

Superficial Swellings

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Color Index:

● Important

● Doctor's Notes

● Extra

● Davidson's

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History of a Lump or an Ulcer

Dr said: At your level you must know the history and physical exam of each swelling. I don't care about the diagnosis of the lumps included in the lecture.

- Duration (when was the first time noticed)
- Discharge
- Who discovered the swelling? A thyroid swelling is usually noticed by the relatives of the patient
- First symptom (how the patient noticed it)
- Other symptoms if there is a thyroid swelling you have ask about general symptoms(hypo-hyperfunction) and specific to the (hoarseness, dysphagia, and shortness of breath)..
- Progression (change since notice) how fast or how slow?
- Persistence (has it ever disappear or healed) a lump that comes and goes? Think of hernia and ask about: is it painful/ painless? When does it appear? While sleeping? coughing?
- Any other lumps or ulcers / any previous lumps in the past. In case of a breast lump it's a must that you ask about family history of breast cancer
- Cause. inflammation? Trauma? Cancer?

Extra: Whenever you ask for a lump or a mass ask about 2 things
 1- Anatomical symptoms for the mass (e.g. in thyroid we ask about SOB and hoarseness of voice)
 2- Systemic symptoms for the mass (e.g. in thyroid we ask about symptoms of hypo and hyper)

Examination of a Lump

Inspection

- Shape
- Site
- Color
- Size
- Surroundings
- discharge

Palpation

- Temperature
- Tenderness
- Surface
- Edges
- Consistency
- Skin
- Attachment

- Mobility
- Reducibility seen in case of a hernia
- Pulsation: the presence of pulsatility indicates the that it's a vascular swelling but sometimes it can be transmitted pulsation i.e there's a vessel underneath.
- Compressibility when you press on it disappears: vascular tumors "hemangiomas"
- Fluctuation fluid or cystic
- Transillumination not sensitive nor specific (Clinically it's not done anymore but you have to do it in the exam)


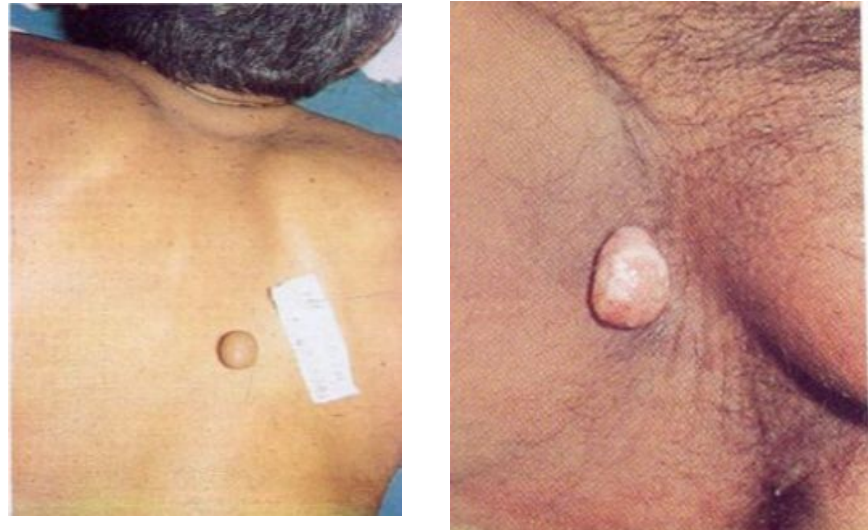
Classification of lumps

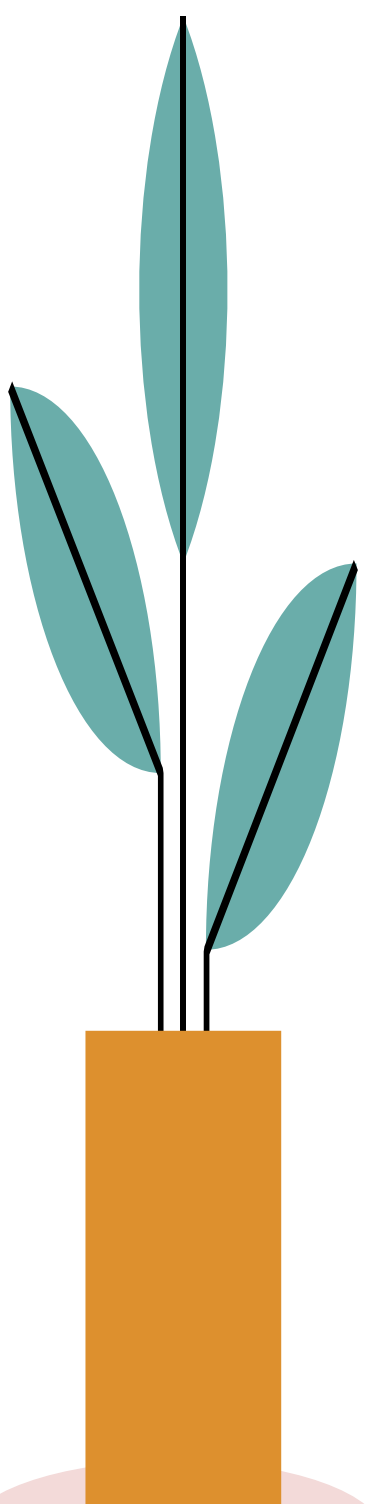
1. Congenital:
 - a. Cystic
 - b. Solid
2. Acquired: (due to infection or trauma)
 - a. Cystic
 - b. Solid

Can be also classified into benign/ malignant

Benign Lumps

Papilloma (warts)

What is it?	<ul style="list-style-type: none"> - Fingers -and hands- like projection of all skin layers. - Usually infective by papilloma virus (called viral warts). 	
Types	1-Pedunculated (have a stalk/neck) 	2-Sessile 
Treatment:	<ul style="list-style-type: none"> • If small or multiple → Cauterization. • If large → surgical Excision. 	




