Oral Medicine _ Fifth Stage

First Semester Extraoral And Intraoral Examination Lec Two

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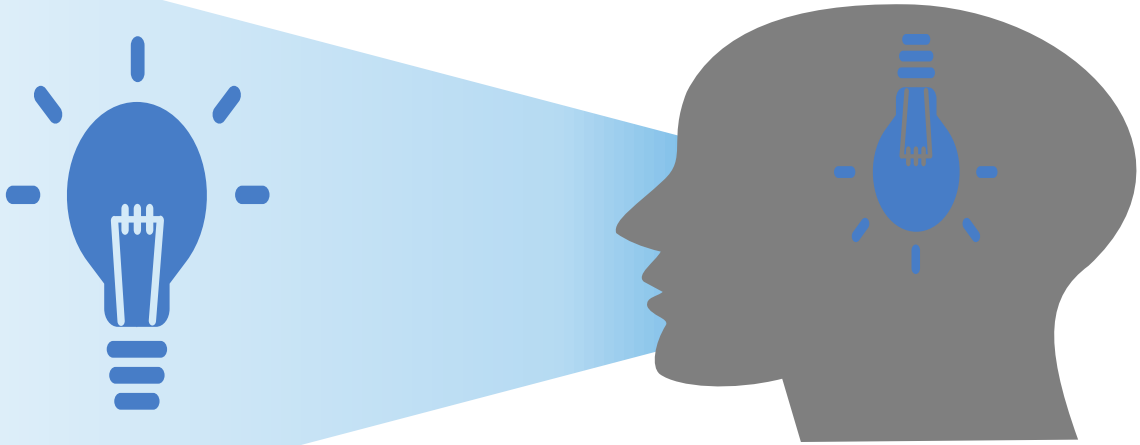
Objectives

- Standing up with our provision regarding extra and intra oral examination
- The differentiation between normal and abnormal findings
- The definitions of the most common oral pathologies

General Examination

A thorough examination includes observing the patient's general appearance. The examination starts as soon as the patient enters the dental operatory. The patient’s general appearance may give clues to medical conditions.

As the patient enters the room, and during history taking, observe the patient’s general appearance, symmetry, gait, and mobility. During the history taking, note any facial asymmetries, lesions or scars.



4.Facial features

Moon facies

SPIDER NAVUS

Down syndrome

Rash or "butterfly rash

Mysasthenia graves

The Hippocratic face

Skin

Cyanosis

Sign of heart disease

Finger clubbing

Sign of heart disease

jaundice

of liver disease

petechiae, ecchymosis, or
ematoma.

gn of bleeding disorders
oood thinners

Hyperparathyrodism

Lymph Nodes Examination

Clinical examination of the L.n we need inspection and palpation technique: use the pads of the index and middle finger(The "flat" of the fingers not the tip) to move the skin in circular motions over the underlying tissues in each area; palpate both sides of the neck simultaneously.

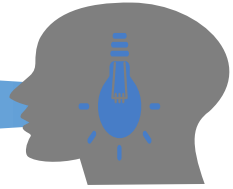
In abnormal nodes, describe in terms of Location ,Size, delimination (discrete or matted together) ,mobile or fixed consistency (soft, hard, firm) and tenderness.

THE DENTIST SHOULD BE WELL KNOWN ABOUT THE location and drainage OF THE L.N

- Soft(insignificant), rubbery (classically lymphoma), hard (classically malignancy & granulomatous infection).
- Tender (classically infection) vs. non-tender (classically malignancy) for example
- Patient 2-12 years old commonly present with insignificant lymph nodes in neck secondary to frequent viral infection.

