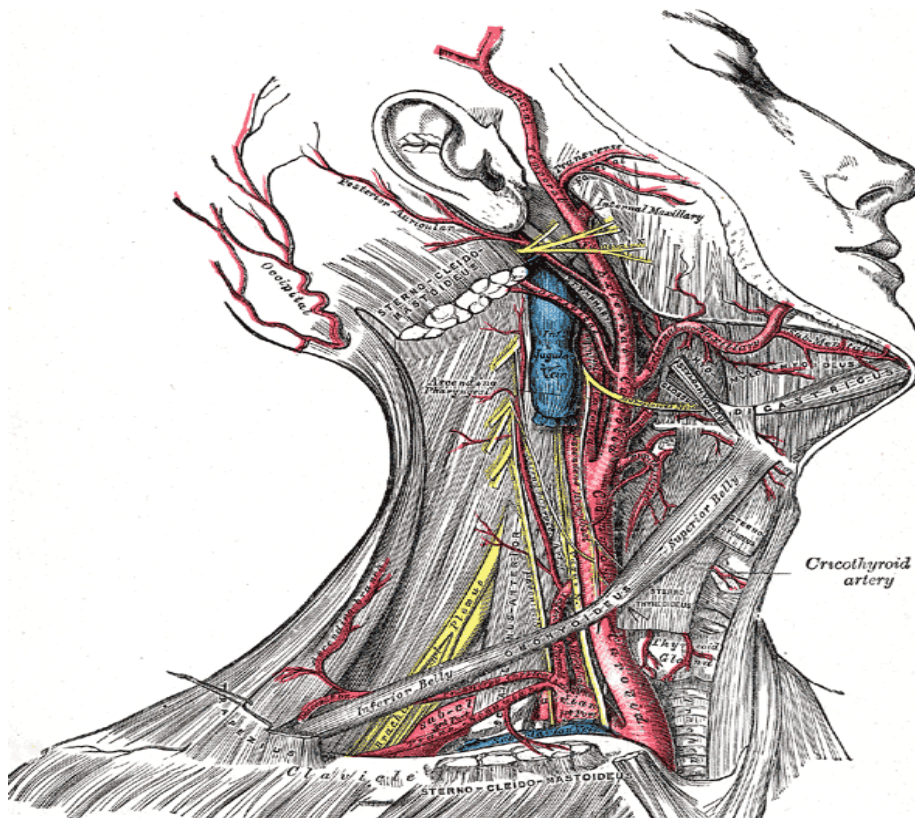




Head and neck



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Correction File

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Neck mass

Introduction:

Neck mass is a common complaint that requires systematic clinical approach in order to get a final diagnosis and set an appropriate management plan. The most effective and accurate screening tool is actually obtaining a good medical history and performing physical examination. When taking history please pay attention to the points below:

- Common clinical findings:

- 1- **Dysphagia:** is something serious you should pay attention whether it is progressive and/or associated with Weight loss → suspect malignancy. However sometimes it is totally and unrelated – as simple as GERD- but it is always better being cautious than relaxed.
- 2- **Hoarseness:** it is of particular importance when it comes to distinguish between a primary vocal cord pathology i.e. laryngeal mass or an infiltrating neoplasm invading the recurrent laryngeal nerve causing paralysis e.g. malignant thyroid carcinoma
- 3- **Aspiration**
- 4- **B-symptoms :** (fever , weight loss , night sweat)

Considerations:

- 1- **Age group:** any neck mass in a patient above 40, you have to rule-out malignancy. If the patient is young, the most likely cause is congenital condition or inflammatory. So ask about inflammation signs
 - **Generally :**
 - Pediatric: (0-15) → benign congenital – inflammatory
 - Young adults: (16-40) → benign tumors / congenital
 - Old adults: (>40 year) → suspect malignancy
- 2- **Location:** Any condition in ENT with unilateral manifestation (nasal obstruction, hearing loss, ear pain, neck mass etc.) you have to rule out malignancy. It is extremely important in order to have a clear DDX and clinical approach as a certain area of the neck has its own differential whether it is congenital or metastatic – see the next page.
- 3- **Duration:** week or less think about inflammatory, years think of benign conditions, months to year think about malignancy
Pay attention to both duration and age in the coming examples:
Patient presents with a neck mass for 7 years → mostly benign
12 year old presents with a 3 months history of neck swelling → mostly congenital
70 year old with mass for 3 months history of neck mass → mostly malignant

- 4- **Course:** progressive symptoms tend to be serious.
- 5- **Habits:** smoking, alcohol all are carcinogens
- 6- **Family history**
- 7- **Surgical / radiation in the area**
- 8- **Medication/ allergy.**

Anatomy:

Anatomical land marks: the ONLY obvious landmarks in every single patient including obese.

- Angle of mandible
- Clavicle

So make sure you locate them before starting your examination. In the mid-line of the neck, there is a cricoid. Anything above the cricoid is called **upper midline**. Anything below the cricoid to the Suprasternal notch, we call it **lower Midline**.

