve your pain. How does that sound?

Patient: It sounds alright, is it going to be painful

Dentist: Certainly not, I won't start unless I ensure the tooth is completely numb, so you won't feel any pain. In the future you have one of two options to consider regarding that tooth. You can either choose to save it or take it out. If you are to save it, we will need to do a nerve treatment otherwise known as a root canal treatment, have you heard about it before?

Patient: No, I am afraid I haven't

Dentist: A root canal treatment entails cleaning the inside of the tooth then placing a permanent filling inside, afterwards we will need to place a crown otherwise known as a cap on top of the tooth to protect it. The advantages are you will end up saving the tooth and the treatment has a high success rate. However, on the downside: it requires multiple appointments, a RCT and a crown are expensive compared to having the tooth out and as any treatment there are some risks associated with it; failure, tooth might break, the fine instruments which we use to clean the tooth might break and get stuck inside the tooth which will necessitate further treatment. Is everything clear so far?

Patient: Yes

Dentist: the second option is having the tooth taken out, have you had any tooth taken out before?

Patient: yes

Dentist: it includes giving you a local anaesthetic to numb the tooth then wiggling it around to take it out. The advantage is it's a simple one appointment procedure. However, on the downside you will end up losing a big back tooth and have a gap. Instead, if it's not restored with an artificial tooth the teeth next to the space will drift in and you will end up with more gaps between you that will cause more problems in the future. Is everything clear Mr. Harry?

I will give you leaflets which explain both treatment options available, take them home, have a read and whatever you decide we will take it from there. How does that sound are you happy with the explanation so far?

Patient: Yes, thank you very much.

Second complaint: (Myofascial Pain Dysfunction Syndrome)

Dentist: your second concern was the discomfort on the side of your face, the reason behind it is teeth grinding which we refer to as bruxism. You have mentioned that you grind your teeth at night, and when you do that, you end up putting too much pressure on the muscles on the side of your face which results in that facial pain and discomfort. Is it clear so far?

Patient: Yes, I understand now

Dentist: for the discomfort to go away you will have to stop grinding your teeth and the muscle ache will gradually improve, but you need to be patient and give the treatment some time to work. As for now, to relieve the pressure on the muscles try to follow a soft food diet, avoid any hard or sticky food, cut food into small pieces and chew on your back teeth, avoid cutting food with your front teeth. I will give you some painkillers to use, and you might experience some pain relief by applying warm towels on the side of your face to reduce the discomfort. I will also give you a leaflet of some jaw relaxation to follow and that will help stretch your muscles and relief your pain.

I will be seeing you regularly to monitor your condition and if those simple measures fail to work and your muscle ache persists, we can fabricate a mouth guard for you. A mouth guard is plastic plate that goes between the teeth to keep them apart and decrease the pressure from your muscles. At that stage I might also consider prescribing a short course of muscle relaxant medication (Diazepam). Is everything clear so far, do you have any questions?

Patient: yes

Dentist: if after three months of treatment your muscle ache is not improving then I will consider referring you to the hospital to see a specialist who can run further investigations in relation to your muscle pain and explore alternative treatment options.

Patient: what type of specialist would I be seeing?

Dentist: A maxillofacial specialist

Dentist: while examining your gums and carrying out the relevant investigations, it has become clear that you suffer from an advanced form of gum disease otherwise no one else periodontitis. Where are you aware of such a condition?

Patient: Oh no, I was not aware of such a thing, what is periodontitis exactly?

Dentist: it's an advanced form of gum disease. Healthy gums are vital for providing adequate support for the teeth, when the gums get diseased it become puffy and swollen and patients usually experience bleeding while brushing and bad taste which you're currently experiencing. There are several factors which have contributed to it, in your case its diabetes, especially when the disease is uncontrolled and dental plaque. Do you know what plaque is?

Patient: oh, I am not sure

Dentist: Plaque is the white sticky substance which forms around our teeth after we have a meal, hence it's important that we brush our teeth twice a day for two minutes to help remove it in a timely manner. When plaque is left to build up around the teeth it puts pressure on the gums and because it is full of germs (bacteria) it leads to gum disease. When gum disease advances and start shrinking the bone which supports the teeth, it starts getting mobile and pockets appear between the gums and the teeth allowing further food to accumulate. This advanced form of gum disease it known as (periodontitis). Is everything clear so far?

Patient: yes

Dentist: For us to treat gum disease we will have to work as a team on your side it's important that you brush your teeth twice a day using fluoridated toothpaste and a soft toothbrush and to floss between the teeth. Next time you come we will go together through the correct technique of brushing, flossing and what other cleaning aids you can use to make your teeth and gums healthier. How does that sound?

Patient: that sounds great

Dentist: On my side I will be cleaning your gums and seeing you on a regular basis to monitor its health. If the gum disease stabilizes and it gets better all the treatment will be completed by myself. However, in some cases gum disease can continue to advance and, in this situation, we will need the input of gum specialist and for which I'll be referring to you to a periodontist. Is everything clear so far?

Patient: Yes, thank you

Dentist: I will give you leaflets which talk more about gum disease and what you could do to make it better.

Dentist: when I examined your teeth, I've noticed thought you have active tooth decay in one of your lower right molars were you aware of that?

Patient: no, I didn't know but I had tooth decay

Dentist: next time when you come, we will run further investigations for that tooth and then I'll be able to offer you treatment options for it. You also mentioned that you smoke, are you interested in quitting smoking?

Patient: no not at the time being

Dentist: that's okay but if you do change your mind in the future, please do let me know and I'll be more than happy to help refer you to the correct services.

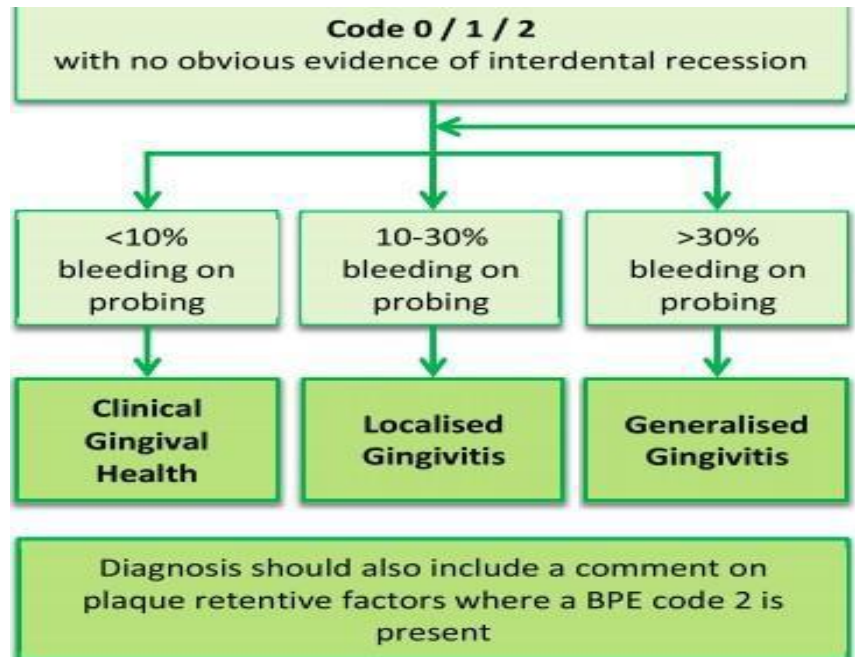
Because you have advanced gum disease and active tooth decay, I'll be seeing you every three months to keep a close eye on the health of your gums and teeth until it stabilizes. How does that sound?

