Extraoral and Intraoral Examination

Oral Surgery
Third Year
College of Dentistry
University of Anbar

Dr. Elham H. Abdulkareem

History Taking and Clinical Examination of Patients on a Dental Clinic

History taking: This should include the following:

- Demographic data
- Presenting complaint (the presenting problem, ideally recorded in the patient's own words)
- History of presenting complaint (a detailed history of the complaint and the symptoms associated with it recorded)
- Dental history
- Medical history (current and past)
- Social and family history

Obtaining information

The initial step in any patient contact is to confirm their identity. In addition, the clinician should introduce themselves, in order that the patient knows to whom they are talking, which may help to lessen the patient's anxiety. It is also important to ensure that the person with the presenting problem is allowed to speak for themselves.

Demographic data

Demographic data are necessary to identify the correct patient and corresponding clinical record. The minimum data required include the following:

- Title (Mr, Mrs, Ms, Miss, etc.)
- Name (both forename and surname)
- Marital status
- Date of birth
- Sex
- Occupation
- Current address and contact telephone numbers

Name and contact details of the patient's general medical/dental practitioner. The data obtained must be recorded accurately. Some conditions are correlated with

age, sex, ethnicity or occupation, and demographic data may help to diagnose a presenting condition more easily, for example a heavy metal worker with dark blue staining at the gingival margins.

Preparation for Examination

- Review the patient's histories
- Examine radiographs
- Patient understanding
- Cultural sensitivity

History taking

History taking is a skill that requires practice. Patients respond in different ways to similar lines of questioning, and it may be necessary to modify questioning style or to ask the same question several times but in different ways in order to optimise the information obtained.

Components of the history

Presenting complaint and history of presenting complaint

Patients attending a DC often present complaining of pain. In order to reach a reliable differential diagnosis or diagnosis, it is important to obtain a clear description of the pain. Where possible, use open questions and avoid prompting the patient; for example, 'What does the pain feel like?' is preferable to 'Is the pain sharp or dull?' which restricts and influences the patient response. Once a description of the pain obtained, more specific questions can be used to develop the history further. Basic questions that should be asked are summarised below:

- Site of pain (ask the patient to point with one finger to the place of maximum pain).
- Ask the patient if the pain radiates anywhere.
- Get the patient to describe the pain, e.g. dull ache, sharp, throbbing or shooting.
- Is the pain intermittent or constant? How frequent is it?
- Onset – gradual or sudden?
- Is there anything that makes the pain better or worse?
- What treatments has the patient tried and were they effective?
- Does the pain keep the patient awake at night or wake them from sleep?

- Is the pain affected or initiated by hot or cold stimuli?
- Are there any associated symptoms such as swelling, numbness or pain?

Past and current medical history

The past and current medical history is a description of previous and current medical issues. A systematic approach to data collection is required. It is important to go through the collected information carefully with the patient in order to identify any areas of confusion. The medical history should be carefully recorded.

- Cardiovascular: Myocardial infarction, angina, hypertension
- Respiratory: Asthma, chronic obstructive pulmonary disease.
- Gastrointestinal: Peptic ulceration,
- Hepatic: hepatitis
- Haematological: Blood borne viruses, e.g. hepatitis A/B/C, HIV, clotting disorders, leukaemia, anaemia
- Neurological: Epilepsy, cerebrovascular disease, psychological/psychiatric disorders
- Musculoskeletal: Muscular dystrophy, joint replacements
- Genitourinary and renal: Genitourinary infection, renal disease or failure, renal transplant, etc.
- Drug history: Prescribed, non-prescribed,
- Allergy: Drugs, latex.
- Past hospitalisation: Medical/surgical
- Social history: Occupation
- Smoking habits: duration, frequency and type
- Alcohol consumption: Quantity
- Home and family circumstances

The degree of severity of a medical problem can be judged by asking further questions. For example, in patients with epilepsy, the frequency and severity of the problem should be ascertained using key questions such as: What medications do you take? What symptoms do you get prior to a seizure? When was your last seizure? Have you been treated in an accident and emergency unit or admitted to a hospital following a seizure? If the clinician has this information, a simple risk assessment can be made, and in the event of a seizure, emergency care is facilitated and a specialist's help more easily obtained if required.

A thorough medical history may uncover conditions that are relevant to diagnosis of the presenting complaint, for example oral ulceration in a patient taking the potassium channel activator, or to the subsequent management of the patient, such as alcoholic cirrhosis in a patient requiring extractions. Clearly, patients taking the anticoagulant warfarin require special consideration. It is important to remember that warfarin interacts with patients who have a high alcohol intake may also have problems with coagulation. In such cases, if surgical treatment is considered, blood should be taken for a full blood count (principally to check the platelet count) and a clotting screen.

Patient examination

The examination should start from the moment the patient walks into the dental clinic. The clinician should remember to examine both the normal and affected sides. The examination is divided into an extra-oral examination, followed by intra-oral examination.

Extra-oral examination

The extra-oral examination starts with a visual examination of the head and neck with particular note made of swellings or deformity, asymmetry of the face, abnormal colour or scars on the skin or lips. A clinical photograph is a useful way of recording information.

Sequence of examination

1. Face, Lips, Skin and Eyes
2. Lymph Nodes: a. Occipital b. Auricular c. Superficial Cervical d. Deep Cervical e. Submental f. Submandibular
3. Glands: a. Parotid b. Submandibular c. Sublingual d. Thyroid (Figures 3 and 4)
4. Larynx
5. Hyoid bone
6. Muscles: a. Masseter b. Temporalis c. Sternocleidomastoid d. Mylohyoid

7. Temporomandibular Joint: a. Right b. Left: Figure 2

Inspection:

- Any swelling over the joint region
- Symmetry and extent of movement
- Clicking sound

Palpation: Pre-auricular and intra-auricular

- Extent and symmetry of movement
- Temperature of the overlying skin
- Tenderness Crepitus

Auscultation: Clicking

Inspection: It does detect any unusual changes in the oral cavities, as it's based on vision.
❖ Color changes "pigmentation or caries"
❖ Tooth Fracture and different Lesions.