Neck triangles:

1- Anterior triangle:

Boundaries: SCM posterior, mandible superiorly and anteriorly the midline. It has 4 levels of lymph nodes (will be discussed

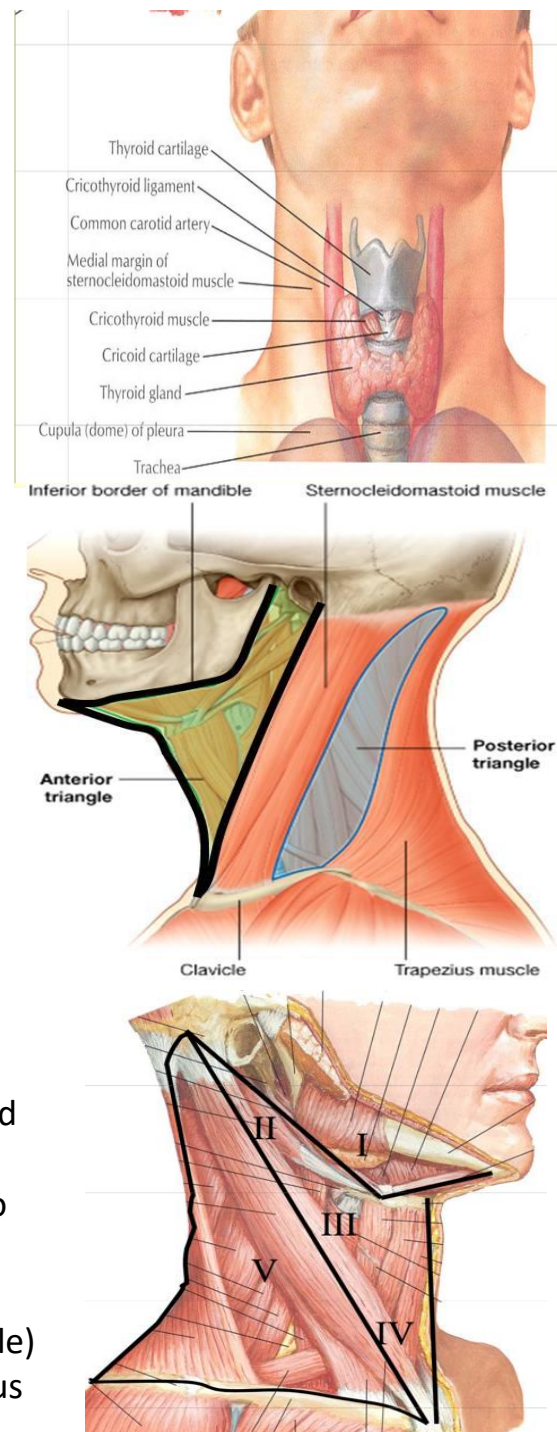
2- Posterior triangle:

It has one lymph nodes (number 5)

The lymph nodes in the neck are divided into 7 levels:

- **Level 1:** Between the 2 bellies of digastric muscle (submandibular triangle).
- **Level 2:** Deep jugular chain (from skull base to hyoid bone)
- **Level 3:** Deep jugular chain (between hyoid bone to the omohyoid muscle)
- **Level 4:** Deep jugular chain (below omohyoid muscle)
- **Level 5:** Posterior triangle (from SCM to the trapezius muscle)

Level 6 & 7 are not palpable; you don't need to know them in this level"

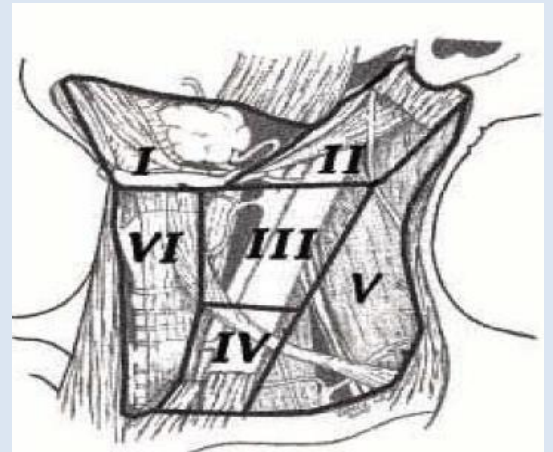
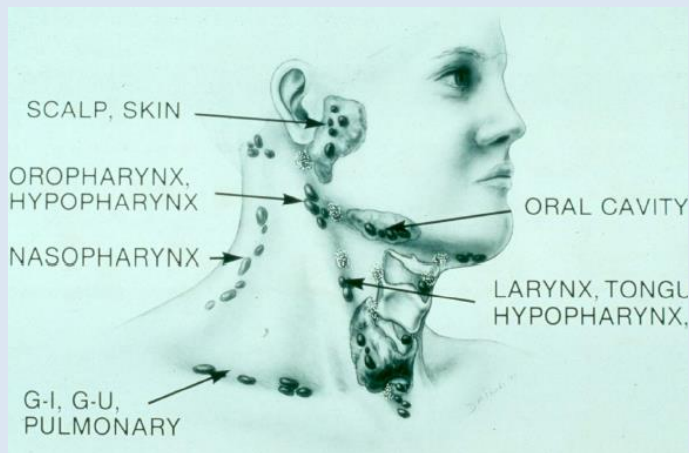


In summary: from the doctor!!

Level I: anything that is below the mandible and above the level of hyoid bone

Level II,III and IV: anything behind the angle of the mandible and going all the way down to the attachment of SCM to the sternum divided to 3 levels upper middle and lower representing level II,III and IV respectively.

Level V: anything laying behind the mastoid in supra clavicular area



Notes:

Lesions of the **skin** usually metastasize to **level II**. So examine the skin carefully including the **auricle**..etc. **Level II** – high posterior triangle: think of **nasopharynx**
Laryngeal Mets usually around the larynx itself
 Submental lymph nodes → examine the **oral cavity** mouth floor buccal area and gums
Posterior triangle nodes: think of **thyroid**.
 Sometimes the carotid is prominent and appears as a pulsating mass it is just a normal vibration nothing to worry- **carotid bulb**.