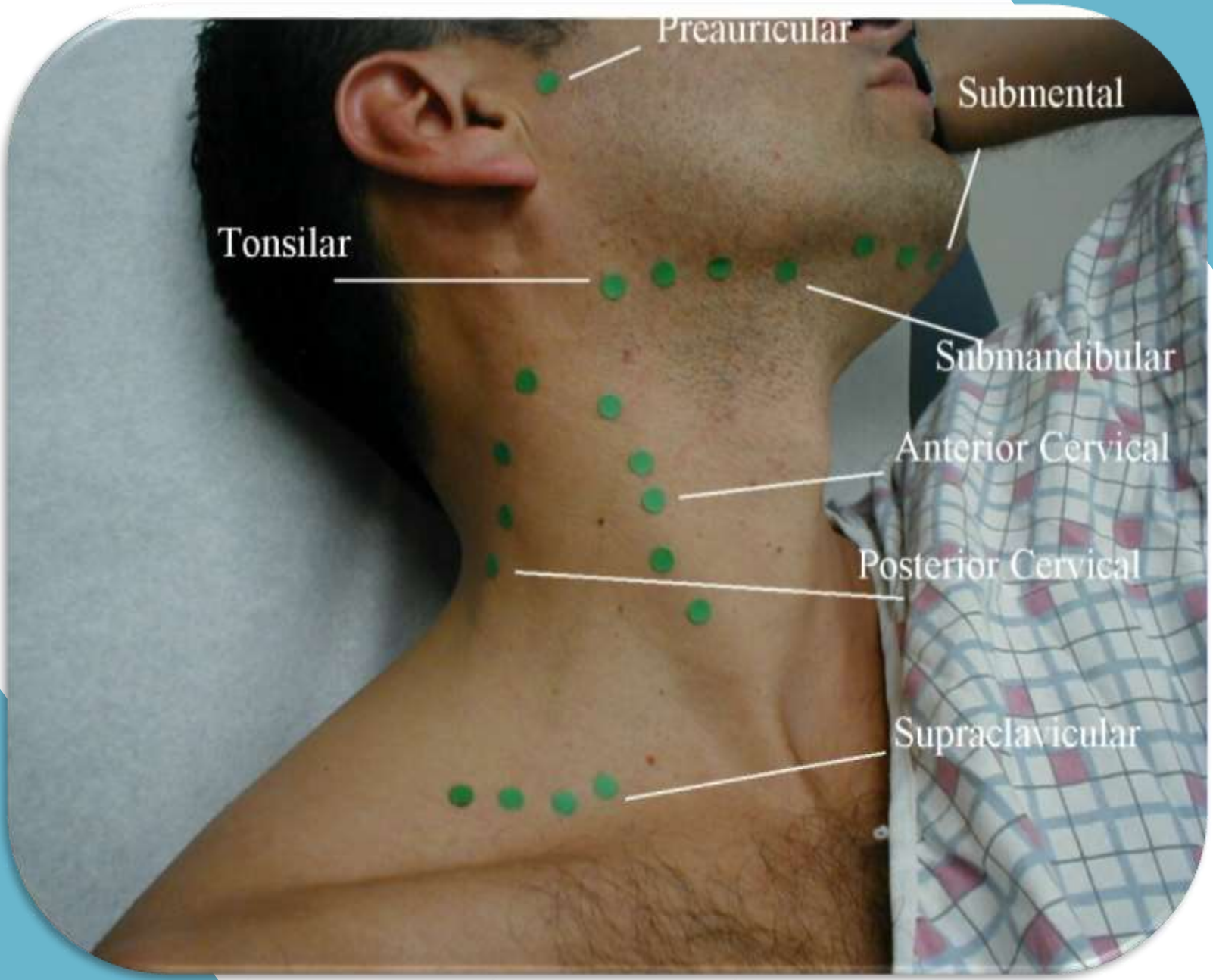
Causes of Generalized and Localized lymphadenopathy ????????

Location of Nodes (And what it drains)



- preauricular - in front of tragus of ear (eye)
- postauricular -over mastoid process (ear)
- parotid- difficult to palpate
- occipital - posterior to mastoid process.
- submental - inside mentus of the mandible (floor of mouth)
- submandibular - near submandibular salivary glands (oral cavity)
- submental-
- pre-sternocleidomastoid

- retroauricular
- suboccipital
- supraclavicular
- infraclavicular
- cervical chains
- anterior chain runs along the SCM (pharynx, tonsils)
- posterior chain runs along the trapezius
- clavicular (abdomen, thorax, breast)
- supraclavicular-Virchow's node (ominous finding in cancer patient)
- Axillary
- Retro-sternocleidomastoid


Preauricular
Submental
Tonsilar
Submandibular
Anterior Cervical
Posterior Cervical
Supraclavicular

Salivary Glands

Parotid Glands: Palpation should be performed on the lateral surface of the mandible and on the soft tissues inferior and medial to the angle.