Patient: It sounds good

Dentist: I look forward to seeing you soon

Periodontal diseases and conditions:

History, examination and screening for periodontal disease
including BPE and assessment of historic periodontitis (interdental recession)



I. Periodontitis:

1. Necrotising Periodontal Diseases

- a) Necrotising gingivitis
- b) Necrotising periodontitis
- c) Necrotising stomatitis

2. Periodontitis

3. Periodontitis as a manifestation of a systemic disease

1. Necrotizing periodontal disease:

A. Necrotizing periodontal disease:
temporarily and/or moderately compromised patients

- Necrotising gingivitis
- Necrotizing periodontitis

Predisposing factors: (Stress, smoking, nutrition, previous NPD, local factors)

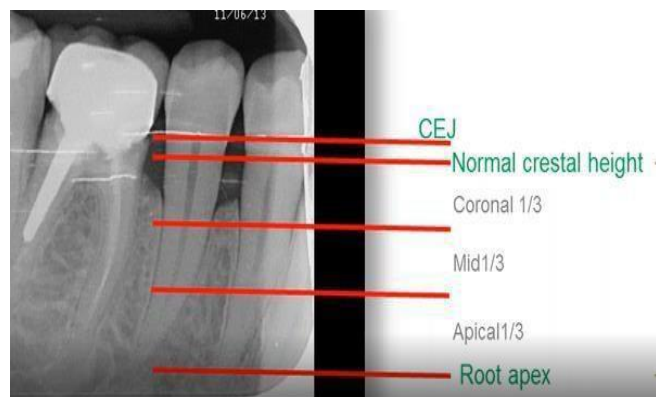
Treatment: (Local debridement, hydrogen peroxide mouthwash / Chlorhexidine 0.2%, antibiotics if clinically indicated- rectify the underlying cause)

B. Necrotizing periodontal disease: chronically, severely compromised patients

- Necrotising gingivitis
- Necrotizing periodontitis

Predisposing factors: (Sever malnourishment, extreme living condition)

Treatment: (Local debridement; debridement gradually, scaling, removal of slough with cotton pellet soaked in 3% hydrogen peroxide, mouthwash (hydrogen peroxide, Chlorhexidine 0.2%), antibiotics if clinically indicated)

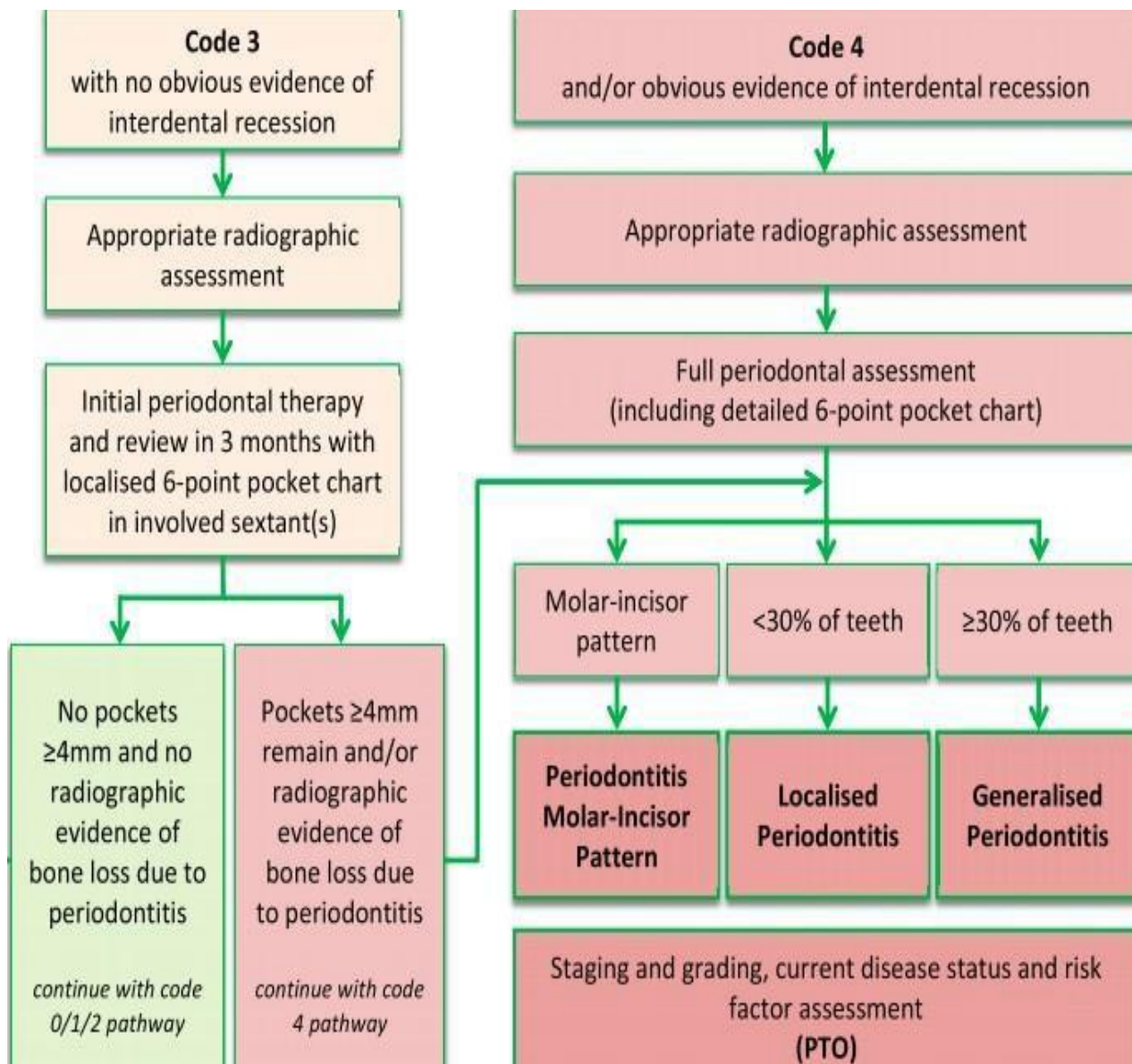


2. Periodontitis:

Definitive diagnosis should include:

Extent, Type, Staging (interproximal bone loss), Grading, Current disease status, Risk Factors

Extent		Captures distribution
Localised:		Localised Up to 30% of teeth affected
Generalised		Moderate More than 30% of teeth affected
Molar/incisor		As described



