

DENT4219

Lecture 3

The Patient Examination and additional tests

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# What patients think



# Extra-oral

- Head and Neck
- Face
- Smile
- Speech
- Asymmetry
- Swelling
- Midline
- Occlusal/incisal plane
- Facial type/profile



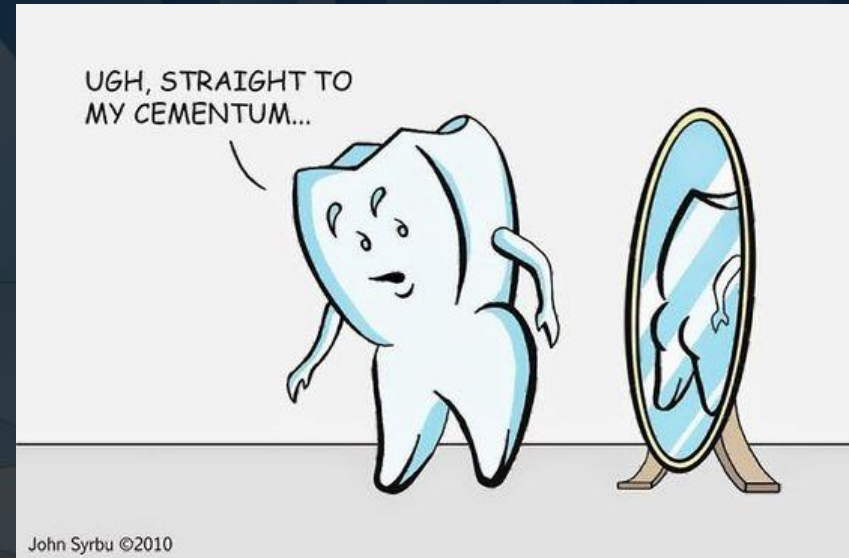
# Soft tissues – look and palpate

- Lips - Vermillion border
- Sulci
- Buccal mucosa
- Palate
- Tongue
- Floor of mouth
- Frenal attachments
- ducts
- saliva



# Oral manifestations

- Early diagnosis prior to systemic manifestations
- Role of dentist is critical
- Dry mouth
  - Medication related, diabetes
- Lichen Planus
- Pemphigus



# Legacy examination....

Form 21

Reason For Attendance

Extra-Oral Examination

Intra-Oral Examination

Radiographs Viewed

Notes

Diagnoses

Resting Saliva		Stimulated Saliva		
Hydration	Viscosity	ph	Quantity	Buffering
>60 Secs ▾	Sticky/frot ▾	5.0-5.8 ▾	<3.5 ML ▾	0-5 Points ▾

Further Procedures

OK Cancel

# Exam and Perio E-form

Exam Saliva Caries Risk

### Examination

Presenting Complaint

E/O Examination

I/O Examination

CPITN

Oral Hygiene

Additional findings / notes

Diagnoses

Med Hist / Clin I Clin II Clin III Clin IV Radiography Report Perio Diag I Perio Diag II Risk Assr

### Relevant Medical History

Presenting complaint

Diabetic:  No  Type I  Type II  Prediabetes  Gestational HbA1c % level

Smoker:  No  Yes, Current  Ex Smoker  
Number a day: Years: Quit date:

Stress:  Yes  No

Other medical conditions

### Relevant Dental History

Signs of Gingival bleeding  Brush Type: Manual  Tooth Paste: Fluoridated   
Bad Breath / Taste  Electric  Non Fluoridated   
Teeth Migration  Interdental Clean: Floss  Other   
Tooth Loss: Caries  Brushes  Mouth Rinse Type   
Perio  Other

### Clinical Extraoral & Intraoral Examination

#### TMJ & PARAFUNCTION

Bruxism  Clicking  Occusal Wear  = <20 Teeth  Pain / Locking  Referral

Occusal Interferences & Fremitus

8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
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#### PROSTHESES