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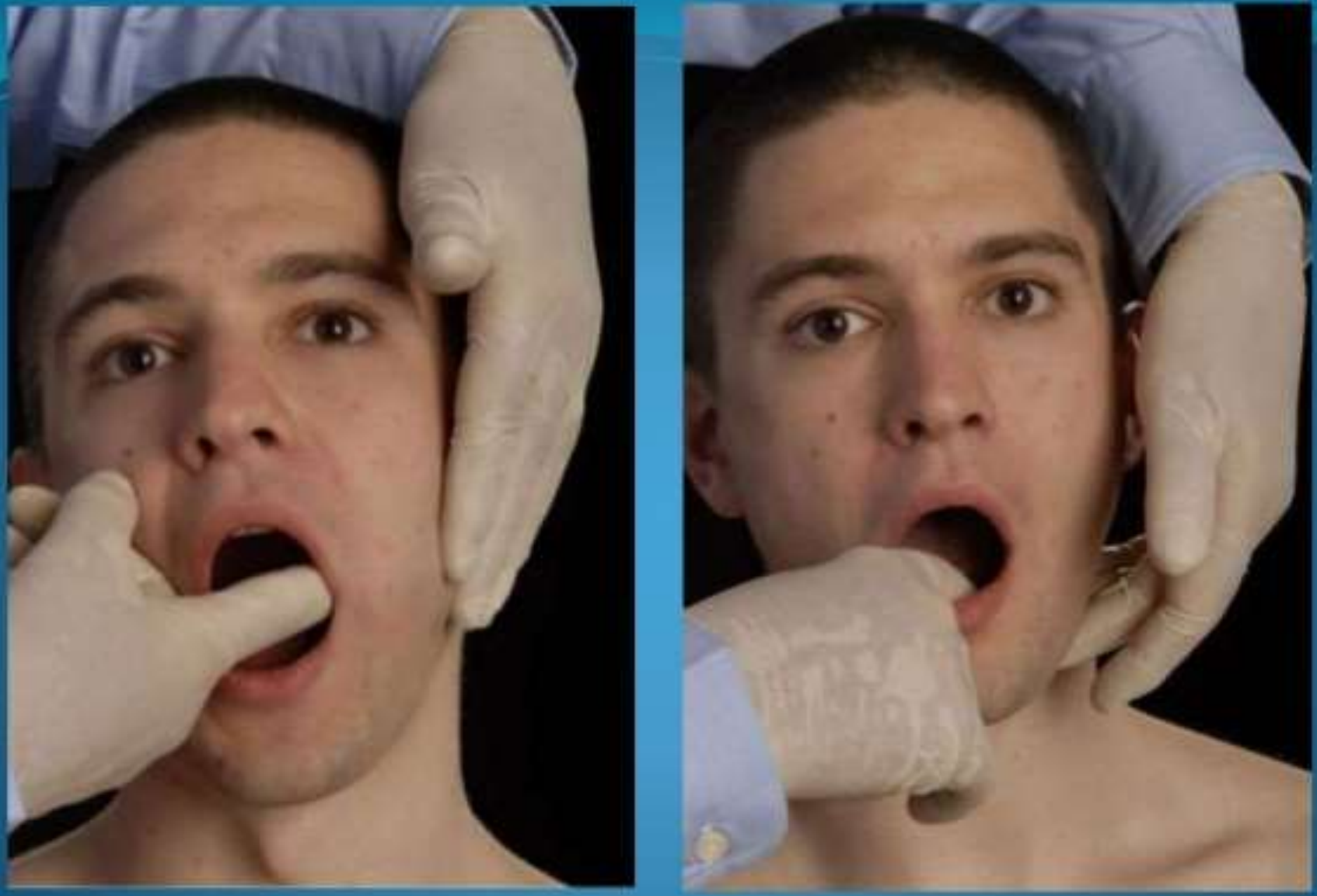
Bimanual palpation with the patients mouth close with the masseter muscle relaxed, this method can be readily performed from the side or behind

• Insertion of the index finger along the teeth to the most posterior location in the cheek with the application of lateral pressure against the examining thumb on the face, this palpation can be performed.

Submandibular glands: External palpation should start with the finger extending towards the midline and the thumb on the body of the mandible. • Pressure is exerted both superiorly and laterally and the finger is gradualy moved beneath the inferior border of the mandible.