Staging

Grading

Supported by

Oral-B

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LISTERINE

Radiographic Assessment

(periapicals or OPG/DPT)

if not clinically justified or if bitewings only available use CAL or bone loss from CEJ

Interproximal bone loss
(use worst site of bone loss due to periodontitis)

% bone loss ÷ patient age
(use worst site of bone loss due to periodontitis)

<15%
(or <2mm
attachment loss
from CEJ)

Coronal third
of root

Mid third of
root

Apical third of
root

Stage I
(Early/Mild)

Stage II
(Moderate)

Stage III
(Severe)

Stage IV
(Very Severe)

<0.5

0.5-1.0

>1.0

Grade A
(Slow rate of
progression)

Grade B
(Moderate
rate of
progression)

Grade C
(Rapid rate of
progression)

Assessment of Current Periodontitis Status

Currently Stable

BoP <10%
PPD ≤4mm
No BoP at 4mm sites

Currently in Remission

BoP ≥10%
PPD ≤4mm
No BoP at 4mm sites

Currently Unstable

PPD ≥5mm or
PPD ≥4mm & BoP

Risk Factor Assessment

For example:

- Smoking, including cigarettes/day
- Sub-optimally controlled diabetes

Diagnosis Statement: Extent – Periodontitis – Stage – Grade – Stability – Risk Factors

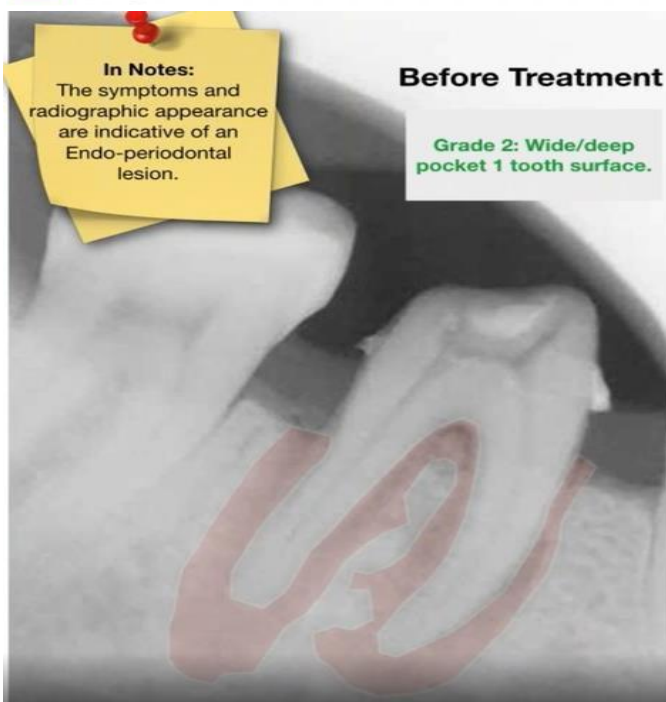
e.g.: Generalised Periodontitis Stage 3 Grade B – Currently Unstable – Risk(s): Smoker 15/day

II. Other conditions effecting the periodontium:

- a) Systemic diseases or conditions affecting the periodontal supporting tissues
- b) Periodontal abscesses and endodontic-periodontal lesions
- c) Mucogingival deformities and conditions
- d) Traumatic occlusal forces
- e) Tooth and prosthesis related factors

Endo-periodontal lesions

Endo-periodontal lesions with root damage	Root canal or pulp chamber perforation External root resorption Root fracture/cracking	
Endo-periodontal lesions no root damage	Periodontitis patient	Grade 1: narrow/deep pocket 1 tooth surface Grade 2: wide/deep pocket 1 tooth surface Grade 3: deep pocket >1 tooth surface
	Non-periodontitis patient	Grade 1: narrow/deep pocket 1 tooth surface Grade 2: wide/deep pocket 1 tooth surface Grade 3: deep pocket >1 tooth surface



III. Peri-implant disease and conditions:

1. Peri-implant health
2. Peri-implant mucositis
3. Peri-implantitis
4. Peri-implant soft and hard tissue deficiencies



1. Peri-implant health:

- Absence of Erythema, BOP, Swelling and suppuration
- PPD implant > PPD teeth sites
- Papilla at inter-proximal sites of an implant may be shorter than at tooth surface
- Berglundh T stal. 2018 "It's not possible to define range of PPD compatible with health, more importantly are clinical signs of inflammation.

2. Peri-implant mucositis:

- Definition: Inflammation in the mucosa around the implant without signs of bone loss
- Aetiology: Plaque
- On examination: Signs of inflammation in the mucosa around the implant with BOP, Erythema, Swelling, Suppuration
- Increase PPD comparison to baseline
- Study by Salvi GE et al. 2012 has shown that peri-implant mucositis can resolve but it may take up to > 3 weeks following re-institution of plaque/biofilm control



3. Peri-implantitis:

- Definition: It's a plaque associated pathological condition which in addition to inflammation in the mucosa is also characterized by subsequent progressive loss of supporting bone.
- On examination: inflammation, recession, Pocket, Bone loss, Bleeding, and suppuration
- When no prior data is available: a PD > or = 6 mm and bone level of > or = 3 mm apical of most coronal portion of intraosseous part of the implant
- PPD correlated with bone loss and indicator for the disease severity
- No specific unique bacteria or proinflammatory cytokines have been identified
- Causes: Strong evidence that confirms correlation between (Poor plaque control- lack of supportive periodontal therapy- history of periodontitis)



4. Tissue Deficiencies:

- Injury
- Pneumatization of the maxillary sinuses
- Systemic disease
- Thin buccal bone plates
- Endodontic infection

Medical History that Significantly Affects Clinical Management:

- Patients with a history of head / neck radiotherapy or intravenous bisphosphonate therapy.
- Patients who are significantly immunocompromised or immunosuppressed.
- Patients with a significant bleeding dyscrasia / disorder.
- Patients with potential drug interaction.

History questions relevant to a periodontal complaint:

1. Do your gums bleed?
2. What causes bleeding? (Bleeding on brushing/ Spontaneous)
3. Since when?
4. Is it overall or is it a specific area? (Localized / generalized)
4. Does anyone in your family have gum disease? (Positive/ negative family history)
5. Have you noticed any gaps forming between teeth?
6. Have you noticed your gums are shrinking down? Gingival recession
7. Have you noticed any sensitivity in your teeth? Sensitivity
8. Are your teeth mobile?
9. Have you noticed any bad taste in your mouth? Foul taste
10. Have you noticed any bad breath? Halitosis
10. Are you happy with the appearance of your teeth?

Patient complaint:**Lump inside the mouth:****Pyogenic granuloma:**

Gingival swelling / bleeding when provoked/ non-painful / no tingling sensation/ gradual increasing in size.

Pregnancy epulis/granuloma:

Gingival swelling / bleeding when provoked/ non-painful / no tingling sensation/ gradual increasing in size/ Pregnant.