Protheses Created:   
Material Type:   
Patient Satisfied:  Yes  No  
Condition:

#### SOFT TISSUE FINDINGS

Lining Mucosa:   
Palate:   
Cheeks:   
Tongue:   
Lips:   
Floor of Month:   
Other:

# 'Template' from sample case presentation

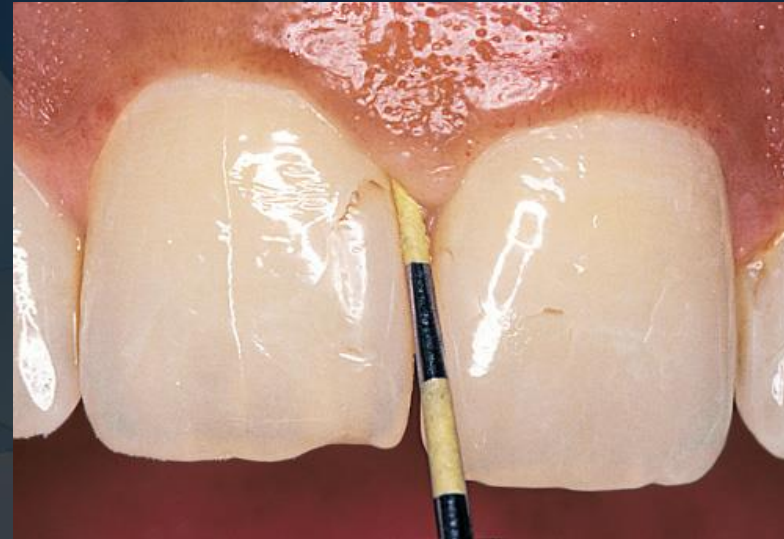
- P/C: Three "snapped off" teeth, and P/- Cr-Co that is "falling out", pt is using Polydent to keep denture in.
- M.Hx: See 011.
- D.Hx:
  - Last dental visit: Temporary filling for broken tooth.
  - Denture hx: Cr-Co P/- made 4yrs ago in OHCWA, loss of tooth 24 which had clasp retaining denture
  - No retention. But pt happy with appearance of clasps. 24 "snapped while brushing teeth" and lost 6mths ago.
  - OH: Brush freq, type- 2x/day electric toothbrush + toothpaste charcoal by Colgate; Floss freq-; Other dental products- no.
  - Diet assessment: Breakfast- banana, oats; lunch-toasted sandwich; dinner- weight-watchers meals; snacks- sugar-free lollies infrequently, potato sticks in one sitting; drinks- water, Pepsi Max 375mL sipped throughout the day everyday, coffee throughout the day
- S.Hx: Works in abakery.
- 
- EOE:
  - Skin and hair- healthy, clear complexion; Facial symmetry- symmetry; Thyroid gland- NAD; TMJ-NAD; Lymph nodes-NAD; Muscles of mastication-NAD; Lips-NAD
- 
- IOE:
  - Labial mucosa (Mx, Md)- ulcer Mx R; Sulci (Mx, Md)- NAD; Frena (Mx, Md)- NAD; Gingiva (Mx, Md)- ; Palate- denture stomatitis, nicotinic stomatitis post hard palate; Oropharynx- NAD; Alveolar ridge- NAD; Buccal mucosa- NAD; Tongue-large fungiform papillae at back of tongue, otherwise NAD; FOM-NAD; Saliva- inadequate, pt reports dry mouth symptoms - recommended Oral 7 or olive oil spray to alleviate symptoms
- 
- Tooth charting:
- No teeth TTP.