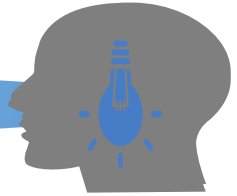
Bimanual examination of the parotid and submandibular salivary glands

Tempromandibular joint examination

Discussed

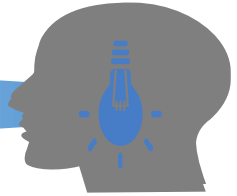
Later

Intraoral examination



- The first step in the intraoral examination is a quick general examination of the cheeks, hard palate, tongue and gingiva looking for any contraindications for continuing the evaluation. If there are none, start the examination.
- 4 Sensations :See Hear Smell Feel

Oropharynx



- **Anterior and Posterior Pharyngeal Pillars**
- Atypical findings one may encounter include lymphoid aggregates (as found on the posterior pharyngeal wall), areas of pale scarring or abscent pillars from tonsillectomy. Pathologic findings include:
- Asymmetry
- Lesions of any kind
- Erythema associated with tenderness or exudates

- **Posterior Pharyngeal Wall**
- Homogenous and non-tender erythema associated with post nasal drip and/or smoking
- Erythema and purulent exudate associated with pharyngitis (infection of the pharynx) may cover portions of the pharyngeal wall
- Ulcers, erosions or noticeable enlargements or growths

Tonsillar Crypt

Pathologic findings include:

- Dysphagia (painful or difficult swallowing)
- Swelling, asymmetry, erythema and/or surface exudates
- Erythema and/or dysphagia may also be associated with mouth breathing and may indicate a nasal obstruction.

Hard ,Soft Palate and Uvula

- Pigmented macules – pigmented lesions of any type should be identified to rule out melanoma. The palate is also a common area for unintentional tattoos resulting from pencil leads being jabbed into the tissues while playing with a pencil or holding it in the mouth.
- Thermal burns – the anterior palate is the most common area for this type of traumatic injury
- Nicotine stomatitis – whitening and fissuring of the attached gingiva of the hard palate and inflammation of the minor salivary gland ducts
- Papillary hyperplasia – development of finger-like projections usually under a poorly fitting full or partial denture
- Other traumatic lesions – abrasions and lacerations resulting from eating injuries
- Systemic related lesions – lesions related to lupus are commonly found in the palate and the palate is a prime location for the blue nevus

Buccal Mucosa

- The buccal mucosa is examined using direct and indirect vision followed by bi-digital palpation of the entire area. Be sure to pull the tissues away from the retromolar area and stretch the mucosa away from the mucogingival junction
- Normal tissues of the buccal mucosa appear moist and pink/dark pink. They are soft and pliable on palpation with no discernible indurations. Stensen's duct should be identified with or without the presence of a parotid papilla. Linea alba, Fordyce's granules and leukoedema and cheek chewing (morsicatio buccarum) are common atypical findings on the buccal mucosa. feeling small papules within the tissues usually indicative of sclerotic or fibrotic minor salivary glands.

Buccal Mucosa

Parotid papilla

Linea alba

Fordyce’s granules

Leukoedema

Buccal Mucosa

- Pathologic findings associated with the buccal mucosa include:
- Traumatic injuries – thermal burns, cheek bites, ulcers, traumatic fibroma
- Leukoplakia associated with spit tobacco
- Neoplastic changes – erythroplakia, speckled leukoplakia an
- Systemic disease – oral lichen planus, lupus, lipomas, aphthous ulcers, erythema multiforme, and Crohn's disease.



Labial Mucosa

The labial mucosa is examined using direct vision by averting the tissues over the fingers or thumbs followed by bidigital palpation of the tissues of the lips.

Sclerotic minor salivary glands are common atypical findings as are Fordyce's granules. Pathologic findings include the following:

- Traumatic injuries – abrasions, lacerations
- Dry, cracked lips
- Angular cheilitis – human herpes virus, Candida Albicans
- Aphthous ulcers
- Neoplastic changes

Mandible

The body of the mandible will be examined using direct and indirect vision followed by digital palpation of the entire structure. The tissues of the floor of the mouth should be stretched away from the inferior border of the mandible with a mouth mirror

. Mandibular tori and exostoses are the most common atypical findings in this area. The retromolar area may present with partially erupted third molars or scarring from third molar extraction. This area is also prone to hyperkeratosis from constant friction from masticatory function. Pathologic findings include:

Traumatic lesions – ulcers, abrasions

Infections – pericoronitis

Neoplastic growths

Floor of the mouth

- The floor of the mouth is examined using direct and indirect vision followed by bimanual palpation of the entire area. The patient should be asked to raise the tongue making direct visual examination of the tissues .
- The tissue will be soft on palpation with firmer areas noted in the area of the suprahyoid muscles. The sublingual folds will feel ridge-like and mobile. Varicosities are the most common atypical observation. Pathologic findings include:
  - Traumatic injuries – ulcers mucoceles
  - Salivary gland pathology – ranula, sialoliths, enlargement
  - Neoplastic changes
  - Ankyloglossia –considered pathologic only if it interferes with the normal development of proper speech