Examination of the head and neck:

It is important to examine 8 areas. Because some patient may have synchronous tumors (thyroid cancer coexisted with parotid cancer in the same time)



1. **Neck:** midline of the neck and 5 levels of lymph nodes
2. **Face:** included the parotid gland.
3. **Oral cavity :** look and palpate all hidden areas(floor of tongue must be looked at to not miss base of tongue tumors especially in those who chew on tobacco -aka Khat-)
4. **Nose:** (with flexible scope)
5. **Nasopharynx** (with flexible scope) ← the comments head and neck tumor other than thyroid don't miss it the commonest presentation is neck mass
6. **Oropharynx** (with flexible scope)
7. **Hypopharynx** (with flexible scope)
8. **Larynx**
9. **Extra:** Perform a full examination of the mass: including detailed characteristics size shape surface pulse number skin attachment skin changes discharge consistency ...etc .
 Perform an Indentation, transillumination and fluctuation- Paget's- Tests. Check reducibility and compressibilityetc
Remember: Check the ear canal for possible skin lesions!

Deferential diagnosis:

After history and examining you should've formulated a deferential list that directs you to the appropriate investigations and final diagnosis in time and cost effective manner.

Table 1. Common Neck Masses

| Neoplastic | Congenital/Developmental | Inflammatory |
|--|--|---|
| Metastatic Unknown primary epidermoid carcinoma | Sebaceous cysts Branchial cleft cysts | Lymphadenopathy Bacterial Viral Granulomatous |
| Primary head and neck epidermoid carcinoma or melanoma | Thyroglossal duct cysts | |
| Adenocarcinoma | Lymphangioma/hemangioma | Tuberculous |
| Thyroid | Dermoid cysts | Catscratch |
| Lymphoma | Ectopic thyroid tissue | Sarcoidosis |
| Salivary | Laryngocele | Fungal |
| Lipoma | Pharyngeal diverticulum | Sialadenitis |
| Angioma | Thymic cysts | Parotid Submaxillary Congenital cysts Throtrast granulomas |
| Carotid body tumor | | |
| Rhabdomyosarcoma | | |

If you have a clinical suspension of an **inflammatory cause** (redness, worm, tenderness, pus, tonsillitis, peritonsillar abscess) which usually found in children **start an empirical trial of antibiotics for 2 weeks**.

- Follow the patient up and see if there is symptomatic relief and reduction of the swelling size by at least 50% then it is mostly inflammatory and is responding.
- If there is no response or partial response the condition requires further investigation. Remember that some tumors partially responds to Abs.

Investigations:

- 1- **Fine needle aspiration gold standard:** it gives you a direct cytological features (**diagnostic**)
 - Any neck mass that is not an obvious abscess
 - Persistence after 2 weeks course of antibiotics
- Small gage needle: reduces the bleeding. Seeding of tumor is not the concern when it comes to FNA.
- Requires proper collection and minimum of 4 separate passes and a skilled cytopathologist
- Contraindications: in vascular tumors (pulsatile mass) wait for radiological images

If you took a FNAB from your patient and found to be inconclusive or with bleeding. The next step is to take the patient to the OR and under GA preform a thorough **examination** with tonsillectomy and pan endoscopic biopsy to make sure there is no neoplasm in the oral cavity, nasopharynxEtc.

And only if those were negative you can perform an open neck node excision.

Open neck excision → decrease survival by 20% why? 1. Decreased vacuolization after decrease the effects of radiation 2. It forces tumor to metastasize to other sites due to blocked lymph nodes

2- CT:

It is a diagnostic radiological image that tells you the possibility of a diagnosis not a diagnosis

- **Distinguish cystic from solid**
- Extend of lesion
- Vascularity
- **Detection of unknown primary in case of metastatic masses**
- Pathological nodes require further investigations:
 - **1.5 cm** and more
 - **Loss of shape, asymmetry**
 - **Necrosis and calcifications**
 - **enhancement**

Case: patient comes to you with clear presentation of nasopharyngeal tumor, you examined the patient thoroughly and found a bit of plugging in the nasopharynx with a neck mass but don't know the source. So you ordered a CT and the image shown above.(pic.1)

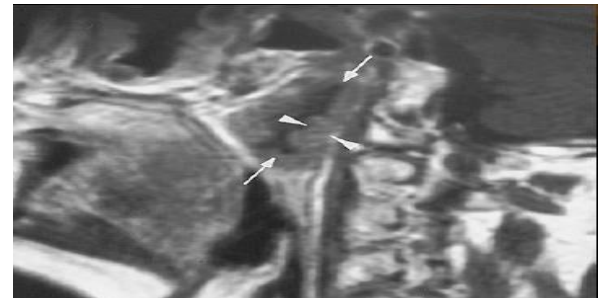
3- **MRI:** like CT but it gives you better view for soft tissue and it is better for upper neck and skull base.pic.2.

4- **Ultra sound:** **best initial and gold standard for thyroid masses**, noninvasive in case of pregnancy and children.

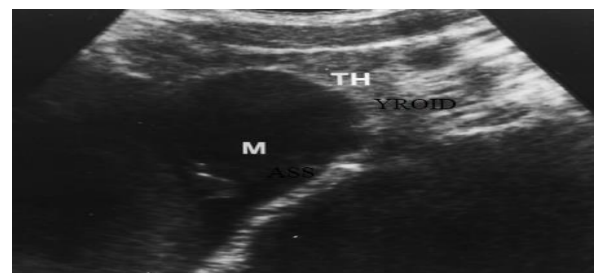
It differentiates between inflammatory conditions (abscess, lymphadenitis and thyroiditis). Differentiates between cystic and solid masses, congenital cysts vs solid nodules. The only drawback is that it is operator dependent.



Pic.1: CT showing an invasive mass going inside the nasopharynx eroding the pterygoid plate posteriorly



Pic.2: prevertebral fat going up then you completely lose so it is deeply invading the prevertebral fascia.