# Digital records

- Use 011 and eform
- TOHM odontogram or tooth chart
  - But can't be 'locked'

# Periodontal probing

- CPITN/BPE
  - PPD
  - Recession
  - BOP
  - Furcation involvement
  - Mobility
  - Marginal discrepancy



# Now you can look at the teeth

- Q1→2→3→4
- Dry with triple syringe
- Plaque/stain
- Mirror and sickle probe
- Percuss
- Grooves/fissures
- Caries
- Restorations



# Restorations

- Type
- Margins
- Overhangs
- Discoloured
- Surface texture
- Contour
- Interproximal contacts
- Volume of tooth



# Restorations



- Tooth coloured GIC vs Composite
  - Location on tooth
    - Gingival 1/3 vs incisal.
    - Surface texture.
      - GIC porous
  - If unknown – TC restoration
- Decide satisfactory vs unsatisfactory

# Crowns and bridges



- Margins.
- Contour.
- Colour/shade.
- Contacts.
- Gingival health.

# Crowns and bridges



- Age → patient recall poor.
- Aesthetics.
- Pontics.
- Abutments.
- Connectors.
- Plaque/food.

# Dentures



- Type
- Age
- Teeth replaced
- Retention
- Support
- Stability
- Aesthetics
  - Teeth
  - Soft tissue/lip support
- Occlusion
  - Worn teeth/effectiveness

# Unsatisfactory

- Defective margins/Leakage
- Caries
  - Clinical vs radiograph
- Fractured/worn
- Poor contour
- Aesthetics
  - Stained/discoloured
  - Margins



# Cracks

- Craze lines
- Vertical vs horizontal
- Stained vs not stained.





- Spaces/missing teeth.
- Broken/fractured teeth.
- Wear.
- Cracks
- Rotated/tilted teeth.
- Arch malalignment → supra-eruption/ submergence

# Commonly missed

- Buccal surfaces upper molars, especially in buccally placed teeth
- Lingual surfaces lower molars, tongue & saliva interfere



# Your patient is listening



- Clinical terms.
- Avoid colloquialisms.
  - “It’s p\*\*\*ing blood”
  - “Let’s hook the tooth”
- Help with devising your treatment plan later.
- No judgement.\*
- Educate the patient about the issues you observe.

# Your patient is listening

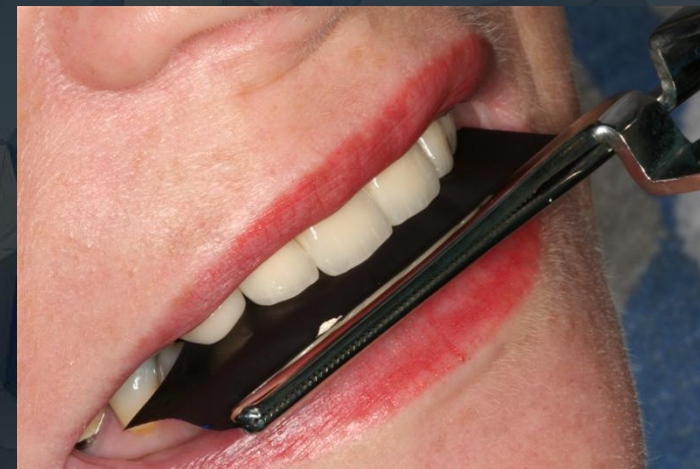
Your patient is aware of the discussions you are having with your tutor..

- <https://www.youtube.com/watch?v=2kLDm0rAAZ8>

# Checking Occlusion

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- Identify static occlusal contacts in maximum intercuspation (MIP).
- Dynamic occlusal contacts in excursive & protrusive movements