Periodontal abscess:

Dull pain, throbbing pain/ localized/ no pain on hot and cold/ no history of dental treatment/ predisposing factors (Iatrogenic due to calculus from recent sub-gingival scaling, hard food). In a previously diseased periodontium.

Relevant history questions:

1. Where exactly is it? Is it on your gums?
Hard palate or alveolar bone (torus palatinus), on the gingival margins (Pyogenic granuloma)
2. Since when have you had it?
Congenital (torus palatines), Developmental (Any soft or hard tissue mass)
3. Is it painful?
4. Is it increasing in size?
-Constant (torus), increase in size (any soft or hard tissue swelling mass)
5. Is it hard or soft?
6. Does it bleed?
7. Is there any tingling sensation in your mouth?
- Minor salivary gland tumor is associated with paresthesia.
8. Have you had any trauma to neighboring teeth?
- Rule out odontogenic cause for the swelling (dental abscess)
9. Have you had any dental treatment on the teeth next to lump?
- Local predisposing factors: inadequate restoration, rough composite filling, overhanged amalgam, over contoured crowns with poor emergence profile)

Basic Periodontal Examination: BPE Is used to support the provisional diagnosis.

If one sextant of the mouth is involved then the condition is localized, if more than one sextant it's generalized Ex: Generalized periodontitis with localized gingivitis

Ex: Localized periodontitis with generalized gingivitis

Radiograph:

- Radiographs are required for: BPE score of 3, 4, *
- Full mouth periapical is required when all sextants are involved with a score of (3,4, *) to confirm the severity of periodontal disease, pattern of alveolar bone loss and overall teeth prognosis.

Investigations

Plaque index:	Plaque is a risk factor for periodontitis.
Bleeding index:	Confirm the presence of active periodontal disease.
6 PP chart:	Confirm clinical attachment loss.
Mobility test	Rule out alveolar bone loss/ periodontal involvement
Percussion test	Rule out alveolar bone loss/ periodontal involvement
Furcation index:	To confirm amount of alveolar bone loss
Blood test:	To rule out diabetes.

SHEET 7

Immediate/ Emergency treatment:

1. NUG: management

Explain the condition, prescribe mouthwash; Chlorhexidine or hydrogen peroxide, prescribe appropriate antibiotics and analgesic if clinically indicated.

2. Periodontal abscess: Establish drainage, prescription of mouthwash, antibiotics and analgesic if clinically indicated.

3. Pericoronitis: Explain condition, local debridement (saline/ chlorhexidine), prescribe analgesics and antibiotics if clinically indicated.

Initial/ Stabilization treatment:

Based on definitive diagnosis of the periodontal status:

Customized oral hygiene instructions, removal of plaque retentive factors including supra gingival, sub gingival scaling, root surface debridement.

Definitive Treatment

Refer to a periodontist if clinically indicated.

Periodontal treatment assessment:

Based upon the Basic Periodontal Examination (BPE) criteria Complexity 3:

1. Surgical procedures associated with Osseo integrated implants.
2. Surgical procedures involving periodontal tissue augmentation and/or bone removal (e.g., Crown lengthening surgery).
3. B.P.E. score of 4 in any sextant and including one or more of the following factors:
 - Patients under the age of 35 Smoking 10+ cigarettes daily
 - A concurrent medical factor that is directly affecting the periodontal tissues
 - Root morphology that adversely affects prognosis
 - Rapid periodontal breakdown > 2mm attachment loss in any one year

Long Term & Maintenance Treatment

1. Recall every 3 months or 6 months based on periodontal status
2. Review and reinforce oral hygiene.
3. Review restoration/ smoking status

Sheet 7 Green Treatment Plan Form Continued

Considering this patient, briefly describe what has led you into choosing this overall care plan and the benefits (likely success, cost, time, etc.) to the patient.

Reasons for

1. Irregular dental attender
2. Poor oral hygiene referral
3. High carbohydrate diet
4. Family history of periodontitis
5. Stress
6. Smoking
7. Not expensive

Benefits

1. Conservative
2. Adequate management GDP and
3. Not expensive

Considering this patient are there any potential disadvantages of this treatment (complicated, high risk of failure, short life of restoration, etc.) for the patient.

Disadvantages:

1. Long treatment
2. Multiple appointment
3. Questionable prognosis

Would you provide all or part of the treatment for this patient yourself? If so which part or parts? (Give your reasons.)

Yes part:

1. Explain the cause and management of periodontal disease.
2. Patient education regarding oral hygiene care (Brushing, flossing and use of mouthwashes)
3. Preventive treatment (fluoride therapy, diet review, referral for smoking cessation and stress management)
4. Long term follows up (Regular recall, review restorations and periodontal status)
5. Initial periodontal treatment (Supragingival and subgingival scaling)

Would you refer the patient for all or part of the treatment? If so which part or parts and to which Specialist/s? (Give your reasons.)

Yes, I will refer to a periodontist for refer for surgical debridement and regenerative periodontal surgery. Because the treatment is beyond the scope of a GDP

Dentures

1. Partial denture:

(Acrylic / Cobalt chromium)

2. Complete denture:

(Acrylic, Acrylic dentures free monomer, cobalt chromium)

3. Over-denture:

(Tooth supported; Implant supported)

4. Immediate denture:

(Simple partial dentures, complete immediate denture)

5. Copy denture:

The denture's polished surface is adequate. However, the denture fit is compromised due to alveolar bone resorption and the acrylic teeth are worn altering the occlusal vertical dimension.

Chief complaints:

Loose dentures:

Potential causes:

New denture wearer, immediate denture (alveolar bone remodeling), improper denture design (over extended flanges, under extended flange, insufficient retentive means; inadequate clasps), broken flanges, broken abutment, premature contact (Occlusal problems), flabby ridge, broken denture, dry mouth.

Discomfort or (soreness) underneath the denture:

Generalized

a. Chronic atrophic candidiasis

(Generalized soreness/ underneath the upper denture/ erythematous mucosa/ more than 6 months/ foul taste/ predisposing factors: diabetes, immunodeficiency, corticosteroids, xerostomia, pregnancy, medication induced, high carbohydrate diet, inadequate oral hygiene)

b. Denture allergy

Recent denture wear, discomfort in relation to both lower and upper denture

Discomfort on the side of the face:

a. Increased Occlusal vertical dimension.

(Difficulty in chewing / discomfort on the side of the face / can't keep the denture in her mouth through the evening / Lip incompetency)

b. Fibromyalgia

Angular cheilitis:

Clinical features: reduced OVD, wrinkling of the face, difficulty in chewing, saliva drooling at the corner of the mouth)

Difficulty in chewing:

Contributing factors: increased or decreased OVD, loose denture, new denture wearer

Pain underneath the denture:

Localized, pressure point, occlusal problem.