5- Radionuclide scanning:

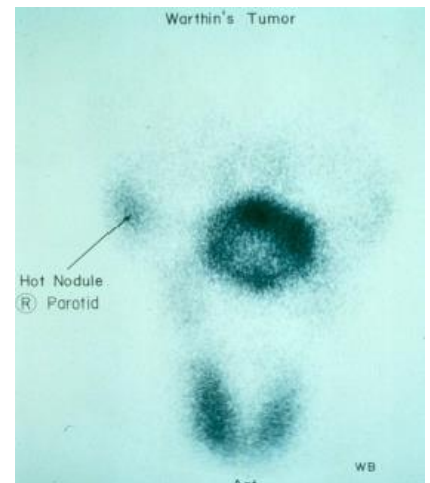
- Salivary and thyroid masses
- Location – glandular versus extra-glandular
- Functional information
- FNAB now preferred for thyroid nodules
 - Solitary nodules
 - Multinodular goiter with new increasing nodule
 - Hashimoto's with new nodule.

Notes:

PETs → unless you have a diagnosis of carcinoma don't order won't add you any value it is mostly used as baseline before starting the management plan – used as a reference.

I 131 → used in the treatment of grave's disease.

→ Treatment and screening after thyroidectomy for thyroid carcinoma patients. (postoperatively)



Inflammatory disorders:

1- Lymphadenitis:

- Very common especially within 1st decade
- Tender node with signs of systemic infection
- directed antibiotics therapy with follow up
- FNAB indications in pediatrics:
 - 1- Activity of an infection without response
 - 2 -Progressivly enlarging
 - 3 -Solitary and asymmetric nodal mass
 - 4-Supraclvicular mass (60% malignant)
 - 5-Presistent nodal mass without active infection.
- Equivocal or suspicious FNAB in the pediatric nodal mass requires open excisional biopsy to rule out malignant of granulomatous disease.

2-Granulomatous lymphadenitis:

it is an Infection develops during weeks to months with Minimal systemic complaints or findings

- Etiologies: TB, atypical TB , cat-scratch fever , actinomycosis, sarcoidosis
- Firm relatively fixed node with injection of skin
 - 1- TB
 - 2- Cat-scratch fever (bartonella)

Note: Any solid asymmetric mass must be considered neoplastic until proven otherwise
Asymptomatic cervical mass in adults 12% are cancer and 80% of them are squamous cell carcinoma.
Ipsilateral otalgia with normal otoscopic examination so direct attention towards the tonsils base of the tongue and hypopharynx.
Unilateral serous otitis media examine the nasopharynx

Granulomatous lymphadenitis

| TB | | Cat-scratch fever (bartonella) |
|--|---|--|
| Typical | Atypical | |
| more common in adults | pediatric age group | Pediatric |
| posterior triangle | anterior triangle | Preauricular and submandibular nodes |
| responds to anti TB | responds to complete surgical excision or curettage | Spontaneous resolution with or without antibiotics |
| may require excisional biopsy for further workup | brawny skin induration and pain | - |

Congenital and Developmental Mass:

Case 1: A 70-year-old, he is healthy and not smoker. He has this neck mass (picture) in the level 2. It has been there for 10 years. He has no complaint. He just visited his son in Riyadh and his son brought him to you.

Q1: What is level 2 in the neck?

From skull base to the hyoid bone.

Q2: What will you do next in this patient?

Examination the 8 areas to exclude other masses

Q2: Everything was normal in the examination, what is the next step?

CT scan followed by FNA.

FNA showed epidermoid cyst

Case 2: A 24-year-old patient presents with level-2-neck mass. He had a history of Tonsillitis. On examination: it looks red and tender. Face examination has shown changed in the appearance of the face (VII palsy)

Q1: What will you do next in this patient?

Examination and history are suggestive of inflammatory condition. So, empirical treatment.

Case 3: A 13-year-old patient presents with midline-neck Mass. On examination it moves with swallowing.

Q1: What is the most likely diagnosis?

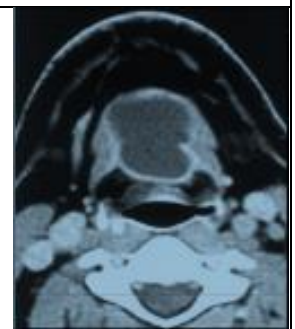
Thyroglossal Duct Cyst





Q2: Mention other DDx seen in mid neck?

Bulging granula (children)

Teratoma (children)

Q2: Mention the most likely diagnosis. Branchial Cleft Cysts



| Epidermal and sebaceous cyst | Branchial cleft cyst | Thyroglossal cyst | Vascular tumours |
|--|--|---|---|
| Older age group | Older children and young adults | 50% before 20 | Usually within first year of life |
| Painless neck swelling | Lateral Neck swelling Following an URI | Midline neck swelling | |
| elevation and movement of overlying skin Skin dimple | Smooth, fluctuant mass underlying the SCM. Erythema may be present if infected. | Midline / near midline Just inferior to hyoid bone Elevates with swallowing and Tongue protrusion | CT , MRI may be helpful |
| CT followed by FNA. excisional biopsy confirms | | | |
| Excision | Control the infection Surgical excision including tract. 1st cleft → may require a total parotidectomy | Surgical removal (sis trunk) after resolution of infection | Lymphangioma: Surgical excision for easily accessible lesions affecting vital functions , high recurrence Hemangioma: Surgical excision for those who have rapid growth affecting vital structures and/or associated with thrombocytopenia with failed medical therapy |
| The most common congenital mass | Types: 2nd cleft → commonest between external and internal carotid medial to CN VII 1st cleft less common → close association with facial nerve. | 75% → midline 25% → near midline | Hemangioma often resolves spontaneously while lymphangiomas Remines unchanged |
|  |  |  |  |