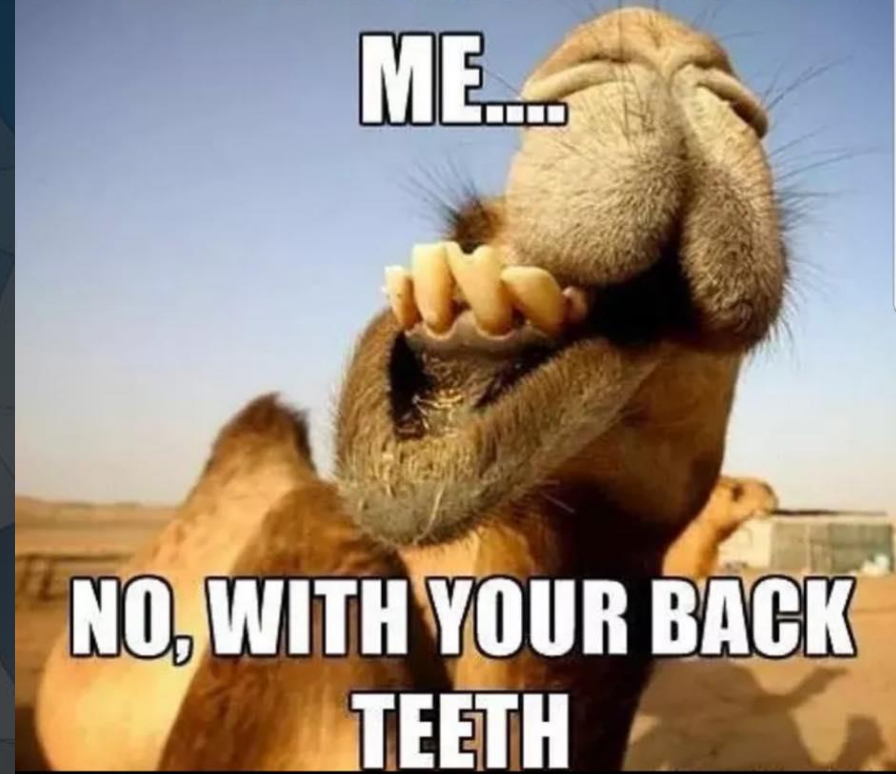


# Checking Occlusion (cont.)



- Check articulating paper marks
- Note location on tooth surface.
  - Affect restoration of
    - Marginal ridges
    - Cuspal inclines/slopes
    - Transverse ridges
    - Grooves/fissures