Gathering information:

Relevant denture questions:

1. Is it a plastic or a metal denture? (Acrylic/ cobalt chromium)
2. How long have you had it for?
3. Does it replace all your teeth or some of them?
4. How did you lose your teeth?
5. Do you have the denture on you?
6. Is it your first set of dentures?

Loose denture

1. Since when have you noticed the looseness?
2. Did you have this denture straight away after your teeth have been removed?
3. What about the teeth that hold the denture in place are they broken?
4. Did the denture break?
5. Does food get loaded underneath your denture (under extended flanges)
6. Does the denture borders impinge on your cheek (over extended flanges) (The denture is fine, but it falls when I speak... over extended)
(The denture is fine, but it falls when I eat... occlusal problem).
7. Do you think that your mouth is dry most of the time?
8. What do you think is the cause of it?

Discomfort/ Soreness underneath the denture:

1. Since when?
2. Is it underneath your upper or lower denture?
3. Is it in a specific area or all over your gums?

Chronic atrophic candidiasis

(Acrylic denture/ underneath the upper denture/ Predisposing factors; Smoking, night-time denture wearer, poor oral and denture hygiene, diabetes, or systemic and topical steroids use)

Denture allergy

(Acrylic denture/ new denture wearer/ underneath the upper and lower denture)

Angular cheilitis:

1. Since when have you had it?
 2. Have you had any treatment for it?
 3. Have you noticed saliva drools from the corners of your mouth?
 4. Can you chew properly with your denture?
- (Wrinkles in the face/ discomfort on the side of the face/ newly constructed denture/ difficulty in chewing)

Discomfort on the side of the side of the face

1. When did the symptoms start?
2. Does it improve or get worse throughout the day?
3. Have you had any treatment for it?

Difficulty chewing:

1. When did the symptoms start?
2. How long have you been wearing this set of dentures?
3. Is your denture loose?
4. Do you have any discomfort on your face?
5. Does it improve or get worse throughout the day?

Denture intolerance

1. When did the symptoms start?
2. Does it improve or get worse throughout the day?
- 3.. How soon do you gag after you put the denture in your mouth? Possible causes:
 - A. Denture faults, gag sensation develops as soon as he inserts the denture
 - New denture with faulty design; overextended post dam, loose denture mouth
 - B. Psychological:
 - Previous history of multiple unsatisfactory dentures wear, gag sensation

Dry mouth:

Do you feel your mouth is dry most of the time?

- Medication: antidepressants, antihypertensive medications, oral hypoglycemic
- Disease: Sjogren's syndrome

Medical History that Significantly Affects Clinical Management

1. Patients requiring IM or IV medication as a component of clinical management.
2. Patients with a history of head/neck radiotherapy.
3. Patients who are significantly immunocompromised or immunosuppressed
4. Patients with a significant bleeding dyscrasia/disorder.
5. Patients with potential drug interaction.

Radiographic investigation:

Not required routinely for denture cases as it's not a diagnostic investigation, unless there is a broken abutment contributing to the denture complaint.

Example Provisional diagnosis

Chronic atrophic candidiasis: Generalized soreness underneath the upper denture-mucosal erythema, soreness commenced more than 6 months- predisposing factors; diabetes, oral steroid, and poor denture hygiene.

Increased occlusal vertical dimension:

Discomfort on the side of the face increases throughout the day-difficulty in chewing-teeth clicking- newly constructed denture.

Special Investigations

- | | |
|--|--|
| 1. Denture examination: | To rule out denture faults. |
| 2. Alveolar ridge examination
exostosis. | To rule out alveolar bone resorption/ bony |
| 3. Candida swab: | To rule out the candida infection. |
| 4. Salivary flow rate: | To rule out xerostomia. |
| 5. Allergy test (patch test): | To rule out denture monomer allergy. |
| 6. Pressure indicating paste: | To rule out pressure point. |
| 10. OVD/ OVR/ FWS: | To rule out increased or decreased OVD |

Example of written treatment plan:

Emergency phase:

1. Explain the cause of denture complaint (Pain, looseness, chewing difficulty)
2. Take an impression for denture repair or the construction of an immediate denture if clinically indicated.
3. Perform chair-sided relining (self-cure acrylic resin: Staining/ appearance) denture if clinically indicated.
4. In case of a broken denture, take an impression with the denture and send it for repair.
5. In case of chronic atrophic candidiasis, emergency treatment includes denture hygiene instruction, candida swab for microbiological testing, application of a tissue conditioner, prescription of antifungal medication.

Stabilization phase:

1. Provision of the repaired denture
2. Explain the long-term treatment options, including fixed and removable options.

Preferred definitive:

Clinicians preferred restoration while taking into consideration patient factors.

Long-term maintenance:

1. Recall every six months unless the patient is a high caries risk or suffers from periodontitis.
2. Reinforce and review oral hygiene.
3. Review restoration, diet, restorations, smoking status, and alcohol intake.

When to refer to a restorative specialist?

1. Prostheses where abutment teeth require extra coronal restoration to improve stability and retention.
2. The use of sectional prostheses
3. Prostheses involving Osseo-integrated implant support.
4. Presence of Oro-facial defects requiring obturation/restoration

Sheet 7 Green Treatment Plan Form Continued

Considering this patient, briefly describe what has led you into choosing this overall care plan and the benefits (likely success, cost, time, etc.) to the patient.

Reasons for

1. Irregular dental attender
2. Poor oral hygiene
3. High carbohydrate diet
4. Stress
5. Smoking
6. Financial constraints
7. History of periodontitis

Benefits

1. Conservative
2. Adequate management GDP and referral
3. Less expensive than implant
4. Last for 7-10 years

Considering this patient are there any potential disadvantages of this treatment (complicated, high risk of failure, short life of restoration, etc.) for the patient.

Disadvantages of provision of cobalt chromium denture

1. Removable protheses
2. Expensive compared to acrylic denture.
3. Required multiple appointments for construction.

Would you provide all or part of the treatment for this patient yourself? If so which part or parts? (Give your reasons)

-Yes, I will do part of the treatment: oral hygiene instruction, provision of cobalt chromium dentures, referral to smoking cessation services, provision of preventive treatment, long term follow up and carrying out periodontal treatment.

Would you refer the patient for all or part of the treatment? If so which part or parts and to which Specialist/s? (Give your reasons)

Yes, I will refer to a restorative specialist for the provision of implant supported prothesis.

Oral medicine

White Lesions

History questions relevant to a white patch complaint

When obtaining history from a patient gather information in a systematic manner
(History of chief complaints - Dental history- Medical history- Social history)

Chief complaint:

1. Can you point exactly to where it is? 2 Since when have you had it?
3. Is it painful?
4. Has it been increasing in size?
5. Do you have any foul taste in your mind?

Dental history:

1. Do you wear a denture? (Chronic atrophic candidiasis /Candida Leukoplakia) If yes:
How often do you clean it?
2. Do you take it out at night?
3. Have you accidentally injured this area before? (Frictional keratosis)
4. Have you changed your toothpaste? (Dentifrice associated slough)
5. Do you grind your teeth? (Linea alba}
6. Have you had any recent dental treatment done?