The Tongue

- The tongue is examined using both direct and indirect vision. The most common place for cancer to occur on the tongue is the lateral border. Grasp the tip of the tongue with a gauze square and roll the tongue over on one side to observe the lateral border then repeat for the other side Use the mirror to examine the posterior lateral borders if necessary.
- The tongue is the most common intraoral site for oral cancer. Therefore, any sign of pathology should be investigated thoroughly. Some of the pathological findings that are found on the tongue include:

The Tongue

- Hairy tongue – filiform papilla become elongated due to a variety of reasons from overuse of mouth rinses to not cleaning the tongue adequately.
- Candidiasis – fungal infection of the tongue often associated with deeply fissured tongues.
- Glossitis – inflammation of the tongue due to anemia, nutritional deficiencies and others.



- Fissured tongue.

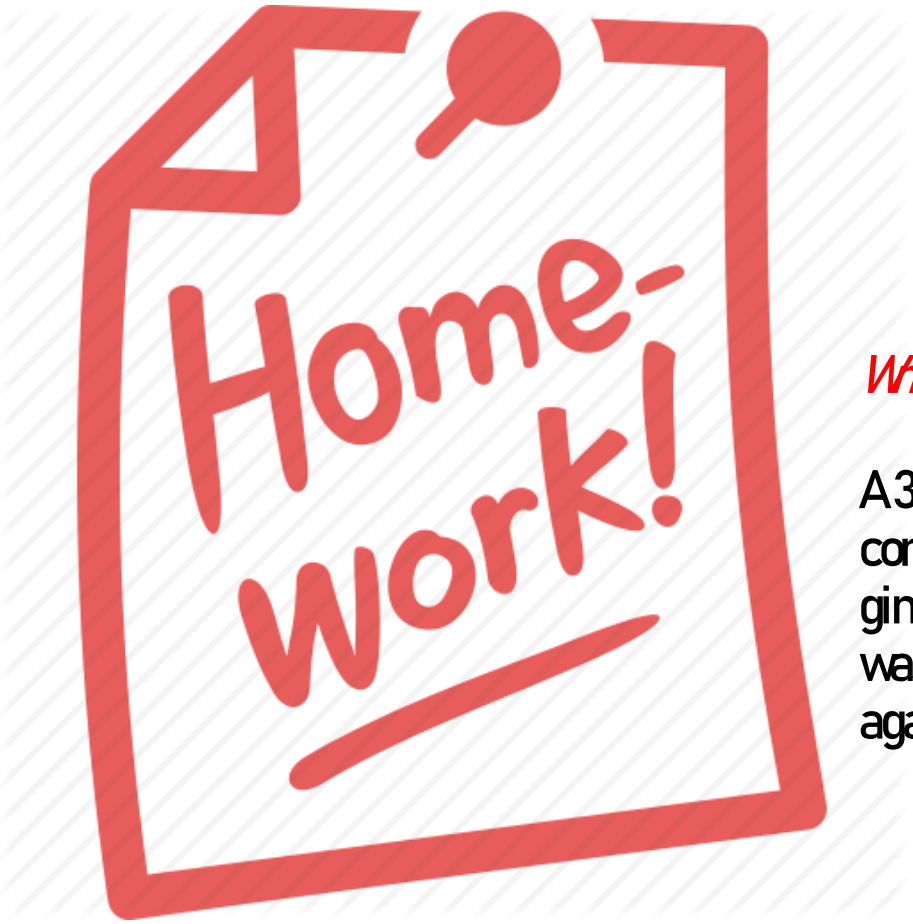
- Scalloped tongue.

- Benign migratory glossitis

So there is a statement which said that the tongue is the mirror of the body.

Neurological examination of the tongue

- Note any atrophy or *fasciculations* (spontaneous quivering movements caused by firing of muscle motor units) of the tongue while it is resting on the floor of the mouth. Ask the patient to stick their tongue straight out and note whether it curves to one side or the other. Ask the patient to move their tongue From side to side and push it forcefully against the inside of each cheek.
- Fasciculations and atrophy are signs of lower motor neuron lesions. *Unilateral tongue weakness causes the tongue to deviate toward the weak side.*
- Tongue weakness can result from lesions of the tongue muscles, the neuromuscular junction, the lower motor neurons of the hypoglossal nerve (CN XII), or the upper motor neurons originating in the motor cortex. Lesions of the motor cortex cause contralateral tongue weakness.



Write a referral letter :

A 30 y old female patient attained your dental clinic complainting from recurring oral ulcerations and gingival swelling .medical history revealed that she was on chemotherapy course before ten years ago against lymphoma .