

# Case Sheet

There is no standard format for the case sheet (patient's notes), case sheets differs in their information details between departments, dental schools and surgical textbooks. Oral diagnosis is the art of using the scientific knowledge to identify the oral diseases and also to distinguish on disease from another.

The diagnostic process classically involves the following steps:-

- 1- History taking.
- 2- Clinical examination.
- 3- Investigation.
- 4- Definitive diagnosis and treatment plan.

All case sheets, however, should contain the following information:

## **Patients biographic data:**

Knowledge of patient's name, age, gender and address and occupation are important for proper dentist-patient communication. In addition, it provides documentation reference for every treated case in the dental clinic.

## **Chief Complaint:**

It what make the patient seek treatment in our hospital. It usually registered in patient's own words . for example:

dental pain on eating on right upper side, swelling at the right cheek, retained root to be extracted and replaced, for orthodontic purpose or for prosthodontic reasons. If the patient complaining of several symptoms in such case they should be listed, but with the major complaint first.

## **History of Present Illness:**

It is the story of the patient problem (story of the chief complaint) with special emphasis on pain characteristics, previous treatments and time sequence. This part of the story must be gone into complete details and let the patient to tell the story in his fashion.

If the patient came complaining of pain, we need to know when the pain did start; pain severity (mild, moderate or severe); pain nature (dull, throbbing, continuous or intermittent); duration, interference with sleep, spontaneous or on stimulation, stimulating factors, etc....

If the patient came complaining from swelling, we need to know when the swelling was noticed; associated pain or discomfort. It is important to

know, if the patient had used or currently under analgesics to relief pain or antibiotics for the swelling.

In general we need to start by asking the patient :

1- Duration (records the length of the complaint).or duration records the length of the pain.

2- Onset (date of onset, manner of onset).

3- Characteristics, and this include:

a) Nature of pain e.g. (continuous. intermittent, stabbing or others).

the pain may be described as sharp, severe, dull, throbbing, excruciating, lancinating, mild, continuous, intermittent, all these objectives can be applied to the pain in different pathological process which may help you in the diagnosis. (In acute pulpitis, the pain is sharp and severe, in acute dental abscess the pain is dull, throbbing and severe and the tooth tender, in acute maxillary sinusitis the pain is dull throbbing and continuous).

b) Severity of pain e.g. ( mild, moderate, severe, very severe).

c) Location or site of the pain: The patient should be asked to point to the place where the pain is felt, using his finger.

d) Radiation of pain (feeling of pain in site other than that of causative lesion, called referred pain). If the pain radiates, the patient should be asked to demonstrate its course with the tip or his finger. e.g. pain of pericoronitis radiates to the ear.

I) Aggravating- factors. (e.g. hot, cold, sweet).

Any factors which precipitate the pain , pulpal pain often precipitated by thermal and osmotic stimuli (hot, cold, sweet ). periodontal pain often precipitated by biting and chewing.

g) Relieving factors.

4-Therapy:

a) Type of therapy and dose .

b) Effect of therapy.

c) Date of therapy.

5- Other information.

The presence of other symptoms like the patient that says that the pain started for two days, then a swelling appeared alter

that or discharging sinus appeared or a discharge of pus, or pain, swelling then parasthesia of the lower lip ...etc.

### **Medical History**

It is important to know the patient's current and past medical problems. Patient's medical history, , interferes with dental treatment planning. General medical history usually starts with general question .

#### **Are you in a good health?**

Ask if the patient has any medical diseases like hypertension, diabetes mellitus, any heart diseases or problem, previous radio- or chemotherapy or any medication, if there is allergy to penicillin or any other drug, jaundice and thyrotoxicosis , pregnancy and others.

Most of Iraqi patients are not accurate in their answers regarding medical history, so it is important to ask in details to be able to reach right information . The patient's medical history includes review, the past and the present illness or diseases because:

- 1- The information of medical history may aid in the diagnosis of various conditions appearing as an oral manifestations that are related to specific systemic diseases (e.g. AIDS, leukemia).
- 2- The presence of many diseases may lead or need modification for the treatment plan, and affect the manner in which therapy is provided.
- 3- Drugs used in treatment of some systemic diseases can also have effects on the mouth (have oral manifestations), or dictate some modifications to the dental or surgical treatment (e.g. anticoagulant drugs, chemotherapy).

#### **The past medical history includes:**

- 1- Previous serious illness or diseases.
- 2- Childhood diseases.
- 3- Hospitalization.
- 4- Previous surgical operations.
- 5- Injuries to the head and neck.
- 6- Allergy to drugs or general allergy.

**Past Dental History:**

Knowledge about the last dental visit might help the dentist to diagnose the current problem . In addition it helps the dentist to identify potential risks of treatment based on previous complications encountered during last dental visit .

The past dental history includes:

- 1- The frequency of previous visits (e.g. previous extractions or oral surgical procedures).
- 2.Any previous complications (e.g. excessive bleeding or fainting).

**Habits:**

Smoker patient might be under risk of developing precancerous and potentially cancerous lesions. There is no direct connection between alcoholism and local anesthetic action. However, alcoholic patient might be under the risk of liver cirrhosis with potential complications related to some dental procedures .

An example answer for such question would be: heavy smoker (more than 20 cigarettes daily); heavy or occasional alcohol intake .

**Family history:**

Patient might not provide history for certain medical problem, because he is unaware of or undiagnosed. Knowledge of family history enables the clinician to identify such medical problems, due to inheritance related factors. Common examples are diabetes, hypertension and ischemic heart diseases .