Cases of Head and Neck Masses

Alarming signs:

- Hoarseness : **(Larynx or affecting laryngeal function)** It means lesion on the vocal cords so there's phonation with normal time because the vocal cords moves but hoarse voice due to the abnormal vibration of them. While in vocal cord paralysis (thyroid cancer invading the recurrent laryngeal nerve) the vocal cords are abducted (only one vocal cord is moving) and airway is not closed so the pt speaks with breathy voice (short phonation time max 4-5 sec while in normal ppl 20 sec) short sentences with effort to speak.
- Unilateral nasal Blockage : if combined with neck mass, check nasal cavity and look for nasopharyngeal carcinoma.
- Ear pain with normal ear examination: referred pain : R/O **base of tongue lesions, laryngeal lesion, hypopharyngeal lesion** and hidden tumors!
- New onset of Epistaxis : **Adult new onset could be nasopharyngeal cancer bleeding or oropharyngeal or simply some drugs**
- Neck mass with no associations: **you have to find the cause!**
- Non healing Ulcer: **always indicative of tumor! Ulcers should heal if they don't there's something serious going with them! Biopsy is MANDATORY!**
- Facial weakness: **Facial nerve Palsy (It's Bell's palsy If idiopathic affect all branches Acute onset negative other findings recover spontaneously in 90% If didn't within 6months look for the cause it's not Bell's palsy)**
- Facial numbness: **Trigeminal nerve (upper alveolar carcinoma invading Maxilla affecting the maxillary branch of the trigeminal – nasopharyngeal carcinoma invading the skull base in the cavernous sinus and affecting the ophthalmic branch or the trigeminal as whole)**
- Dysphagia – Odynophagia
- Diplopia: **cavernous sinus invasion affect abducent nerve near the nasopharynx.**
- Difficulty in Denture applying – poorly fitting denture or painful: **ulcer or malignant changes or premalignant lesions hidden!**
 - Risk factors :
 - Smoking
 - Alcohol
 - Dust exposure – النجارين more likely to have Sinonasal tumor
 - Sun exposure – squamous cell carcinoma
 - Previous Scar or Burn if chronically inflamed can be turned into malignancy!
 - Family history of : lymphoma thyroid carcinoma.
 - Immune Deficiency : lymphoma, Kaposi carcinoma
 - History of other cancers (10% of cancer patients tend to have another cancer in their life span)

Case 1:

(Young boy was fine until he developed URTI 2 weeks ago, he was fine for 2 days after the infection resolved then 5 days ago started to notice a neck mass)

Child presented with rapid growing neck mass, low oral intake, irritability, dry mouth and skin, fever, and history of sore throat 5 days ago.

Dx: abscess formation

TX: Incision and drainage with antibiotics



Case 2:

Old man with neck swelling in the submandibular area with diffuse erythema around it for 5 days, He has no fever, quite tender when he touch it and he never had like this swelling before

On examination edematous area, no lymph nodes except for small lymph nodes in the same region

Oral cavity examination which is completely important in these cases was normal!(to exclude any thing comes from inside or went inside from out)

Dx:

Simple Cellulitis (Presents like mass under skin and tender)

Tx:

Antibiotics, observe other causes (if diabetic make sure you control DM)



Case 3:

Patient presents with bilateral neck mass for 8 months and he is asymptomatic noticed by his family.

The mass moves with swallowing, not with tongue protrusion!

Dx:

Benign thyroid nodule

Investigation:

Neck examination, FNAB, TSH

FNA: cytological diagnosis with specific classification: 6 types (no one will ask you about)

Type 1 : only blood only fluid not diagnostic; it's like you have done nothing !

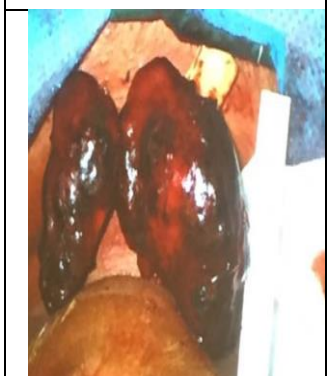
Type 2 : Benign in only like 90% of cases, so there's still a chance that it's malignant so you evaluate with US: growth!

Type 3 (follicular lesion of atypia of undetermined significance 15-20% Malignant) and 4 (follicular neoplasm 40% Malignant) and

5 (suspicious for papillary thyroid carcinoma 60% Malignant): suspicious!

Type 6: papillary thyroid carcinoma in 90% of cases !

Tx: surgical excision (total Thyroidectomy) either for it's size or compression symptoms or malignant FNA or family history of thyroid cancer



Cystic left lobe

Case 4:

80 years Old lady with left temporal lesion with necrotic center deep ulcerating the skin rolling down edges (something wrong form in out!)

Dx: (DDx: Leishmaniosis)

Basal cell carcinoma to confirm take biopsy from the margins! (Even if it is growing for the past 2 years it considered basal because it is the commonest.)

Examine the depth of invasion, facial nerve involvement, any lymph node, any eye involvement!

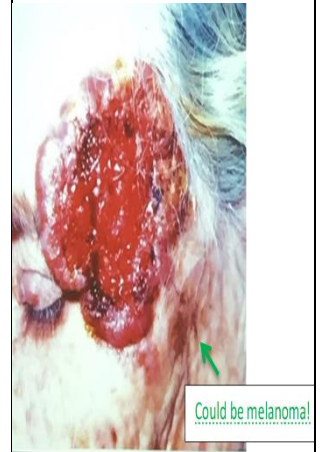
Investigation:

Biopsy (we took the biopsy from the corner because the center is necrotic)

Tx: Surgical excision if refused radiation is effective.

