Diagnosis in oral surgery

CASE HISTORY

Department of Oral & Maxillofacial Surgery

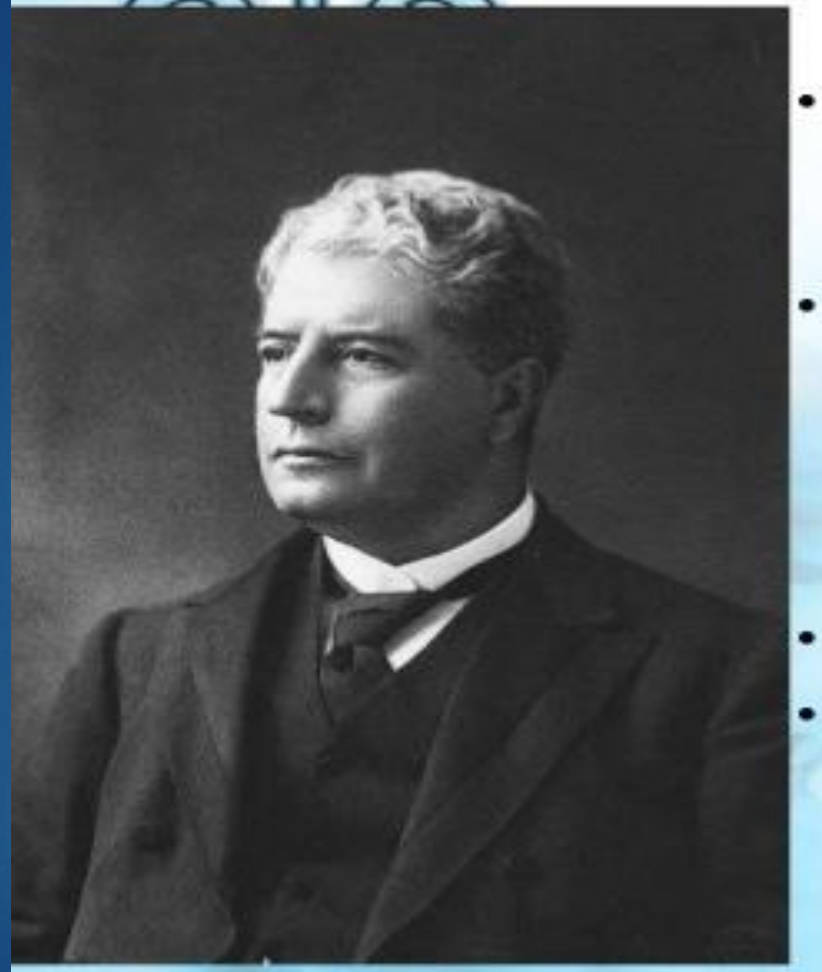
A- Basic information

1-Subject title	**Oral Surgery**	
2-Number of credits	Theory:2	Clinical:2
3-Number of contact hours	Theory:1 h/wk.	Laboratory:2 h/wk.
4-Subject time	Third Year	

No.	Title of lectures	Hours
1	Diagnosis in oral surgery	1
2	Diagnosis in oral surgery	1
3	Extraction of teeth	1
4	Extraction of teeth	1
5	Contraindications of Exodontia	1
6	Contraindications of Exodontia	1
7	General arrangement for extraction	1
8	Dental forceps	1
9	Dental forceps	1
10	Elevators	1
11	Elevators	1
12	Technique of forceps extraction	1
13	Technique of forceps extraction	1
14	Complications of teeth extraction	1
15	Complications of teeth extraction	1
16	Complications of teeth extraction	1
17	Basic surgical instruments	1
18	Basic surgical instruments	1
19	Basic surgical instruments	1
20	Local anesthesia: Introduction	1
21	Pharmacology of local anesthesia	1
22	Pharmacology of local anesthesia	1
23	Surgical anatomy in local anesthesia	1
24	Instruments of local anesthesia	1
25	Techniques of local anesthesia	1
26	Techniques of local anesthesia	1
27	Techniques of local anesthesia	1
28	Complications of local anesthesia	1
29	Complications of local anesthesia	1
30	Complications of local anesthesia	1
Total		30

Father of oral surgery

James Edmund Garretson



- **James Edmund Garretson** (1829-1895) MB DDS was a professor of Dental college in Philadelphia.
- With his work a treatise on ***The Diseases And Surgery Of Mouth Jaws And Associated Parts*** first published in 1869, helped to establish Oral & Maxillofacial surgery in U.S
- He is known as the ***father of oral surgery***
- He established oral surgery as a branch of medicine and dentistry though distinct from both

DEFINITION OF OMFS

- "oral and maxillofacial surgery is the specialty of dentistry that includes the diagnosis and surgical and adjunctive treatment of disease, injuries and defect, including both the functional and esthetic aspects of hard and soft tissues of oral and maxillofacial region"

Peterson

SCOPES.....

- Dentoalveolar surgery
- Diagnosis & treatment of benign pathology , cyst , tumours , head & neck oncology.
- Congenital craniofacial malformations
- Soft and hard tissue trauma of Oral&maxillofacial region.
- Chronic facial pain disorders.
- TMJ disorders
- Cosmetic surgery limited to head & neck
- IMPLANTS

Diagnosis in oral surgery

Oral diagnosis is the art of using the scientific knowledge to identify the oral diseases and also to distinguish one disease from another.

The diagnostic process involves the following steps:

1 History taking.

2 Clinical examination.

3 Investigations.

4 Provisional diagnosis(Suggested diagnosis).

5 Definitive diagnosis and treatment plan.

In oral surgery practice, clinician is often faced with the diagnosis of the following conditions:

- 1 Dental and facial pain.
- 2 Swelling(Lump, Mass).
- 3 Ulcers
- 4 Injuries(dental) facial bones
- 5 TMJ problems
- 6 Medically compromised patient
- 7 Facial deformity.

History taking

- Is the most important single step in the diagnosis of medical or surgical conditions.
- It should be systematic using special set or sequences . Listen to the patient s story.
- Important terms:
- **Signs:** Means (objective things) an abnormal presentation, detectable by the clinician e.g. swelling, ulcer. Has no relation with the patient's feelings(mind). You see it.
- **Symptoms**: Means a(subjective problem that a patient describes e.g. pain, paresthesia .Related to patients feelings(mind).

Objectives of taking history:

1- To provide the dentist with information that may be necessary for making diagnosis.

2- To establish a good or positive professional relationship with the patient which affect coperation and confidence.

3- To provide the dentist with information concerning patient's past and present medical, dental and personal history.

4- To provide information about patient's systemic health which may greatly affect the treatment plan and prognosis and diseases that could be transmitted to the dentist, his staff or other patients.

5- It serves as a legal document.

Components of the patient history:

The case history may include commonly the following sections or components:

- 1- Biographic data (personal history).
- 2- Chief complaint (C.C.).
- 3- History of the chief complaint (history of the present illness) (H.P.I.).
- 4- Past dental history.
- 5- Medical history and systems review.
- 6- Family history.

How you take history:

- During history taking the dentist should encourage his patient to describe his symptoms in his own words, interrupting his story only to explain a point or stop a useless talk.
- A clear and concise summary of patient's complaints should be recorded in the case sheet. The symptoms should be recorded or being listed in order of their importance (e.g. pain, swelling, bleeding). During taking the history give your patient your whole attention and never take shortcuts.
- You have to avoid speed in taking the history, so you have to give the patient a suitable time to give all informations, because hurry in taking history may lead to many pitfalls that affect the accuracy or completeness.