**Clinical Examination**

Clinical examination divided into:

- 1-Extra-oral examination
- 2-Intra-oral examination.

In Clinical practice , examination of patient involves FOUR ROUTINE PROCEDURES

- I. INSPECTION.
- 2.PALPATION.
- 3.PERCUSSION.
- 4:AUSCULTATION.

## **INSPECTION (VISUAL) :**

At the start of every examination you must begin by looking at patient as a whole before looking at the region in question for signs that may provide clue for a diagnosis, any changes in the color, or asymmetry of the face, any growth, ulceration, scar, defect, loss of tissue should be inspected by your eye

## **PALPATION**

Use your finger tips to feel for tender spots, lump, fluctuant swelling, & mobile teeth . Palpation gives information about texture, dimension, consistency, temperature & functional events

**PROBING:-** Is the palpation with an instrument & is one of the most important diagnostic techniques used in dentistry. The teeth are probed for caries with the dental probe & periodontal probe is used to measure the periodontal sulcus depth..

## **PERCUSSION**

Is the technique of striking the tissue with fingers or an instrument (e.g. Handle of the mirror ). The examiner listen to the resulting sounds & observes the response of the patient. Extra orally, percussion is often used to detect tenderness in the frontal and maxillary sinuses by tapping the finger tips against a finger placed over the sinuses . Intra orally, percussion is used to evaluate the teeth by tapping the teeth with mirror handle, this technique may induce pain in the area of inflammation from periodontal diseases (lateral percussion) or in a periapical area (vertical percussion).

## **AUSCULTATION**

Is the act or process of listening to sounds within the body. e.g. Auscultation to the clicking in the temporo-mandibular joint (T.M.J.) by the use of stethoscope Auscultation technique is rarely used in dentistry.

### **1-Extra-oral examination**

In extra oral examination we consider the general evaluation e.g. observation the patient posture, gait, facial form, nutrition status, speech , body movement, skin.

These include examination of:

- Examination of the temporo-mandibular Joint.
- Lymph nodes.
- Salivary glands.
- Bones of the skull.
- Sinuses (e.g. Maxillary Sinus)
- Ear, eye & peri-oral tissues.
- Neck examined for enlarged thyroid gland , lymph nodes of the neck, & swelling.

Color of sclera and conjunctiva: color of sclera might provide an important clue for serious liver problems. The normal color of sclera is white. If the sclera is yellowish, this could indicate jaundice, which is an important sign of liver diseases like hepatitis B or C infected patient or in carrier state.

Facial swelling or asymmetry could indicate a spread of dental infection to the surrounding fascial spaces, which is the most common cause of facial swelling, or could indicate tissue overgrowth of benign or malignant nature .

In case of suspicion of dental infection spread or malignant tumor metastasis to the adjacent lymph node, lymph node examination is performed .

A lymph node is an oval shape structure distributed widely throughout the body and linked by lymphatic vessels. lymph nodes are important for the proper functioning of the immune system ,acting as filters for foreign particles( dead tissues, microorganisms ,cancer cells).

Sub-mental, sub-mandibular , Peri-auricular, parotid, upper jugular and supra-clavicular lymph nodes are examples cervicofacial lymph nodes. Normal lymph nodes are not palpable, infection lead to enlargement of lymph nodes.

Lymphadenopathy means enlargement of lymph nodes which lead to changing in consistency and size .

*The causes of lymphadenitis are:*

- infections
- idiopathic
- autoimmune diseases.
- cancer

Temporo-mandibular joint (TMJ) examination is performed when history of pain might indicate TMJ related problem . TMJ may be the source of orofacial pain, we need to examine the TMJ to avoid the overlapping in the diagnosis of oro-facial and dental pain. TMJ should be examined for:

- pain on palpation, opening and closing.
- Clicking.
- crepitation.
- deviation of occlusion from the mid-line.

## **2-Intra -oral Examination**

Why we do intra-oral examination ?

The objectives are:

1. To detect soft tissue abnormalities.
- 2.To evaluate the status of teeth and other hard tissues.

Intraoral examination starts as a general overall examination to oral cavity. This will give an idea about the patient's oral hygiene. Oral mucosa and tongue (especially ventral surface of the tongue and floor of the mouth) examination is important for middle age or elderly patients with history of heavy smoking .

After completing the general examination of the oral cavity, the clinician focuses on the tooth or area under suspicion to identify further problems through visual inspection, probing and percussion .

Probing should be performed with caution as it might lead to accidental pulp exposure.

### **Investigations:**

Sometimes investigations, such as radiographs or histopathological examination, might be requested to confirm the diagnosis or provide necessary information for proper treatment planning. Other investigations are blood sugar tests for diabetic patients; hematological tests for various hematological disorders; serological or blood biochemistry tests to assess the patient medical condition .

### **VITALITY TEST:**

- 1.Hot application (e.g. Hot instrument)
- 2.Cold application (e.g. Ethyl Chloride Application )
3. Electrical pulp Tester. Used to check the vitality or response of teeth.

**Diagnosis:**

Successful treatment needs correct diagnosis. diagnosis is what history taking and clinical examination were performed for. 70% of the medical conditions can be diagnosed by history taking alone. It is not unusual to fail in reaching diagnosis. In such cases providing a list of possible differential diagnosis will help. It is important to test your diagnosis/differential diagnosis against the case history and examination's finding.

An example answer for diagnosis would be: acute pulpitis, chronic pulpitis, non vital tooth, chronic periapical lesion, periapical abscess .