Palpation: This depends on our sense of touch to feel any abnormalities and to differentiate it from the normal. The types are Bimanual, Bilateral
We can detect the different consistency, temperature, Mobility, in duration.

Percussion: We examine this by striking an object on the tooth and evaluate the produced sound. This technique also helps in detection of tooth mobility.

Probing: This is important technique as it can detect caries and any periodontal diseases.

Auscultation: listen to the normal sounds produced by the Patient
❖ Wheezing: Respiratory disease
❖ TMJ clicking: TMJ disorder

Odor: smelling the patient oral odor can help in the differential diagnosis. Such as Acetone odor= Uncontrolled DM

Intraoral examination

Lips & intraoral mucosa
- View/palpate lips, labial and buccal mucosa, and mucobuccal folds.
- Examine and palpate the tongue
- Mucosa of the floor of the mouth.
- Hard and soft palates, tonsillar areas, and pharynx
- Use a mirror

Oropharynx, nasopharynx, and larynx.
Note: amount and consistency of the saliva and evidence of dry mouth (xerostomia).

Figure 1: Bimanual Palpation. A: Examination of the buccal mucosa by simultaneous palpation on extraorally and intraorally. B: Examination of the floor of the mouth by simultaneous palpation with fingers of each hand in apposition.

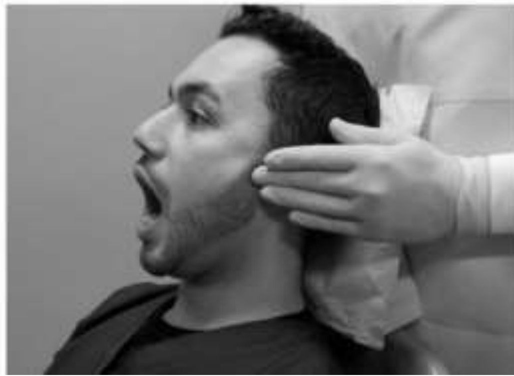

Figure 2: Assessment of the Temporomandibular Joint.

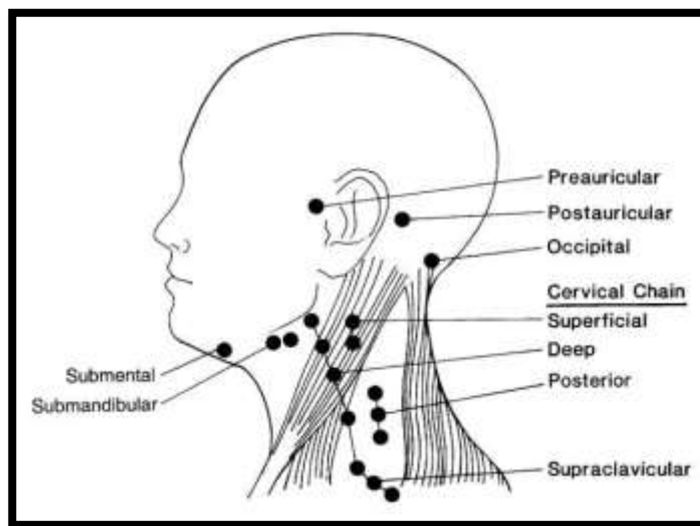

Figure 3: Lymph Nodes.

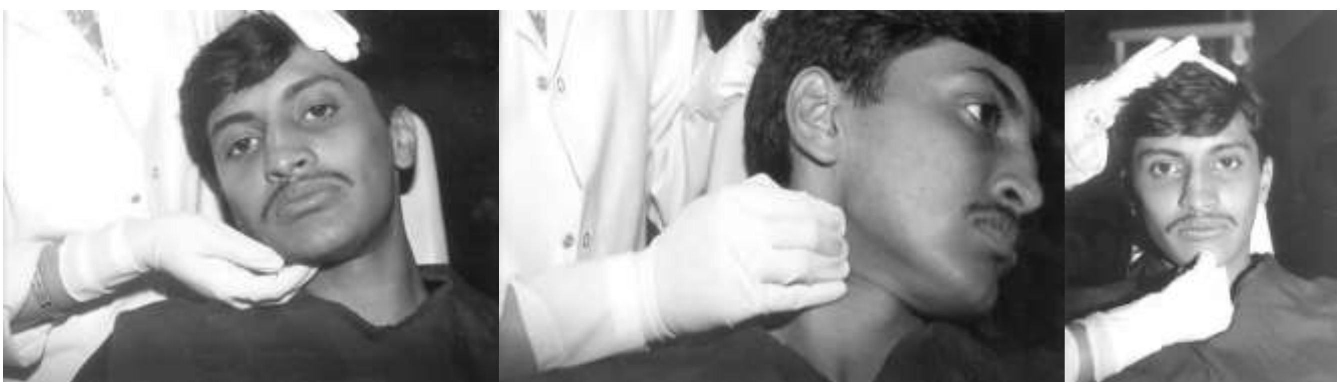

Figure 4: Lymph Node examination.

References:
1. https://www.DrmanaliR/oral-diagnostic-process-part-2
2. https://www. indiandentalacademy/extra-oral-examination
3. https://www.JaceySheckler/extraoral-and-intraoral-examination
4. https://www.slideshare.net/ozident/intra-oral-examination