- You have to avoid the leading questions (e.g. does the pain comes on taking hot or cold?) it's better to ask him what is or what are the things that brings pain to you? Or anything hurts you?
- During taking history don't depend on the patient diagnosis or the diagnosis of a previous doctor, so you have to ask the patient to describe his complaining only to establish your diagnosis process.

History taking :

- The art of taking an accurate case history is probably the most important single step in the diagnosis of medical or surgical condition .History taking should be systematic , using special set or sequences . During history taking the clinician or the dental surgeon listen to the patient's story or talks and list the symptoms in order of severity or importance . By patient's words .

Biographic data:

- Includes the full name of the patient, age, sex, address, telephone number and occupation. These information may aid or contribute to the diagnosis since some medical problems have a tendency to occur in a particular age group, sex or race. The patient occupation may be associated with a particular disease or may influence the type of therapy.

Chief complaints (C.C.):

The chief complaint is usually **the reason for the patient's visit**.

The chief complaint(s) is best stated in the patient's own words in a brief summary of the problems (e.g. pain, swelling, ulcer, paresthesia, numbness, clicking, halitosis, bleeding, trismus).

If the patient is complaining of several symptoms in which case they should all be listed, but with the major complaint first.

History of the present illness (H.P.I.):

- This part of the story must be gone into complete details and get the patient to tell the story in his fashion, or in patient's own words but at times medical terminology is used, interrupting his story only to clarify a point or stop a lengthy talk.
- Never ask the patient leading questions and you have to see if the patient in a condition able to give you a history which is reliable and his statement can be relied upon.

It's best to start by asking the patient about:

- 1- Duration (record the length of the complaint).
- 2- Onset (date of onset, manner of onset).
- 3- Precipitating/predisposing factors. (e.g. hot, cold, sweet).
- 4- Characteristic, and this includes:
- a) Nature (e.g. continuous, intermittent, stabbing).
- b) Severity (e.g. mild, severe, very severe).
- c) Location.
- d) Radiation (feeling of pain in a site other than that of the causative lesion, called referred pain).
- e) Temporal features.
- f) Aggravating factors.
- g) Relieving factors.
- h) Associated constitutional symptoms and signs.
- 5- Course and progress.
- 6- Therapy: a) Type of therapy and dose. b) Provider. c) Effect of therapy. d) Date of therapy.
- 7- Other information.

So if a patient comes with a chief complaint (pain) very detailed history of the pain should be taken and particular attention paid to the following points:

- a) The duration of pain: Whether any incident which might have played some part in the etiology of the pain precede its onset (e.g. a blow on the jaw, dental treatment), duration record the length of the pain.
- b) Site of the pain: The patient should be asked to point to the place where the pain is felt, using his finger.
- c) Any radiation of the pain: If the pain radiates, the patient should he asked to demonstrate its course with the tip of his finger. On other occasions pain maybe felt in a site other than of the causative lesion or remote from the diseased area and this type is called "referred pain", e.g. pain of pericoronitis radiates to the ear.

- d) The precise characteristic of the pain: the pain maybe 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 is tender, in acute maxillary sinusitis, the pain is dull, throbbing and continuous).
- E)Timing of pain: Some pains are characteristically worse at particular time in the day e.g. pulpal pain often awakens the patient at night and tends to keep him awake, in acute periodontitis the pain is worse at meal time.

f) Any factors which precipitate the pain: Pulpal pain is often precipitated by thermal and osmotic stimuli (hot, cold, sweet). Periodontal pain often precipitated by biting and chewing.

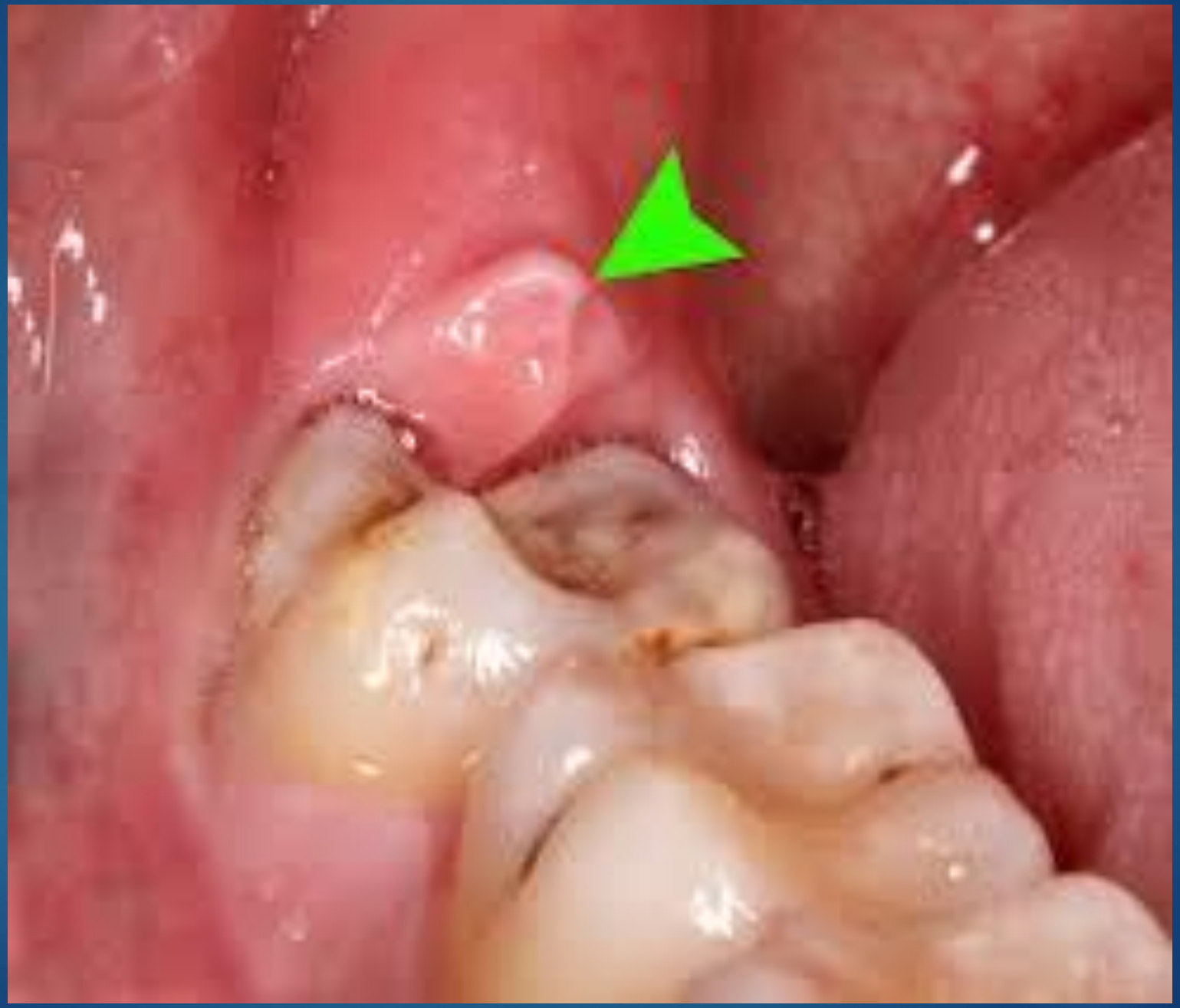
g) Any factors or drugs which relieve pain: This will give you an idea about the nature and duration or severity of the pain.