Medical history:

1. Are you currently under the care of any GP or specialist for any medical conditions?
(Lichen planus/ Bechet syndrome/ Systemic lupus/ Rheumatoid arthritis/ HIV)
2. Are you taking any medication over the counter or prescribed? (Lichenoid reaction)
3. Do you have any skin, joint, eye trouble?
(Lichen planus/ Bechet syndrome/ Systemic lupus/ Rheumatoid arthritis}
4. Do you have any heart, kidney, or lung problem?

Social history:

1. Do you smoke?
2. How many cigarettes? For how long?
3. Do you drink alcohol?
4. How many units do you consume on a weekly basis?
5. Do you chew tobacco?

Differential diagnosis: Hereditary conditions:

1. Leukoedema: normal variation: asymptomatic- symmetrical greyish white or milky surface
- disappears on stretching as it's an intracellular oedema of spinous cells, and no treatment required.
2. White spongy nevus: autosomal dominant trait, no malignant potential, hereditary appears early in life, doesn't disappear on stretching, bilateral, asymptomatic appears before puberty, no treatment required.
3. Follicular keratosis: autosomal dominant, keratotic papular lesions of the skin and infrequently mucosa lesions are numerous and asymptomatic, treatment not required.
4. Hereditary benign intraepithelial dyskeratosis:
Asymptomatic diffuse, saggy white lesions of buccal mucosa as well as other tissues. Associated with eye lesions: white plaques surrounded by inflamed conjunctive rare.

Reactive lesions:

1. White lesions associated with smokeless tobacco.
Asymptomatic white folds surrounding areas where tobacco is held usually found in the labial and buccal vestibule, common, treatment required, discontinuation of use, biopsy as there is a risk of malignant transformation with long-term use.
2. Nicotine stomatitis: Hyperkeratosis in the oral mucosa, appears as a diffusely grey or white slightly elevated papules with a punctate red center. Treatment includes discontinuation of tobacco habits, observation, and examination of all the mucosal sites, there is a little risk of malignant transformation in palate, especially for reverse smokers.
3. Hairy leukoplakia
Diagnosed by biopsy: No treatment required unless cosmetically objectionable Antiviral and retroviral agents are likely to cause the lesion to regress.
4. Hairy tongue
Risk factors: associated with initiating factors: Broad spectrum antibiotics/systemic corticosteroids / hydrogen peroxide/ intense smoking/head and neck therapeutic radiation. Treatment includes elimination of initiating factors and maintaining adequate oral hygiene.
4. Frictional keratosis
This is a white patch due to hyperplastic hyperkeratotic epithelial induced by local trauma example, sharp tooth dentures or cheek biting. It is managed by removal of the source of the friction, which will generally allow complete resolution of the lesion. If this doesn't happen biopsy is indicated. Treatment: Removal of the source of trauma / monitor / biopsy if the lesion persists or aggravates.

5. Leukoplakia

White lesion patch or plaque of the oral mucosa that can't be characterized clinically or pathologically as any other disease.

6. Oral lichen planus

The most common type is reticular form with the characteristic feature of slender white lines (Wickham's striae) radiating from the papules. Patients with reticular lesions are often asymptomatic, but atrophic (erythematous) or erosive (ulcerative) OLP is often associated with a burning sensation and pain.

Mucosal lesions, which are multiple, generally have a symmetrical distribution, particularly on the mucosa of the cheeks, adjacent to molars, and on the mucosa of the tongue, less frequently on the mucosa of the lips (lichenous cheilitis) and on the gums (the atrophic and erosive forms localized on the gums manifest as a desquamative gingivitis).

7. Chronic hyperplastic candidiasis

This is more commonly seen in middle-aged men who are heavy smokers. It typically presents as a white patch on the oral commissural buccal mucosa bilaterally or dorsum of tongue. It has an increased risk of malignant transformation, treatment; biopsy to confirm diagnoses and provision of systemic antifungal treatment.

8. Oral Submucous Fibrosis

Is a potentially malignant disorder, described as "an insidious, chronic disease that affects any part of the oral cavity and sometimes the pharynx. Although occasionally preceded by, or associated with, the formation of vesicles, it is always associated with a juxta epithelial inflammatory reaction followed by fibroelastic change of the lamina propria and epithelial atrophy that leads to stiffness of the oral mucosa and causes trismus and an inability to eat". OSMF is also characterized by reduced movement and depapillation of the tongue, blanching and leathery texture of the oral mucosa, progressive reduction of mouth opening, and shrunken uvula.

Bilateral white lesions:

1. White sponge nevus
2. Hereditary benign intraepithelial dyskeratosis
3. Lichen planus: associated with white reticulations striae and skin lesions
4. Lichenoid drug reaction
5. Linea alba
6. Candidiasis
7. Lupus erythematosus: Delicate radiating striae, biopsy

Solitary white lesion:

1. Frictional keratosis
2. Hairy leukoplakia
3. Lupus erythematosus
4. Mucosal burn: Iatrogenic, medication related
5. Submucous fibrosis
5. Squamous cell carcinoma

ULCERS

Gather information:

History questions relevant to an ulcer complaint

Chief complaint:

1. Is it a single ulcer or multiple?
 2. What's the ulcer size, is it less or more than 1 cm?
 3. Is it the first time you have experienced it, or have you had it before?
 3. When it heals does it leave a scar?
 4. Is it always there or does it come and goes?
 5. How long does it last for?
 6. Does anyone in your family have the same problem?
- Major aphthous ulcer- minor aphthous ulcers- herpetiform ulcerations have genetic predisposition.

Dental history:

1. Have you had any recent dental treatment? (Iatrogenic)
2. Have you accidentally injured the inside of your mouth?
3. Did you recently change your toothpaste or mouth wash? (Sodium lauryl sulphate)

Medical history:

1. Are you currently under the care of any or specialist for any medical problems?
2. Are you taking any medication over the counter or prescribed?
3. Do you have any skin, joint or eye troubles? (Bechet syndrome/SLE)
4. Do you have any tummy problems? (Crohn's disease/ Ulcerative colitis)
5. Are you on any oral contraceptive pills?
6. How about your periods, do you experience heavy bleeding?

Social history:

1. Do you smoke?
2. Have you ever smoked before? (Smoking cessation can predispose to RAS)
3. Are you a vegetarian? (Can be associated with hematinic deficiency)
4. How do you describe your life in terms of stress? (Stress predisposes to RAS)

NB: If the ulcer persists for more than 3 weeks without a valid cause it must be referred to oral and maxillofacial department for biopsy to rule out oral cancer.

Radiographs: Not clinically indicated for soft tissue lesions

Special investigations: Biopsy to confirm the definitive diagnosis

Treatment plan:

-The treatment plan varies according to clinical presentation, predisposing factors collected from the patient history

NB: Refer to the DTP lecture cases.