Basal cell carcinoma is local and slowly growing tumor.

With parotid or lymph node involvement, SCC (shorter duration compared with basal). If the patient present with lesion for 2 months, think melanoma or subcutaneous lymphoma.



Case 5:

(Oropharyngeal carcinoma responds very well to radiation therapy, while oral cavity tumors need surgery)

Heavy smoker heavy drinker patient presents with painful mass in his right side of his tongue.

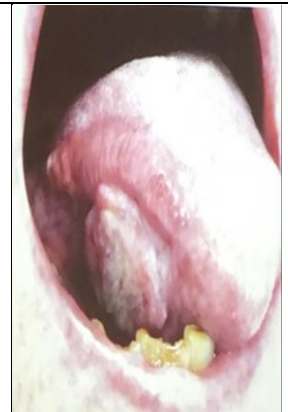
Dx: Most likely not 100% sure! 90% is Squamous cell carcinoma of the tongue

DDX: benign pleomorphic adenoma, malignant salivary gland (minor salivary glands area), also could be sarcoma or lymphoma!

Investigation: **Biopsy** to confirm and CT scan or MRI for metastasis (staging)

Tx: Surgical excision followed by radiation or chemoradiation!

(Up to half of the tongue you can excise without the need for reconstruction)



Case 6: YOU SHOULD FOCUS ON THE HISTORY! 3DDX:

1- If I tell you this pt was well till about 6-7 weeks ago he started to have **low grade fever**, weight loss on examination there were multiple palpable cervical lymph nodes on the right!

Dx: lymphoma (the tonsils itself is huge)

2- IF I give you the same history and tell you that the pt has 2 days history of sore throat and dysphagia and right ear otalgia and high grade fever.

Dx: Tonsillitis

3- Smoker patient otherwise healthy, he started having painful swallowing and pain in his ear for 2 months. **NO FEVER** (the tumor located on the tonsils) **multiple lymph nodes in the neck on examination!**

Dx: unilateral tumor of tonsils **Tonsillar Carcinoma**

Investigation: Biopsy



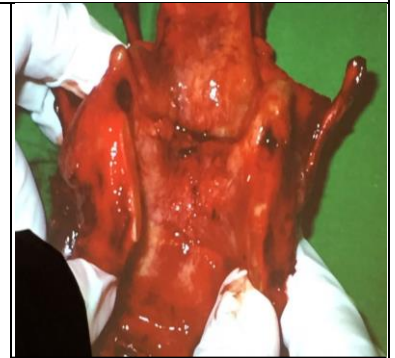
Case 7:

Pt was asymptomatic, lesion was found by his dentist, you can see the uvula is pushed away not central, and the right tonsils not visible most likely pushed posteriorly by something in front of it, the soft palate margins are extended
Dx: Deep Lobe Parotid Tumor



Case 8:

65 year old male heavy smoker(2packs/day for 40 years) patient presented with stridor and hoarseness for 10 months, dysphagia, weight loss and he sleeps on a chair.
And on examination there is neck mass about 4x5 cm in the posterior triangle.
Dx: Laryngeal cancer (laryngeal symptoms: hoarseness, stridor, neck mass)
Tx: Laryngectomy followed by Chemoradiation
Stridor indicates airway obstruction and weight loss indicates severe cases! Sever stridor: breathless when they lay down, walk for short distance or eat!



Stage 4: The Tumor destroying all the larynx No vocal cords with deep ulcers every where

Case 9: Focus on History

- 1- (Low grade fever weight loss mass felt lipomatous on exam not tender associated with multiple cervical lymphadenopathy with hepatosplenomegaly = Dx: lymphoma)
pale, WBC 150, platelets 15-16. Hb 6-7. Dx: Leukemia
- 2- Lady patient neck mass there for 5-6 years slowly growing but she is asymptomatic.
Dx: Benign parotid tumor
- 3- If it was there for the last 7 months severely painful tender and already has facial paralysis and two cervical lymph nodes, skin attached to the tumor. Dx: most likely malignant.
Dx: history and physical exam then FNA then CT or MRI



Conc Case 9

Parotid mass most likely is **80% Pleomorphic adenoma** (benign mixed adenoma) without knowing the history secondary to that is Warthin tumor! This is applied for all other salivary glands!
The most common malignant in parotid is mucoepidermoid carcinoma then adenoid cystic carcinoma, But in other salivary glands it is opposite!

However in a human being the most common salivary gland tumor is Mucoepidermoid carcinoma! Because 90% of malignant salivary gland tumors occur in parotid !

Submandibular: 60% benign 40% malignant

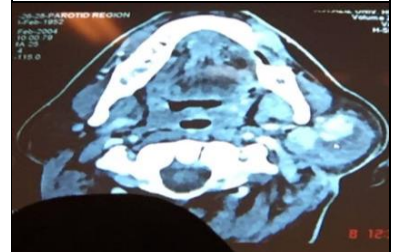
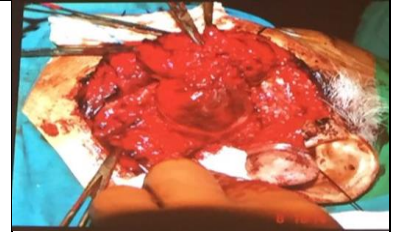
Sublingual: 40% benign 60% malignant

Minor salivary: 20% Benign 80% malignant

The Bigger the gland the more likely to be Benign! BB

Pain, nerve palsy, rapid growing tumor, LN, invasion of skin. (all these symptoms are indications of malignancy).