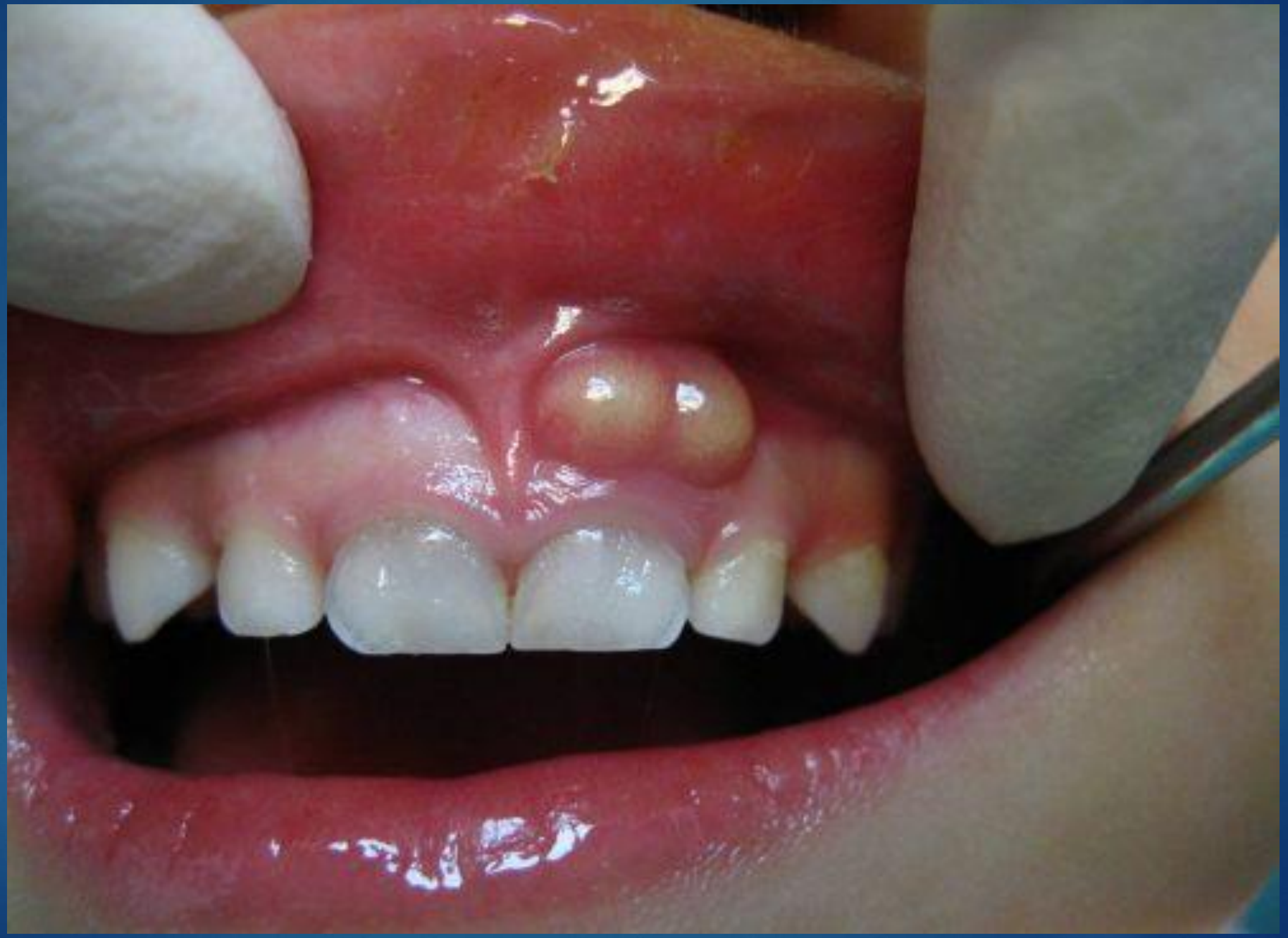
h) The presence of other symptoms: Like the patient that says that, the pain starts for two days, then a swelling appeared after that or a discharging sinus appeared or a discharge of pus, or pain, swelling then paresthesia of the lower lip ... etc.

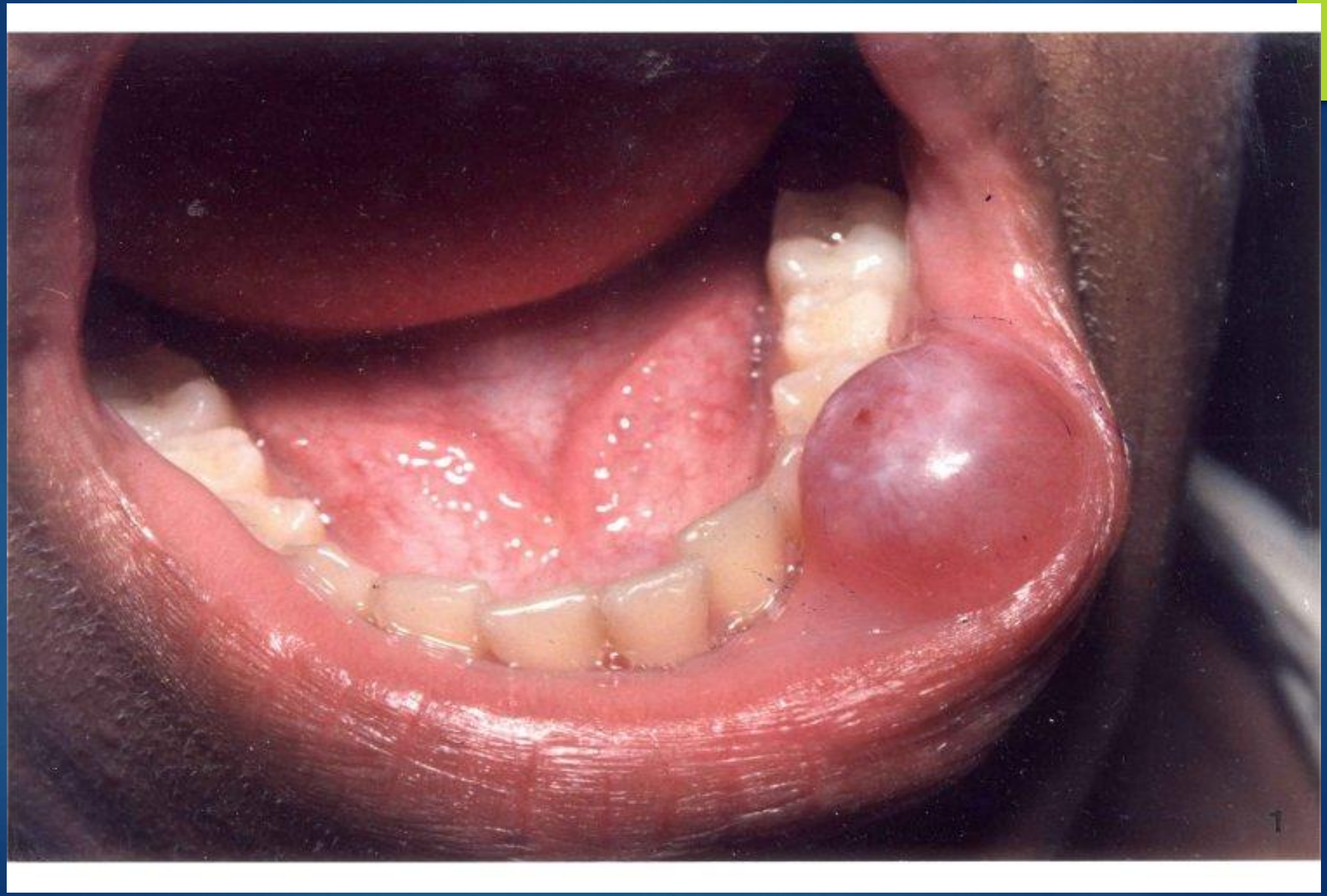
i) The patient also may be asked about relevant past medical history which may assist you in the diagnosis of the pain like a patient with facial pain of vascular origin like migraine, or chronic psychosomatic origin or angina (angina pectoris) pain. In addition to that the patient asked about his opinion of the cause of the pain.