**BITE DOWN FOR  
ME....**



**NO, WITH YOUR BACK  
TEETH**

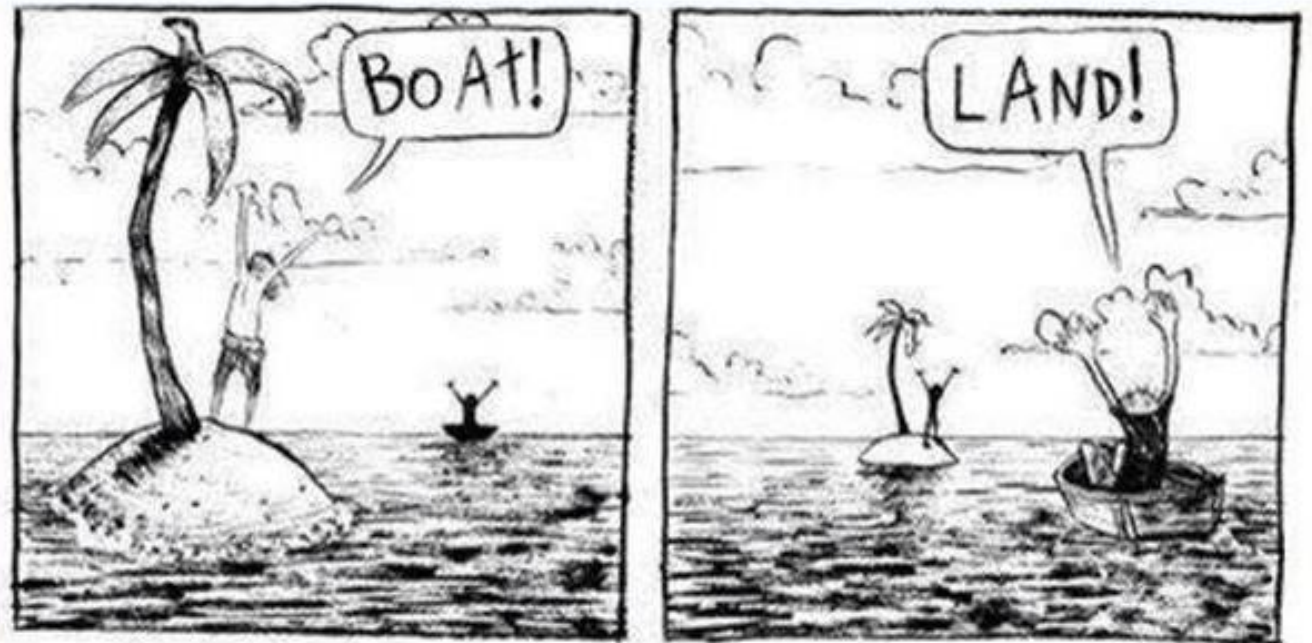
# Examination → information collection



- **Collect clinical info.**
  - Might need more info via Dx tests.
- Avoid formulating diagnosis & tx plan for now.
  - Suspicion ok.
- Briefly discuss findings with ptt.
- Offer some initial thoughts.
- Maintain objectivity.

# Discussing the findings

- Discuss your findings in a very general way.
- Always with reference to patient's perspective.



# A framework for having difficult/challenging conversations

- SPIKES
  - Setting
  - Perspective & Perception
  - Invitation
  - Knowledge
  - Emotion & empathy
  - Strategy and Summary
- Curtin and McConnell 2012
- Risks being formulaic/rigid but helpful to remember if in a tight spot.



- **Setting:** set up and environment, ensure an appropriate venue, time and duration are arranged.
- **Perception:** ascertain the patient's perception or understanding of the problem.
- **Invitation:** Inviting the patient to determine how much they want to know or understand.
- **Knowledge:** Inform the patient about the problem, avoiding clinical jargon that would create a barrier to understanding.
- **Emotion and empathy:** Understanding the emotions of the patient and empathising with them. Allowing time for the information to be processed.
- **Strategy and summary:** Provide a summary of the discussion and a strategy to improve.

# Clinical Examination and TP guideline

**INITIAL CLINICAL EXAMINATION**

A comprehensive oral examination must be done for all patients who are treated at OHCWA. A comprehensive oral examination is done when a patient presents for their first appointment. A detailed history taking (medical and drug history, dental history, social history) and a thorough examination of the extra-oral and intra-oral soft and hard tissues are an integral component of the comprehensive examination. This includes establishing the patient's goal of care. A thorough diagnosis, initial prognosis and treatment plan is formulated with the patient considering the various factors that derive the final plan.

\* If further information is required regarding the medical or drug history, a letter is sent to the patient's medical practitioner or patient is told to return next time with a summary from their medical practitioner of their past medical history and medications (See Appendix J)

**First session:**

- In the first session, students need to complete the initial clinical examination following the template available on TOHM (click **Quick Plans** > Select **First Exam**). By selecting this Quick Plan, a clinical note with all the exams to be completed in the first session will be added to the existing appointment. (See Appendix Z for more information about the clinical examination).

Note: After the tutor approval, clinical notes cannot be changed. Hence, additional information should be added into another clinical note.

- The Comprehensive Examination E-Form can be used to record information about saliva and caries risk.
- After oral hygiene status has been captured during the initial examination, the teeth can then be cleaned with prophyl to allow comprehensive examination (tooth charting) if necessary.
- Patients in general maintenance who need a simple treatment (please check the 'Simple Treatment' classification in page 4) do not require a full workup done (e.g. photos, preliminary impressions) before starting treatment procedures.

**Subsequent sessions before Treatment Planning:**

- The Odontogram should be completed on TOHM (if not done in the first session).
- If the patient has CFTN 3 or 4, the patient will need a full periodontal examination that should be done by completing the Perio E-Form and Periodontal chart. This part of the clinical examination can be done under the supervision of GP tutors or a

periodontist specialist in a session booked via Humanity. (Exemptions can be granted, e.g. the case presents a localised deep pocket).