Tx: Surgical excision



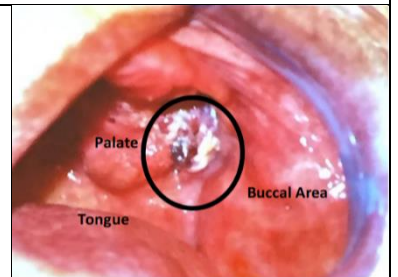
Warthin's tumor on Ct scan and grossly. Coming from and within the deep lobe of parotid gland

Case 10:

Elderly diabetic hypertensive lady has no teeth complaining of poorly fitting denture (تركيبية الأسنان) pain in putting it !

On exam: Huge fungating mass in the side of the gum !

Dx: Squamous cell carcinoma of the upper alveolar invading the maxillary sinus!



Case 11:

Male decided to get married and his future wife commented on his nose that it is abnormal!

The only symptoms he has that he started having difficulty looking at the sides.

On exam the nasal hump was huge so you suspect something pushing the nasal ridge laterally and up !

Dx: Sinonasal Tumor

wood dust association common in carpenters.

On CT: mass sparing all the nasal bone (the bone which should appear white on CT is absent) No orbital invasion!

But on MRI: clearly invading the skin (fat which should appear black is gone!) and it is already going inside the dura !

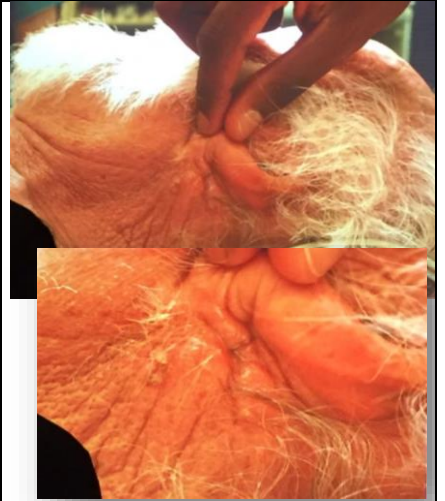
Rx: Total Rhinectomy! With prosthetic nose placement!



Case 12:

Patient post kidney & liver transplant complaining of post auricular draining sinus for almost 3 weeks causing him a lot of pain!
On exam the ear was completely normal!
Should we worry about it?
Yes, because he is immunocompromised!

On MRI there was a mass with sinus through it and invading the parotid anteriorly!
Dx: squamous cell carcinoma of the skin deeply invading to the parotid!



Rx: underwent auriculectomy with temporal bone resection + hearing Aid!

Case 13:

Branchial cleft cyst in atypical age 65y.O.
Neck mass in the mid third of the sternocleidomastoid muscle, deep to it not invading any structures or causes any changes around with no lymphadenopathy!
Rx: surgical excision with following the tracts which extends to the tonsils, it usually has some tracts going deep. If you don't have the tracts completely out you make a chance for recurrent sinus prone to infections!



Case 14:

Old lady present with a mass in the midline of neck moves with tongue protruding!
Dx: Thyroglossal Cyst
Rx: Surgical excision (cyst Trunk procedure) remove the cyst along with the hyoid bone along with tract beyond the hyoid bone to prevent recurrent sinuses or Fistulas!



Remnant of the tracts making a pus draining sinus from the base of the tongue CT: Thyroglossal fistulography Methylene blue darning!

Examples of Benign conditions that could be bothering to the patients:

Case 15:

Cystic lesion or cystic obstruction of salivary gland becoming like a balloon Called Ranula!

Rx: puncture or even remove it but benign condition!

Ranulas are mucoceles that occur in the floor of the mouth and usually involve the major salivary glands. Specifically, the ranula originates in the body of the sublingual gland, and, infrequently from the minor salivary glands.



Case 16:

torus mandibularis normal variation, overgrowing of the mandible thickening, but pt is asymptomatic.



Case 19:

This pt has this lesion for a very long time

Found to be pyogenic granuloma !

He was biting the area and injured it which lead to overgrowth.

Rx: simple excision with local anesthesia!



Case 20:

Pt with history of liver failure on the list for transplant, presented with painful ulcer on his tongue for 3-4 weeks.

Dx: Biopsy showed sialoadenitis which is just necrotizing part of the inflamed salivary gland!

Rx: self limited no need for



Case 21:

Pt heavily smoker presented with dysphagia treated with antibiotics as Adenotonsillitis for almost 2 months, when you examine him you clearly found ulcer in the soft palate.

Dx: biopsy positive squamous cell carcinoma

Rx: chemoradiation



Case 22:

Typical basal cell carcinoma of the auricle.
Dx: confirmed by biopsy!
RX: basically just resection in case of refusal you can go with radiation!



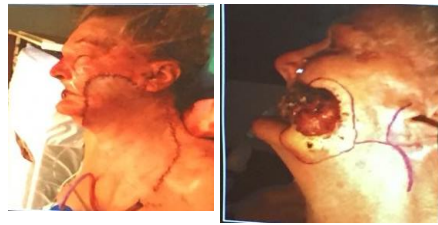
Case 23:

This is a rare case of an elderly lady who present with a fungating mass through her nose.
Investigations and Dx: Biopsy reveals **sinonasal melanoma** it was invading the skin and the septum.
Melanoma doesn't always happen in the skin, mucosal membranes can give rise to melanomas as well.
Treatment: There is no treatment for melanoma except for surgical resection.
Skin melanoma has a bad prognosis. Mucosal melanoma has an even worse prognosis!