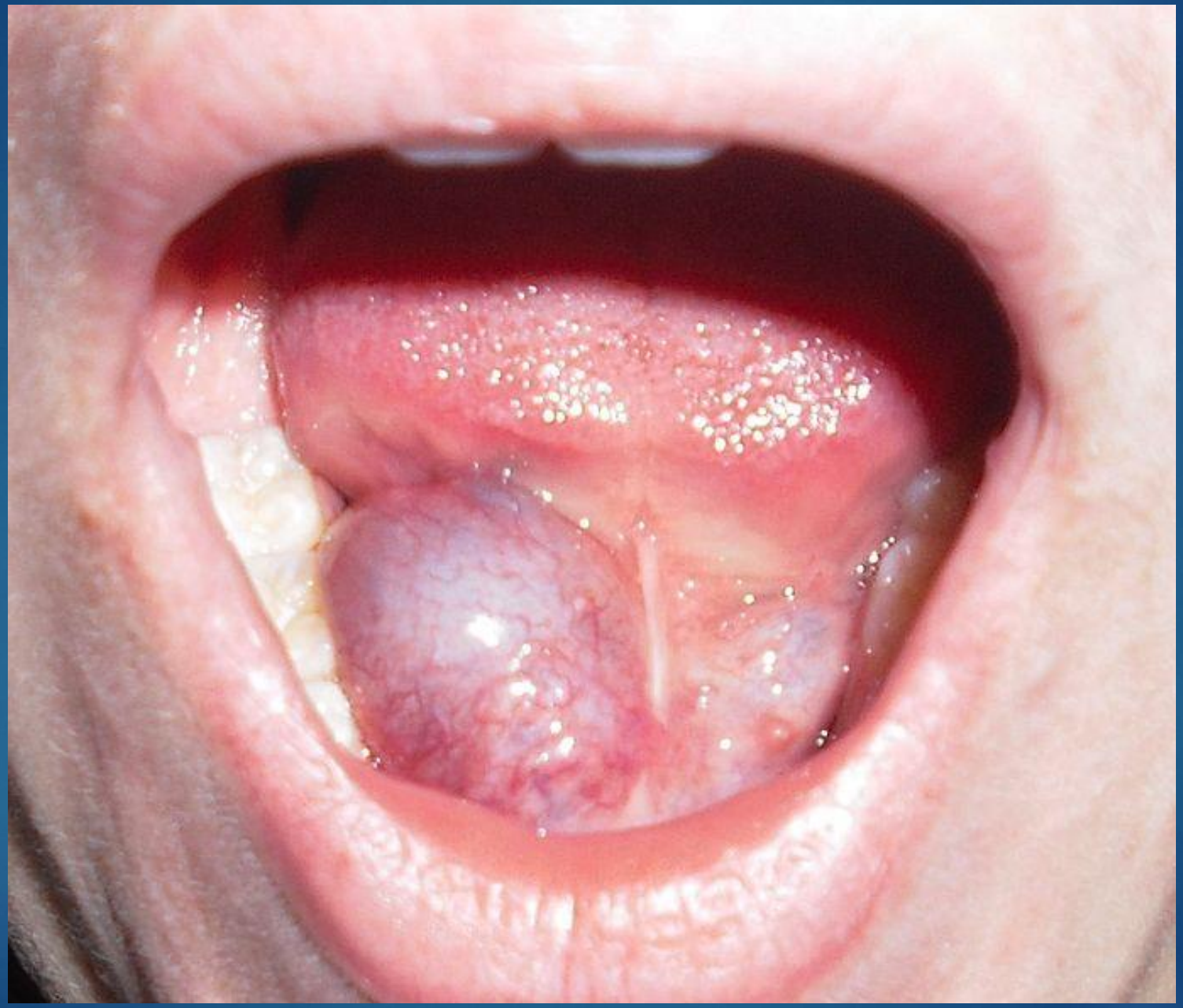
Patient presented with a lump or swelling:

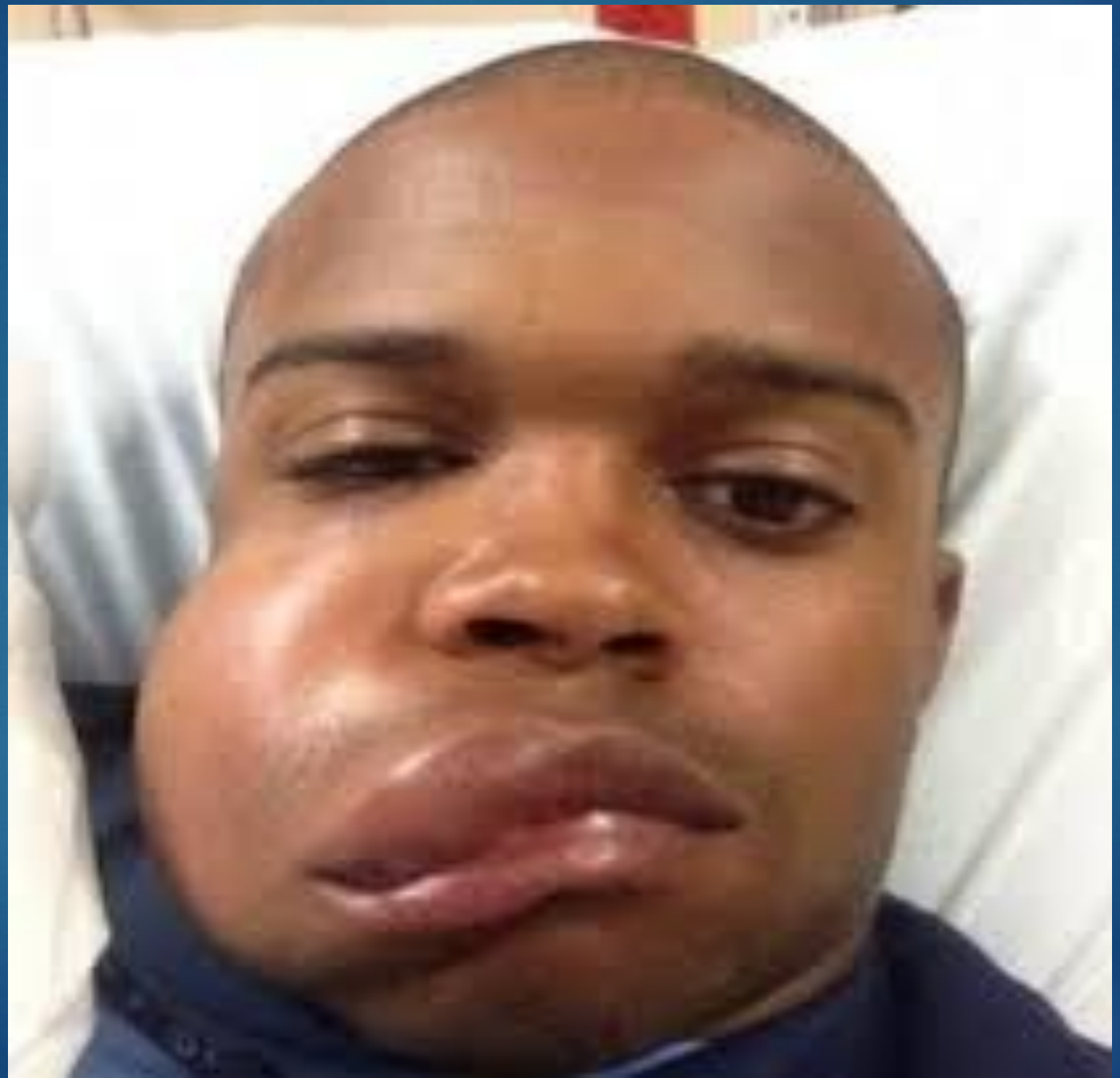
- 1 How long the swelling has been present.
- 2 Whether it is getting larger or smaller.
- 3 Any possible cause as trauma.
- 4 The anatomical situation, may arise from skin,muscle,bone…..
- 5 Are the associated lymph nodes enlarged.
- 6 Shape, size, surface, color ,single or multiple.
- 7 Is fluctuation present.
- 8 Consistency soft, firm, hard
- 9 Signs of inflammation.
- 10 Palsation.
- 11 Pressure effects on