Example:

Mr. James Black was diagnosed with denture stomatitis, he is asthmatic and uses corticosteroid inhaler. His dental history reveals he is an irregular dental attendee with inadequate oral and denture hygiene.

Immediate/ Emergency treatment:

1. Advise patients inhaler to rinse their mouth with water or brush their teeth immediately after using the corticosteroid inhaler.
2. Follow local measures for management of denture stomatitis which include:
 - Brush the palate daily
 - Clean the dentures thoroughly (by soaking in chlorhexidine mouthwash or sodium hypochlorite for 15 minutes twice daily; note that hypochlorite should only be used for acrylic dentures).
 - Leave their dentures out as often as possible during the treatment period.
3. Prescribe appropriate antifungal medication.

Initial/ Stabilization treatment:

Monitor candida infection to ensure resolution.

Preferred treatment:

Refer to an oral medicine specialist if lesion is nonresponsive to treatment.

Long-term maintenance:

Review oral health.

Tooth Surface Loss

Complaint: Sensitivity &/or unsatisfactory aesthetics

Differential diagnosis:

- A. Dental caries
- B. Periodontal disease
- C. Tooth Surface Loss
- D. Dentinogenesis imperfecta, Amelogenesis imperfecta; generalized condition, congenital Conditions, positive family history.

Gather information:

Relevant history questions to a TSL complaint

1. Can you point exactly to the site of the sensitivity?
2. Since when have you noticed it?
3. Does anyone in your family have the same problem?
4. Have you noticed your teeth are getting shorter? No, continue with the periodontal questions.

Yes, continue with the tooth surface loss questions.

5. Are your teeth getting yellowish in color?

Dental history:

1. What kind of toothpaste do you use?
2. What kind of toothbrush do you use and how many times do you brush your teeth?
3. How do you brush your teeth do you scrub them, or do a rolling technique?
4. Do you have any soreness or difficulties in opening your mouth?
5. Do you grind your teeth?
6. Do you have any crowns or bridges in your mouth?

Medical history:

1. Do you suffer from any medical conditions? Hiatus hernia
2. Are you currently taking any medication that is over the counter or prescribed? (Iron/ Vitamin C)
3. Do you have any tummy trouble?
4. Do you experience heartburn after meals? (GERD)
5. Are you pregnant?
6. Are you conscious about your weight? Have you ever vomited after a meal?
7. Do you have any tummy trouble?

Social history: (SADS)

Alcohol: Red and white wine is highly acidic ph.: 3.4

Diet: fizzy drink, fruit juices, sparkly water Stress: (Attrition)

Occupation: car factory, professional swimmer, wine taster

Notes:

1. What do you wish for the treatment?
2. Is it just sensitivity or are you conscious about the appearance of your teeth?

Provisional diagnosis:

Multifactorial non-carious multifactorial tooth surface loss

(Attrition: bruxism, hypertrophy of the masseter muscles, occlusal tooth wear- erosion: high alcohol intake- high consumption of fizzy drink- abrasion

Radiographs: Not clinically indicated for Tooth Surface Loss cases as it's not a diagnostic investigation.

Special investigations:

- | | |
|-----------------------------------|---|
| 1. Dietary chart: | Diagnostic for external erosion |
| 2. Muscles of mastication: | Confirm muscle pain and hypertrophy associated with para |
| | functional habits |
| 3. VDR / OVD / FWS: | To confirm the amount of tooth surface loss/rule out super eruption |
| 4. Salivary flow rate: | Xerostomia is a risk factor for erosion |
| 5. Scratch test: | Confirms active tooth wear |

Definitive findings:

If the tooth surface loss is more than 2mm and is generalized, referral to a restorative specialist is required.

Scenario (1)

- Localized TSL: Lower anterior teeth with a high upper lip line
- Patient only concerned about sensitivity

Treatment: symptomatic management

Immediate/ Emergency treatment:

1. Patient education regarding TSL
2. Local measures: rectifying the causes
 - A. Fluoride therapy
 - B. Desensitizing agents

Initial/ Stabilization treatment:

1. Monitor tooth surface loss:
(Photographs / scratch test/ BEWE index/ Scratch test/ silicon index)
2. Diet chart

Preferred treatment:

Fluoride varnish and follow up

Long-term maintenance:

1. Recall every 6 months.
2. Review diet, oral hygiene
3. Review the restoration.

Scenario 2

- Localized TSL in relation to upper anterior teeth, increased freeway space,
- No super-eruption, high upper lip line
- Patient concerned about both sensitivity and aesthetics

Immediate/ Emergency treatment:

1. Patient education regarding TSL.
2. Local measures: rectifying the causes.
3. Sensitivity management:
 - a. Fluoride therapy
 - b. Desensitizing agents

Initial/ Stabilization treatment:

1. Monitor tooth surface loss:
(Photographs / scratch test/ BEWE index/ Scratch test/ silicon index)
2. Diet analysis and a dietary chart
3. Interim restoration: Direct or indirect composite resin overlay restoration
4. Night guard construction for bruxism
5. Re-mineralization: Recaldent (CPP-ACP)
5. Explain long-term treatment options.

Direct composite- veneers- resin bonded crown- onlays

Preferred treatment:

Resin bonded all ceramic crown for the restoration of the upper anterior teeth.

Long-term maintenance:

1. Recall every 6 months
2. Review diet, oral hygiene
3. Review the restoration

Scenario 3

Localized TSL in the upper anterior segment, TSL < 2 mm Freeway space is maintained, Super-eruption)

Immediate/ Emergency treatment:

1. Patient education regarding TSL
2. Local measures: rectifying the causes
3. Fluoride: (HIGH FLUORIDE TOOTHPASTE/ MW/ VARNISH)
4. Desensitizing agents

Initial/ Stabilization treatment:

1. Monitor tooth surface loss:
(Photographs / scratch test/ BEWE index/ Scratch test/ silicon index)
2. Diet analysis and a dietary chart
3. Interim restoration: Direct or indirect composite resin overlay restoration
4. Night guard construction for bruxism
5. Re-mineralization: Recaldent (CPP-ACP)
6. Dahl appliance, monitor for 3 months
7. Once FWS is restored and TSL is stabilized explain the long-term treatment options; direct composite Veneer, resin bonded crown or onlay

Preferred treatment:

Resin bonded all ceramic crown for the restoration of the upper anterior teeth

Long-term maintenance:

1. Recall every 6 months
2. Review diet, oral hygiene
3. Review the restoration

Scenario 4

Generalized tooth surface loss 2 mm with maintained freeway space, Super eruption **Immediate/ Emergency treatment:**

1. Patient education regarding TSL
2. Local measures: rectifying the causes
3. Fluoride therapy
4. Desensitizing agents

Initial/ Stabilization treatment:

1. Monitor tooth surface loss:
(Photographs / scratch test/ BEWE index/ Scratch test/ silicon index)
2. Diet analysis and a dietary chart
3. Interim restoration: Direct or indirect composite resin overlay restoration

4. Night guard construction for bruxism
5. Re-mineralization: Recaldent (CPP-ACP)

Preferred treatment:

Refer to a specialist:

(Confirmative / reorganized approach) Anterior: Double veneer technique Posterior teeth: Full coverage restoration

Long-term maintenance:

1. Recall every 6 months
2. Review diet, oral hygiene
3. Review the restoration

Oral presentation:

Explanation and management of TSL

Dentist: Thank you for waiting Mr.... I have the results of your investigations; we will go through it together and I will be explaining to you the treatment options available. How does that sound Mr....?