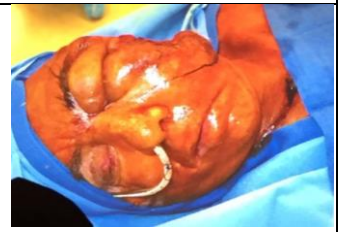
Case 24:

A neglected elderly lady in a nursing home presents with a growing mass on the left side of her neck.
Investigations: Biopsy reveals squamous cell carcinoma. It was a local disease with no metastasis.
Treatment: Patient underwent wide local excision with neck Dissection with parotid.



Case 25:

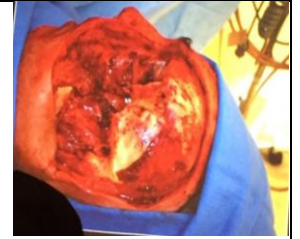
This is a patient with basal cell carcinoma of the temporal area. Treated with radiation 20 years earlier. The patient ignored himself completely and disappeared from followup. He presented 20 years later with a massive tumor eating half of his face.
Now he showed up because he can't see with his eye!
Investigations and Dx: Biopsy reveals squamo---basal cell carcinoma i.e. transformation from basal to squamous cell carcinoma.



Conc Case 25:

Treatment: He underwent massive resection of the whole area. Keep in mind that in patient who received radiation cannot be given radiation again as the tissue would not be able to tolerate it.

Reconstruction is usually done with anterolateral thigh flap; we take a free flap from the leg with its vessels and plug it into the area and reanastomose the skin.

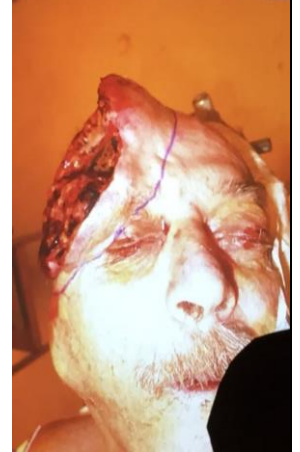
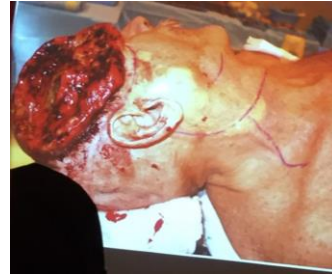


Case 26:

This is another example of ignorance. The patient has **Histiocytic carcinoma** of the scalp. The patient is demented and refuses any kind of treatment.

Finally, his family brought him because they couldn't tolerate his smell.

Treatment: complete resection with radical neck dissection (carotid, internal jugular, vagus nerve, sternocleidomastoid, lymph nodes..etc). This is the tumor in the dura, which was resected and grafted



Case 27:

Lady 80+ complaining of dysphagia, changes of voice inability to swallow, weight loss.

Heavy smokers (10packs/day)

Dx: huge pharyngeal carcinoma invading the base of tongue invading all the surrounding tissues.

Rx: Total laryngectomy : larynx destroyed followed by chemoradiation!



Case 29:

Elderly lady presented with massive thyroid mass.

Investigations and Dx: MRI shows huge thyroid mass, huge cervical lymph nodes compressing the airway.

Biopsy from the trachea showed **anaplastic thyroid carcinoma**. **The rest of the tumor is papillary.**

Anaplastic thyroid carcinoma is worse than any type of cancer.

1year survival rate is less than 2%. In contrast, papillary thyroid carcinoma is curable in more than 90%. The average survival even with metastasis is 22 years. This shows that with thyroid, you could have the best prognostic cancer (papillary) and the worst prognostic cancer (anaplastic).

Treatment: She underwent radical neck dissection (carotid, internal jugular, sternocleidomastoid, thyroidectomy etc..

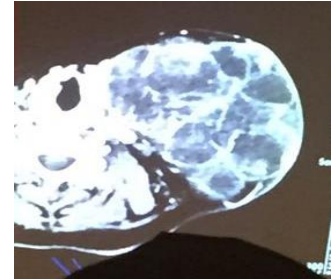


Case 28:

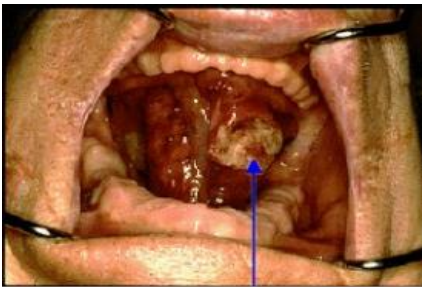
Lady with history of parotid tumor resected, and had three flaps, advised to have radiation therapy but refused!

This is an unfortunate 36 year old lady who had parotid myoepithelial carcinoma which is not that common of a tumor in the parotid. She was treated with resection previously but had declined radiation therapy. She came with a massive recurrence of her parotid tumor. Her MRI shows that her tumor has reached her larynx and has replaced most of the neck. She underwent surgery and reconstruction, and had done quite well from a surgical point of view.

However, she disappeared after surgery without undergoing radiotherapy. She has been seen 6 years after; she was blind at that time because the tumor recurred at the skull base and destroyed her optic canal, she was not able to eat or drink or even talk. She remained in the hospital for 6 months for pain management palliative treatment before passing away.



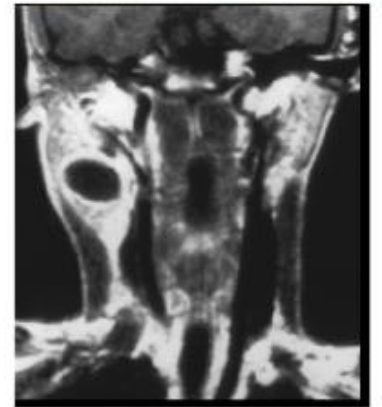
Extra pictures have fun looking at them 😊



pharyngeal CA



Basal cell carcinoma



Branchial cleft cyst



Drainage of neck abscess



Cellulitis



Good luck