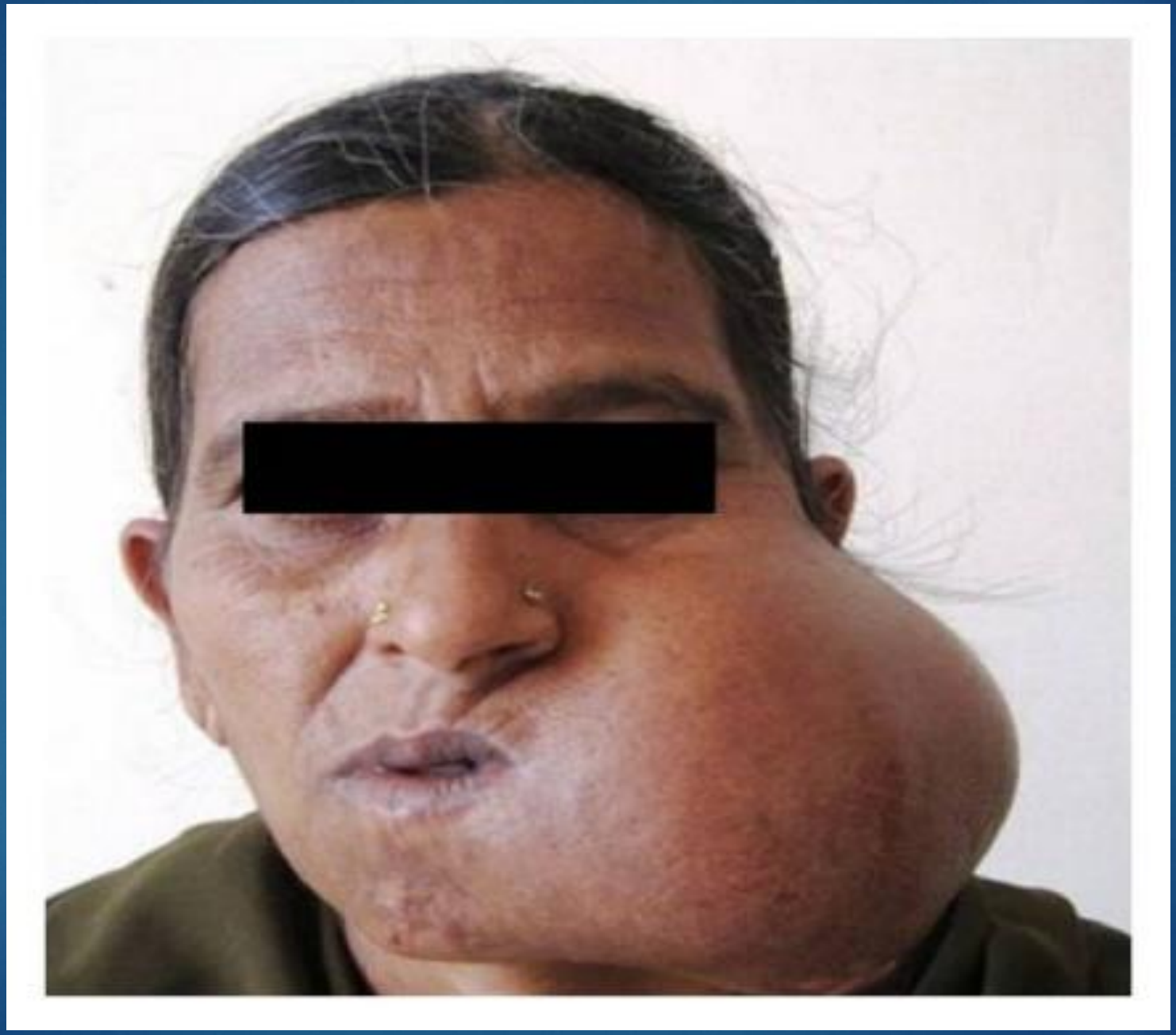


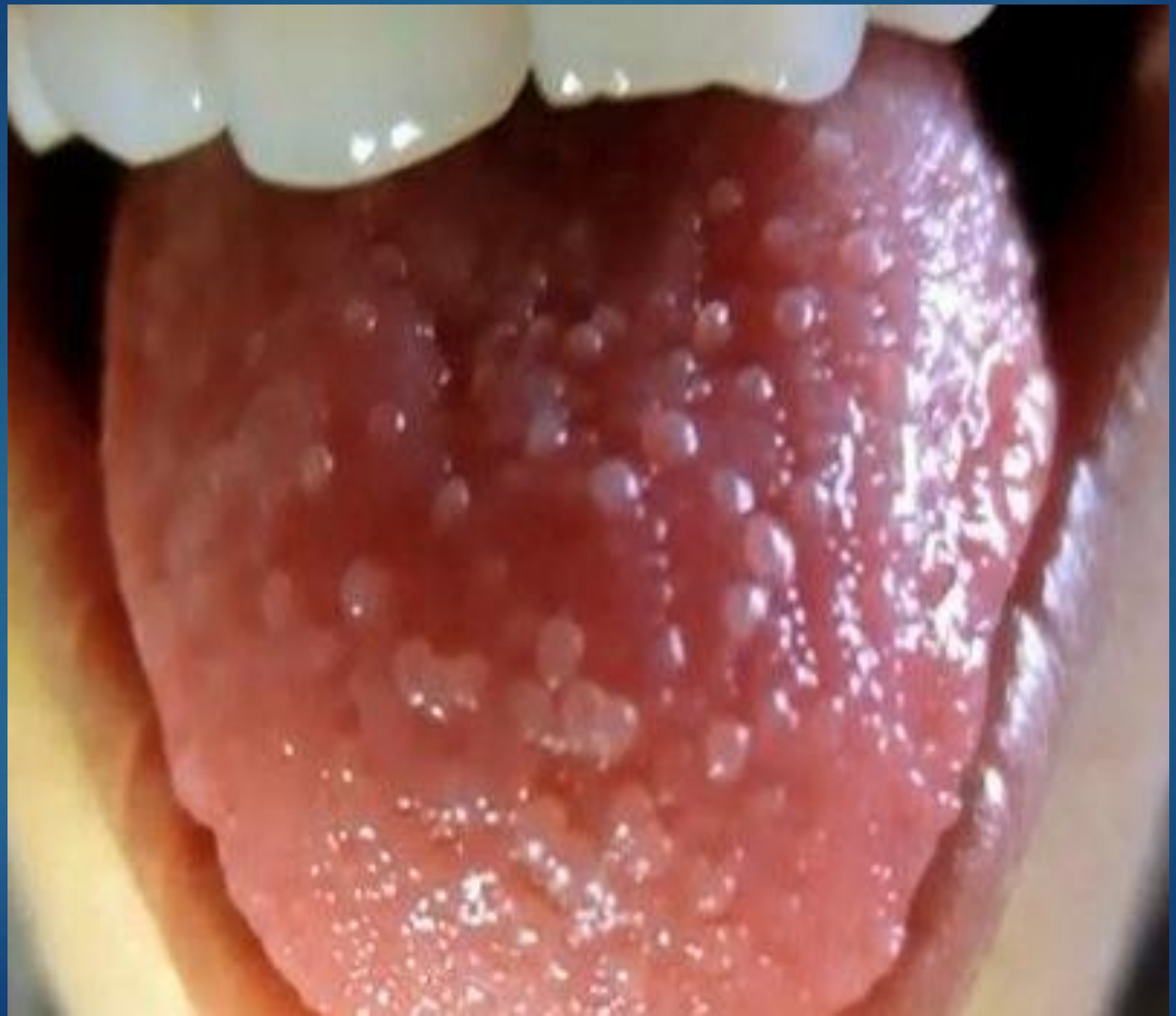






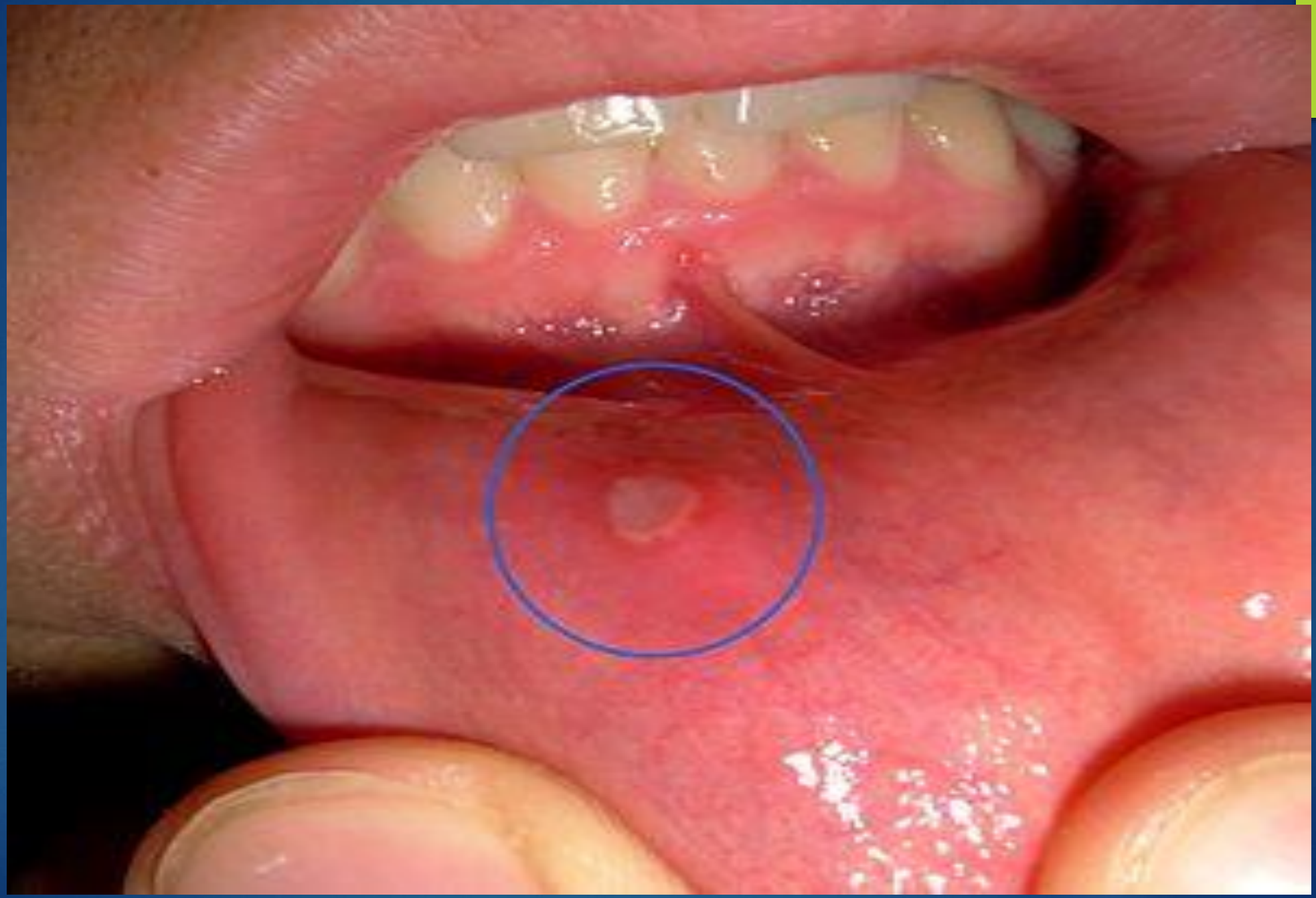


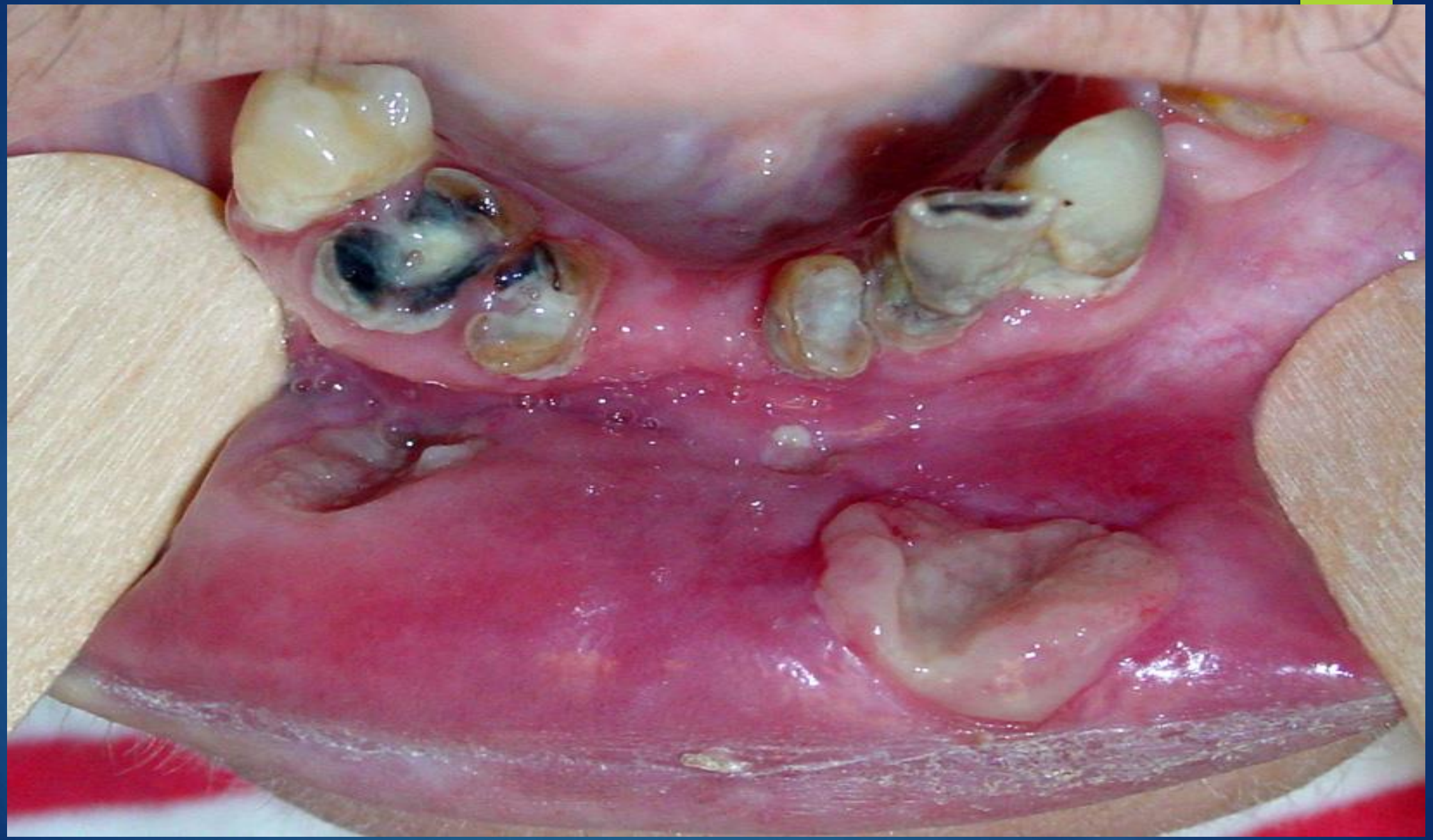


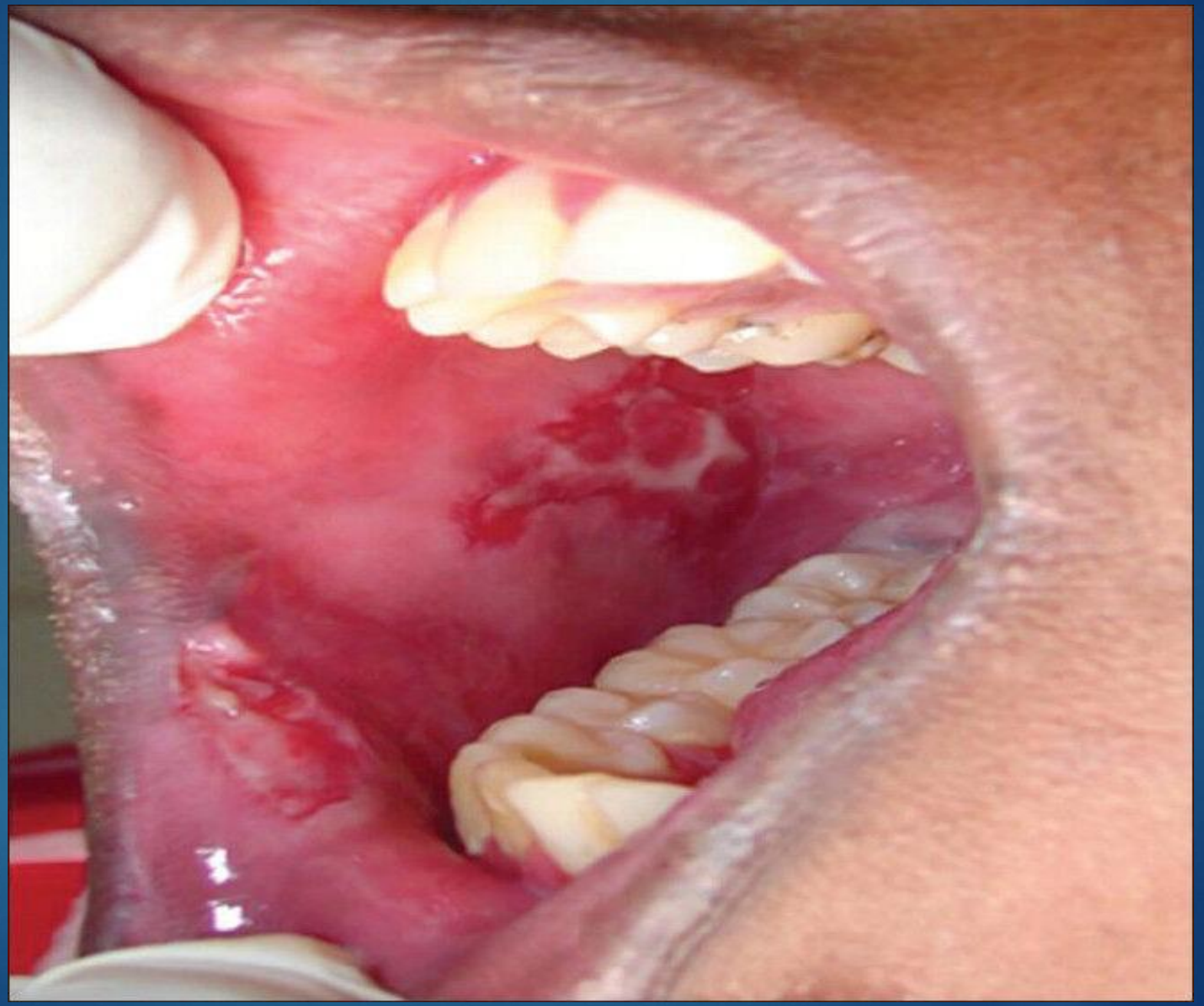


3rd example – taking history from a patient with ulcer:

1) Mode of onset: duration of ulcer should also be noted.
2) Pain: ulcer associated with inflammation are painful and ulcers associated with epithelial or basal cell carcinomas are painless.
3) Discharge: discharge from ulcer like serum, blood, pus should be noted down.
4) Associated disease: like tuberculosis, diabetes and syphilis.
5) The floor of the ulcer.
6) Lymph node involved.
7) The edge of the ulcer, undermined,rolled raised and everted







Past dental history

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The past dental history includes:

1. The frequency of previous visits (e.g. previous extractions or oral surgical procedures).
2. Any difficulties or complications (e.g. excessive bleeding or fainting).
3. Determination of the availability of past dental or oral radiographs. In other words, it is important to ask the patient about any type of dental or oral treatment received before, and if there were any complications or nonsatisfaction arised and his impression about the type of treatment.

Medical history and systems review (M.H.):

The patient's medical history includes review, the past and the present illness or diseases because:

1- These information (M.H.) may aid in the diagnosis of various conditions occurring or has oral manifestation that are related to specific systemic disease (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 manifestation), or dictate some modification 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- Operations.

5- Injuries to the head and neck.

6- Allergy to drugs or general allergy.

7- Listing of medication taken in the last six months.

Some examples of serious illness:

- Heart attack or diseases (e.g. myocardial infarction, angina pectoris).
- Stroke (cerebro-vascular accident C.V.A.).
- Hypertension. Heart failure.
- Bleeding disorders. Diabetes.
- Rheumatic fever or disease. Hospitalizations may indicate past disease and how it was treated.
- AIDS (acquired immune-deficiency syndrome). Viral hepatitis.
- Neoplasm and the method of treatment (surgical, cytotoxic drugs) especially if the growth in the head and neck region or previous radiation (radiotherapy).
- Allergic reaction to drugs.