- Investigations**
  - Testing of pulp sensibility (all teeth should be tested as part of a new patient examination):
    - Cold test (CO2)
    - Electric Pulp test
  - Testing for cracked cusps/teeth, where necessary
    - Bite stick, Tooth Slooth
    - Transillumination
    - Magnification (e.g. loupes)
  - Radiographs: Radiographs should be taken where necessary to aid in diagnosis. Radiographs should be taken in accordance with OHCWA radiographic guidelines.
  - Diagnostic Casts: In certain cases, diagnostic casts would be required for good treatment planning, patient education, referral to specialists or diagnostic wax-ups (e.g. prior to orthodontic treatment and prosthodontic treatment). Mounting models on articulator using facebook registration is recommended for complex prosthetic cases.
  - Saliva Testing
- Specialist Opinions:** Specialist opinions are required for procedures beyond the scope of the operator.
  - Endodontics (\*)
  - Oral Surgery
  - Orthodontics
  - Periodontics
  - Physician's report
  - Prosthodontics
  - Psychological Status including cognitive impairment affecting decision making
  - Laboratory Tests

**Clinical tutors will make the decision whether a specialist opinion/assessment is necessary.** Specialist tutors may provide opinions about a case with or without the patient in the chair but, if necessary, the student may have to book a specialist appointment to assess the patient under the supervision of specialist tutors (Perio, Pros, End).

- Tooth Investigation:** In cases where an unsatisfactory restoration needs to be replaced or an extensive caries lesion is present, students may need to remove the

existing restoration and/or caries lesion to assess the suitability of the tooth for restoration and to determine whether other treatment is also required (e.g. endodontics, periodontal, etc). This can be done before the approval of the TP but the final restoration should only be done after the final TP has been approved (exemption for simple treatments can be applied, see below). In the meantime, the tooth must be temporised or extracted if deemed to be unsuitable for restoration.

- Radiographs:** All carious lesions detected at clinical examination, should be shown on the base chart odontogram and those detected radiographically must be also noted in the comments section of the radiograph. It is an obligation that other tissues captured on the radiograph are recorded and pathology reported to the patient even if it is not the area of concern. A periapical radiograph must be taken for any tooth that does not respond to pulp sensibility testing.

Accurate record keeping and informed consent are the legal components of any care. The Australian Schedule of Dental Services and Glossary (Tenth Edition, 2013) outlined in Appendix 3 details the various item codes that are available for use in clinical examination sessions.

**(\*) Clinical Assessment of Endodontic cases**

Radiographs in conjunction with the clinical examination (and considering the diagnosis) should be used to evaluate the complexity of treatment and who should do the treatment (e.g. student or specialist) and/or who should supervise if a student is going to do the treatment (GP or Endo specialist Tutor).

The following should **ALWAYS** be referred for specialist tutor opinion and supervision - teeth that have:

- Uncertain/unclear diagnosis
- Complex, conflicting, or unclear symptoms and signs
- Uncertain prognosis
- Anatomy that is unusual, complicated, or unclear on radiographs
- Extra roots or extra canals
- Canals that appear to be calcified (on radiographic examination)
- Curved canals (beyond about 10-15°)
- Root canals that appear to divide, deviate, join, etc. throughout the root
- Had previous root canal treatment (both for evaluation and for those that need endodontic re-treatment (ALL cases))
- A post that needs removal
- Any form of resorption
- Root fracture
- A history of Trauma
- A history of previous periapical surgery

# Examination Duration

- 60 minutes
  - 10-15 minutes history
  - 20-30 minutes examine patient
  - 10-15 minutes discuss with patient
  - 5 minutes write notes!
- Further diagnostic steps
- Don't look at the clock!

# Additional diagnostic steps

- Historically described as “special tests”
- Beyond clinical examination
  - Radiographs
  - Pulp tests
  - Periodontal charting
  - Articulated study models
  - Others: dietary analysis, plaque score, saliva analysis.
  - Photographs