**Developmental disturbances of the oral region**

" ؟؟؟ = QUESTION "

it means disturbance in the growth during developmental stages , it occurs before 18 and it may affect any site of the oral cavity including hard and soft tissues, bone and teeth.

Oral pathology : deal with disease of the oral cavity (mucosa, bone, teeth) it's very essential for oral medicine ,oral surgery ….etc

Developmental anomalies of oral cavity may affect (soft tissues ,bone, teeth)

Developmental anomalies of soft tissue:

**1) lip pit :**

Anomalies at junction between upper and lower lips (small depression at this site) , up to 4 mm in depth

AD inheritance in some cases so there's a family history

common up to20% of population

Unilateral or both sides (bilateral)

more frequent in adults

sometimes you can see saliva coming out from these pits because deep down there are some of the minor salivary glands open to these pits

not significant " diagnosis chance finding during dental examination ,not complained by patient"

association with other lesion (preauriculare pit =pit anterior to the auricle )

commissural lip pit (position )

saliva ???

**2) paramedian lip pit :**

position (at central of lower lip adjacent to the midline)

Could be two pit adjacent to the midline .

Not common (rare)

significant in newborn

it's isolated (found alone with no other abnormalities) or associated with syndrome so you should check 1-palatal , 2-lip "cleft"

\*van der wound syndrome (AD) 🡺 characterized by the presence of paramedian pits and also cleft lip and palate , in the future may have missing teeth at cleft area "canine ,lateral"

\*if you find patient have cleft and other abnormality you should check :

1) leg (behind knees) "extra skin connecting the thigh with the leg " and this cause difficulty in walking

2) skin "connection between fingers and toes " .

3)mouth "fibrous band connect maxillary and mandible" ," lip pit " , "clefting " .

4) genital disturbances

🡺 popliteal pterygium syndrome (AD)

paramedian lip pit VS lip pit

More sever

Deeper may reach to 2 cm in depth

More significant (need management )

**3)double lip:**

Extra mucosa coming out from inner side of upper lip " labial mucosa "

prominent due to tension /force during e.g. (smile ) … miss diagnosed with gingival prominent .

Common in inner side of upper lip, but can be in lower lip , ( inner aspect of U > L lip)

*associated* with Ascher's syndrome

nontoxic goiter (enlarge thyroid) , check if it's hyper, hypo thyrodism.

(edema +extra skin in upper eyelid ) ( Blepharo chalasis is droopingof the skin if the upper eyelid and folding of the skin happen afterwards)

Not common

congenital

acquire ???

4)frenal tag

Large labial fermium ,extra piece of mucosa coming out from upper labial fermium

Common

Its not Significant but some dentist who don't know what it is , or think that its a tumor may do excision .

there's no need for excision or any other management

AD family history

**5) fordyce's granules**

yellowish small granules that are elevated above the surface and the patient can feel them

most common sites are the buccal mucosa and the upper vermilion zone (lipstick area)

Few or lot

become more prominent after puberty

size is 1-2 mm

Aesthetic problem in vermillion zone , no aesthetic problem in buccal mucosa .

Cosmetic effect (complication)

Collecting of sebaceous glands not associated with hair, each granule consists of 1-5 lobules of sebaceous glands connected with a duct that opens to the surface (normal sebaceous glands) so there's secretions

Age 🡺 prominent 🡺 number

More in adult compare to young pt ,

Common 80% so we consider them variation of normal

Significant due to aesthetic

granules become more prominent after puberty, they increase in size and number, does this mean they're formed after birth? are they histologically present in infants ???

the saliva decreases with age, the sebaceous secretions increases with age, are there any relations between them ???

is there any clinical significance ???

can they turn into a tumor, hyperplasia??? very rare cases.

Relation with (gender /skin type /systemic diseases) ???

6) **Oral tonsil** (normal lymphoid tissue )

normally there are : " all make a circle or a ring and they're related to immunity "

\*palatine tonsil

\*posterior at the junction between oral cavity +pharynx

\*upper posteriorly (pharyngeal tonsil) "adenoid"

\*posterior 1/3 of the tongue (lingual tonsil )

\*at soft palate

Rare small collecting of lymph node with active germinant center ,

Ectopic ,migrate anteriorly ???

More common in posterior part of the tongue they may extent in the lateral border of the tongue

Foliate papillae :

lateral border of posterior 1/3 of the tongue , vertical rogues Between it grooves

elevation Beneath it (lymphoid tissue that extend more ant. on lateral border of the tounge ( post. lateral border ) )

Irritation this area by local factors or upper respiratory infection 🡺lead to inflammation ,redness ,bruning sensation (Foliate papillitis) , common pain at posterior part

Tongue the most common site of oral cancer especially lateral part ,so patient think that it's cancer

the squamous cell carcinoma favors the posteriolateral border of the tongue, how to differentiate cancer from foliate papillitis??? . painless cancer At early stage.