Review of systems:

Is that part of the medical history covering each major system of the body. Review of systems lead to concentration on the signs and symptoms related to that system disorders, which dictate us to more investigations or referring of the patient for medical evaluation and preparation.

The review of systems includes: Cardio vascular system, respiratory system, central nervous system, genitourinary system, musculoskeletal system, endocrine system, ears, eyes, vital signs (blood pressure, pulse, temperature, respiratory rate).

How to have a general medical history :-

by asking the pts certain limited questions(5 questions)

Any patient come to you should be asked certain concise questions to have general medical history and these include :

1. If he is currently receiving any medical care or under supervision of any
clinician
2. Whether he has been hospitalized and Why ?
3. If they have any serious illness remembered by the patient ?
4. If your patient had any surgical operation before ?
5. If your patient takes any type of drugs before in the past or in present time ?

Family History: (F.H.)

Details of (F.H.) may reveal valuable information about diseases that are
occurring in families (e.g. Tuberculosis, Hemophilia, Psychiatric or neurotic disorders, Breast cancer, Congenital Anomalies such as lip clefts or palate clefts).

Habits :- e.g-- *smoking ,alcohol* , these habits and duration is important to clinicians
because it may be related to many local and systemic effect on oral soft tissue and may have an indirect effect on surgical intervention needed for such patients .

PATIENT'S MEDICAL HISTORY

PATIENT'S NAME _____ DATE OF BIRTH _____

ALTHOUGH DENTAL PERSONNEL PRIMARILY TREAT THE AREA IN AND AROUND YOUR MOUTH, YOUR MOUTH IS A PART OF YOUR ENTIRE BODY. HEALTH PROBLEMS THAT YOU MAY HAVE, OR MEDICATION THAT YOU MAY BE TAKING, COULD HAVE AN IMPORTANT INTERRELATIONSHIP WITH THE DENTISTRY THAT YOU WILL BE RECEIVING. THANK YOU FOR ANSWERING THE FOLLOWING QUESTIONS.

	YES	NO
1. ARE YOU IN GOOD HEALTH	☐	☐
2. HAVE THERE BEEN ANY CHANGES IN YOUR GENERAL HEALTH WITHIN THE PAST YEAR	☐	☐
3. DATE OF YOUR LAST PHYSICAL EXAM: _____		
4. PHYSICIAN'S NAME _____ ADDRESS _____ PHONE NO. _____		
5. ARE YOU NOW UNDER THE CARE OF A PHYSICIAN	☐	☐
6. HAVE YOU EVER BEEN HOSPITALIZED FOR ANY SURGICAL OPERATION OR SERIOUS ILLNESS PLEASE EXPLAIN. _____		
7. ARE YOU TAKING ANY MEDICINE(S) INCLUDING NON-PRESCRIPTION MEDICINE IF YES, WHAT MEDICINE(S) ARE YOU TAKING _____	☐	☐
8. HAVE YOU HAD ANY ABNORMAL BLEEDING	☐	☐
9. DO YOU BRUISE EASILY	☐	☐
10. HAVE YOU EVER REQUIRED A BLOOD TRANSFUSION	☐	☐
11. HAVE YOU HAD A RECENT WEIGHT LOSS	☐	☐
12. HAVE YOU EVER TAKEN FEN-PHEN/REDUX	☐	☐
13. HAVE YOU EVER TAKEN FOSAMAX, BONIVA, ACTONEL OR ANY CANCER MEDICATIONS CONTAINING BISPHOSPHONATES	☐	☐
14. HAVE YOU TAKEN VIAGRA, REVATIO, CIALIS OR LEVITRA IN THE LAST 24 HOURS	☐	☐
15. DO YOU USE TOBACCO	☐	☐
16. DO YOU OR HAVE YOU USED CONTROLLED SUBSTANCES	☐	☐
17. ARE YOU WEARING CONTACT LENSES	☐	☐
18. DO YOU HAVE A PERSISTENT COUGH OR THROAT CLEARING NOT ASSOCIATED WITH A KNOWN ILLNESS (LASTING MORE THAN 3 WEEKS)	☐	☐
19. DO YOU HAVE ANY DISEASE, CONDITION OR PROBLEM NOT LISTED ABOVE THAT YOU THINK I SHOULD KNOW ABOUT	☐	☐
WOMEN ONLY:		
ARE YOU PREGNANT OR THINK YOU MAY BE PREGNANT	☐	☐
ARE YOU NURSING	☐	☐
ARE YOU TAKING BIRTH CONTROL PILLS	☐	☐

	YES	NO
ARE YOU ALLERGIC TO OR HAVE YOU HAD REACTIONS TO:		
LOCAL ANESTHETICS LIKE NOVOCAINE	☐	☐
PENICILLIN OR OTHER ANTIBIOTICS	☐	☐
SULFA DRUGS	☐	☐
BARBITURATES, SEDATIVES OR SLEEPING PILLS	☐	☐
ASPIRIN	☐	☐
IODINE	☐	☐
ANY METALS (E.G., NICKEL, MERCURY, ETC.)	☐	☐
LATEX / RUBBER	☐	☐
OTHER (PLEASE LIST) _____		
DO YOU HAVE OR HAVE YOU EVER HAD THE FOLLOWING:		
RHEUMATIC HEART DISEASE OR RHEUMATIC FEVER	☐	☐
SCARLET FEVER	☐	☐
HEART DEFECT OR HEART MURMUR	☐	☐
HEART TROUBLE, HEART ATTACK, OR ANGINA	☐	☐
CHEST PAIN	☐	☐
SHORTNESS OF BREATH	☐	☐
PACEMAKER	☐	☐
HEART SURGERY	☐	☐
HIGH/LOW BLOOD PRESSURE	☐	☐
CONGENITAL HEART PROBLEM	☐	☐
SWELLING OF FEET, ANKLES, HANDS	☐	☐
HEPATITIS, JAUNDICE OR LIVER DISEASE	☐	☐
STROKE	☐	☐
SINUS TROUBLE	☐	☐
LUNG OR BREATHING PROBLEMS	☐	☐
ASTHMA OR HAY FEVER	☐	☐
HIVES OR SKIN RASH	☐	☐
FAINTING OR DIZZY SPELLS	☐	☐
DIABETES	☐	☐
AIDS OR HIV INFECTION	☐	☐
THYROID PROBLEMS	☐	☐
ALLERGIES	☐	☐
ARTHRITIS OR RHEUMATISM	☐	☐
JOINT REPLACEMENT OR IMPLANT	☐	☐
STOMACH ULCER	☐	☐
KIDNEY TROUBLE	☐	☐
TUBERCULOSIS	☐	☐
PERSISTENT COUGH	☐	☐
COUGH THAT PRODUCES BLOOD	☐	☐
CHEMOTHERAPY (CANCER, LEUKEMIA)	☐	☐
SEXUALLY TRANSMITTED DISEASE	☐	☐
EPILEPSY OR SEIZURES	☐	☐
ANEMIA	☐	☐
GLAUCOMA	☐	☐
NERVOUSNESS	☐	☐
TONSILLITIS	☐	☐
TUMORS	☐	☐
MENTAL HEALTH CARE	☐	☐
BACK PROBLEMS	☐	☐
CHEMICAL DEPENDENCY	☐	☐
MITRAL VALVE PROLAPSE	☐	☐
CORTISONE TREATMENT	☐	☐
COLD SORES/FEVER BLISTERS	☐	☐
HYPOGLYCEMIA	☐	☐
EATING DISORDERS	☐	☐

PATIENT'S NUMBER