Patient: Sounds good

Dentist: You have mentioned you are asthmatic, please don't forget to bring your inhaler on the day of the appointment and if there's anything about the treatment that makes you uncomfortable or stressed, please let me know about it. Is that okay? The reason behind your teeth sensitivity is the fact that the outer surface of your teeth, which we refer to as the enamel has worn off exposing the underneath layer (Dentine) which is yellowish and more sensitive to hot and cold food. Is everything clear so far?

Patient: Yes, but why did that happen?

Dentist: There are three reasons why that happened to your teeth, firstly you are consuming high amounts of fizzy drinks and fruit juices which are high in acids. Acids make the teeth soft, so they tend to wear away faster than normal. Secondly, you are grinding on your teeth which are already soft, and all that extra pressure is wearing off the enamel and finally, you have been scudding your teeth harshly to make them whiter. So, all these reasons when combined accelerate tooth wear and contributed to the sensitivity. Is everything clear go far?

Patient: yes, but what are we going to do about it?

Dentist: First, we need to rectify the reasons behind tooth wear, and we will start off by modifying your diet, so it becomes much healthier, which is good for your general wellbeing and the health of your teeth and gums. For that I will give you a dietary chart to fill, you will simply write down the amount and type of food you consume throughout the day and next time we will go through it together to help locate the components of your diet that are high in acids. Is it clear so far?

As for the grinding, try to avoid it as much as possible. For today I will cover your teeth with fluoride to decrease the sensitivity, and I will prescribe you a special form of toothpaste to which is high in fluoride, it considered a medicine and should only be used by yourself.

As for brushing, it's best to use a soft toothbrush and fluoride toothpaste, and next time when you come, we will talk more on how you can keep your gums healthy and what alternative dental treatment options are available to make your teeth whiter.

How does that sound?

Patient: Sounds good, but I am not happy with the appearance of my teeth, what can we do about it?

Dentist: For that during our next appointment we can place white filling on top of your teeth to make them look better and at the same time it acts as a bandage to protect the sensitive layer of the tooth. How does that sound?

Patient: It sounds good

Dentist: Do you have any questions so far?

Patient: No that you

Dentist: In the future when your diet improves and the grinding ceased, we can explore permanent treatment options which includes white fillings, crowns (caps which goes over the teeth covering them completely) to protect it and makes it look nice or onlays (hats) which covers the top surface of the back teeth to protect it and prevent further tooth wear.

Do you wish to know more about them now?

Patient: yes

Dentist: (Explain the difference between crowns, onlays and composite fillings with their advantages, disadvantages, and risks

DTP**Past Paper Cases:****CASE 1:****History taking:****Blue sheet****Chief complaint “I hate my denture”**

It's a lower acrylic partial denture given 6 months ago- teeth were extracted secondary to caries and infection. Loose since insertion- can't eat and unable to speak adequately with the denture. No broken clasp nor broken parts, abutment teeth are adequate.

Second complaint “I have pain on my upper teeth”

The dull pain in upper right back teeth started 3 days ago, pain came up at dinner 3 days ago, has a white filling on it, placed three months ago. Pain on biting and severity of pain is 6/10, no past swelling, no foul taste, no mobile teeth.

Dental history

- Irregular dental attendee - last visit 3 months ago- last appointment included denture review and fluoride application.
- Previous amalgam restorations and extraction without complication. Had a bridge which was removed secondary to infection and got replaced with a chrome cobalt denture 3 years which was broken and replaced with this denture.
- Brushing twice a day with electric toothbrush and Colgate toothpaste, no additional cleaning aids.

Medical history

Asthmatic since childhood on salbutamol inhaler, asthmatic attacks are triggered by stress, cold and weather last attack 6 months ago.

Social history

Single/ Works in M&S

High stress level/ Bruxer with sensitive teeth

Smokes 1-2 cigarettes day/ 30 years

High sugar diet/ Alcohol consumption is 5 units / week

Notes:

- Patient expectation alleviation of pain, preservation of the tooth and provision of a lower co-cr denture

Artifacts given after taking patient history and before completing the provisional diagnosis and investigation forms:

Teeth:

5 4 3 2 1	2 3 4 5 6 7
3 2 1	2 3 4 7

BPE: 2-1-1/2-2-2

Picture of the denture with; Lower acrylic denture has underextended flanges and absence of a clasp on the LL7

Provisional diagnosis:

- Loose lower acrylic partial denture
- Generalized gingivitis
- Chronic apical periodontitis in relation to the upper right posterior teeth

X-ray request:

- IOPA for the upper right posterior teeth to confirm the presence of periapical pathology

Special investigation:

- Bleeding index and plaque index
- Denture examination
- Vitality testing in relation to upper right posterior area
- Percussion test in relation to the upper right posterior area
- Mobility testing in relation to the upper right posterior area
- Palpation test in relation to the upper right posterior area

Definitive finding:

(Provided by the dental nurse after completing the orange forms)

- Generalized tooth surface loss of 1 mm
- Smith and Knight index 1 mm
 - Electric pulp testing reading of the upper right first premolar
 - The IOPA provided was relevant to the case and it showed periapical infection in relation to the upper right 4

Treatment plan

Immediate phase:

- Explain the cause of the loose denture secondary to inadequate design (deficient flanges and missing clasp)
- Take an impression with the denture and send it to the laboratory for denture repair and clasp addition.

- Explain Chronic periapical abscess in relation to the UR4
- Perform pulpectomy for the UR4, ca(oh)2 and RMGI

Stabilization phase:

- Explain generalized gingivitis, OHI, supra and subgingival scaling (PMPR)
- Monitor periodontal condition with bleeding and plaque index
- Explain non-Carious tooth surface loss secondary to attrition
- Prescribe high fluoride toothpaste and apply fluoride varnish twice a year
- Prescribe a hard occlusal splint
- Explain the treatment options for the missing lower teeth: acrylic denture, co-cr denture, implants and bridge
- Give patient treatment option for UR4 either RCT and crown or extraction
- Refer patient to GP for stress management
- Monitor TSL with photos and cast modules, scratch test
- Dietary analysis and advice on reducing sugar consumption
- Refer for smoking cessation and providing advice

Preferred definitive:

- Construction of new low chrome cobalt partial denture
- Root canal treatment for UR4 and PFM crown

Long-term maintenance:

1. Recall every 6 months
2. Review medical history, restorations, and smoking status
3. Reinforce OHI, dietary advice and prevention