Oral tonsils are ectopic lymphoid tissue present more anteriorly on the ventral surface of the tongue or on the floor of the mouth as reddish elevated lesions that are asymptomatic and we might need biopsy to diagnose it because it's not easily diagnosed

7) Retrocuspid papilla

unilateral or bilateral, often bilateral

attached gingiva lingual to the canine

Small elevated area up to 2-4 mm

it's a soft tissue, fibrovascular stroma covered by orthokeratinized or parakeratinized epithelium, under them directly we'll find the nutrient blood vessels.

significant : you have to know its name and how it looks so you don’t mistake it with a tumor or bone swelling.

no need for biopsy.

looks like the incisive papilla

Miss diagnosis with fourus mandibularus ???

8) ankyloglossia (tongue-tie)

short thick anteriorly positioned lingual frenum

congenital

Theres no detachment between "frenum area and gingival" and anterior part of floor of the mouth

Restrict the movement of the tounge

complication "depend On severity": to almost all function of the tongue .( speech ??? (S,N,D,T, … ) , swallowing ,oral hygiene , don’t affect tasting )

Tongue important for growth of maxilla and mandible so, pt can't perform normal adult swallowing if it's attach with floor of the mouth 🡺 so, pt do infant type of the swallowing (tongue ant. position between upper and lower jaw) which affect growth of the teeth and mandible .

less common in adult ??? : benefit for time of management some cause become less with age .

what age is recommended to do the surgery ???

9) microglossia (small tongue )"aglossia":

isolated or

associated with other malformation and syndrome (most common) .. in hand (small hand , no digit),feet (orowandibular limbhypogenesis syndrome) ,clefting , missing teeth especially central and lateral incisors.

-complications  
 related to the loss of tongue functions ,   
changes in teeth alignment , collapse jaw and low palate.

10) macroglossia (hyperactivity of tongue)

Size

protruding out side oral cavity ,lateral border impression of teeth . Scalloped ???

complications

feeding difficulties in infants , secretions and drooling of saliva out , infections of the skin, swallowing problems , snoring, noisy breathing ,glossitis (inflammation of the tongue )

Cause of :

True =large tounge , false =pseudo macroglosdia.

**True :**

(diagnosis):

Biopsy ,sign and symptom , medical history .

Relative ,( pseudo macroglsia) : dentist imaging that it's large but it's normal … structures that force the tongue with a normal size to go forward and to be positioned more anteriorly .

this happens in cases of :

\*adenoids +large tonsil🡺 bush the tongue forward.

\*low palate 🡺no space for tongue

\* decreased oral cavity volume whether transverse, width or depth in maxilla or mandible … e.g(sever mandible deficiency " retropnatism ( small mandible) so the tounge come out )

\*hypoTonya of the tongue 🡺relax muscle

11)bifid tongue:

Cleft tongue and separated into two parts like the snake

Rare

Associated with ankylogssia " developmental abnormalities of the tongue " .. In which cases ???

in sever cases surgery is required

12)lingual thyroid nodule

the thyroid starts development from the foramen cecum , if this development wasn't normal, failure of epithelial migration may occur , so we'll find thyroid tissue in the foramen cecum area or at any distance between foramen cecum and the normal thyroid location.

Nodule, mass at junction between (anterior 2/3 and posterior 1/3 of tongue )🡺formation cecum .. border =circumvallate papilli.

Failure migration of thyroid gland .

Proliferation of tongue area 🡺 thyroid tissue

normal thyroid or not ???

become apparent during puberty or adolescence

Complication " due to a mass at the posterior part of the dorsum of the tongue " :

affect breathing ,swallowing ,nausea " Because touch soft palate 🡺 gag reflex " , Trauma (bleeding ,ulceration )

Need management.

70% no thyroid tissue in the neck :

\*1/3have hypothyroidism

\*2/3 normal 🡺thyroid stimulate hormone

Stimulate that in the tongue " inlarge " to replace hypothyroidism

\*avoid biopsy ". 70% of patients with lingual thyroid don't have thyroid tissue in the neck and around 1/3 may have hypothyroidism, so if we did the biopsy for them we'll deprive those patients from the only source of thyroid hormones " 🡺(hypothyroidism collapse),hypo tension ,hypoglycemia ,loss of consciousness , die

so check the neck thyroid ,if it's found u can remove oral one .

\*thyroid scan :use iodine isotope or techretium 99m (is the solution instead of thyroid biopsy. In thyroid scan we'll use radiography investigations to tell us where's the thyroid tissue, is it in the tongue or the neck, in this picture we'll find the mass in the tongue )

CT.MRI: size, extent of lesion

if u remove oral thyroid " and theres no neck one " give hormone replace therapy or transplant .

where is the parathyroid in the patient of lingual thyroid???

what happens if a patient with lingual thyroid takes thyroxin???. regress in size

GOOD LUCK ^^..

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