Scars:

- Fibrous tissue proliferation following trauma, surgery, infection (like abscess)
- It is usually flat.

types	Hypertrophic scar	Keloids
<p>What is it?</p> <p>A scar takes its final shape after 6 months. So if it was an ugly scar you shouldn't intervene before that period. It will be of no benefit</p>	<ul style="list-style-type: none"> - Excessive fibrous tissue in a scar. - This is an exaggeration of the normal maturation process. - Such wounds are very raised but never continue to worsen after 6 months. 	<ul style="list-style-type: none"> - Excessive fibrous and collagen tissue. - These are similar to hypertrophic scars except that they continue to enlarge after 6 months.
<p>Gross Feature</p> <p>The results of the pathology are very important: i.e the presence/absence of blood vessels</p>	<ul style="list-style-type: none"> - Confined to the edges of the scar. - NO neovascularization. - Wound infection is an important factor. 	<ul style="list-style-type: none"> - Usually extends beyond the margins of the original scar - There is neovascular proliferation in a scar - They are most likely to occur across the upper chest shoulders and earlobes.
<p>Clinical features</p>	<ul style="list-style-type: none"> - It is a raised, non-tender swelling with no itching. - It may regress gradually in six months - Does not usually recur after excision. 	<ul style="list-style-type: none"> - Initially raised, pink, tender, itchy and may ulcerate. - More common in dark skinned people.
<p>Treatment</p>	<p>Silicone gel and steroid injections. You could leave it and they usually get better</p>	<p>Injection (hyaluronidase , steroids etc.) - Excision & grafting .</p>
<p>example</p>	<p>Hypertrophic scar Normal scar</p> 	



Infantile haemangioma (strawberry naevi):

What?	<ul style="list-style-type: none"> - The most common tumor in infancy. It's congenital in nature - Presents as bright-red compressible raised lesion with an irregular bosselated surface, which changes to a blue color when the baby cries. - They typically proliferate for up to 6 months then remain static for 2-3 years.
Where?	<ul style="list-style-type: none"> - The most common affected organ is the skin, especially in the head, neck, trunk and extremities. - But it can affect other organs (e.g lips , tongue ,liver ,brain).
Treatment:	<ul style="list-style-type: none"> ● These lesions can resolve spontaneously. (you should wait before you interfere) ● Large or ulcerating lesions may be treated with oral propranolol to accelerate involution.
Examples	

Skin Cysts

Dermoid cysts. They are classified to congenital (sequestration) and acquired (implantation) cysts.

Congenital (sequestration) dermoid:

What?	-They arise from nests of epidermal cells that have been sequestered in the dermis which are lined by squamous epithelium. It is benign.
commonly	<p>Common at lines of Embryonic fusion sites:</p> <ul style="list-style-type: none"> ● Midline: neck & root of nose. ● Scalp. ● Inner or outer angles of eyes
Clinical features	<ul style="list-style-type: none"> ● Painless, spherical,cystic mass. ● Appears in childhood or adults. ● Grows slowly ● Smooth surface. ● Not attached to skin. If attached it's either malignant or it has poor prognosis ● No punctum. Thus it's not a sebaceous cyst ● Not compressible not vascular ● Transillumination test is negative. ● No discharge.
complications	Infection.
Treatment	Excision and drainage



Occipital dermoids



nasal root dermoid



forehead dermoid



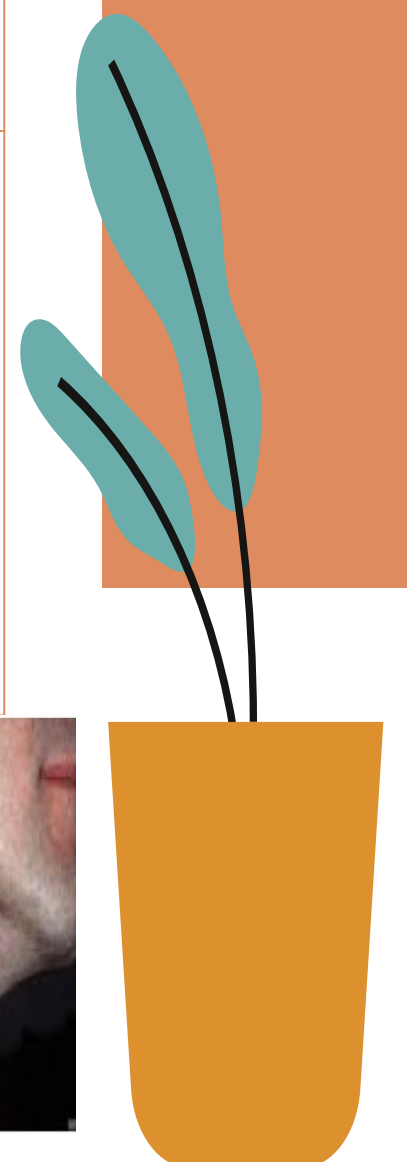
External angular dermoid




Submental dermoid



Infected dermoid

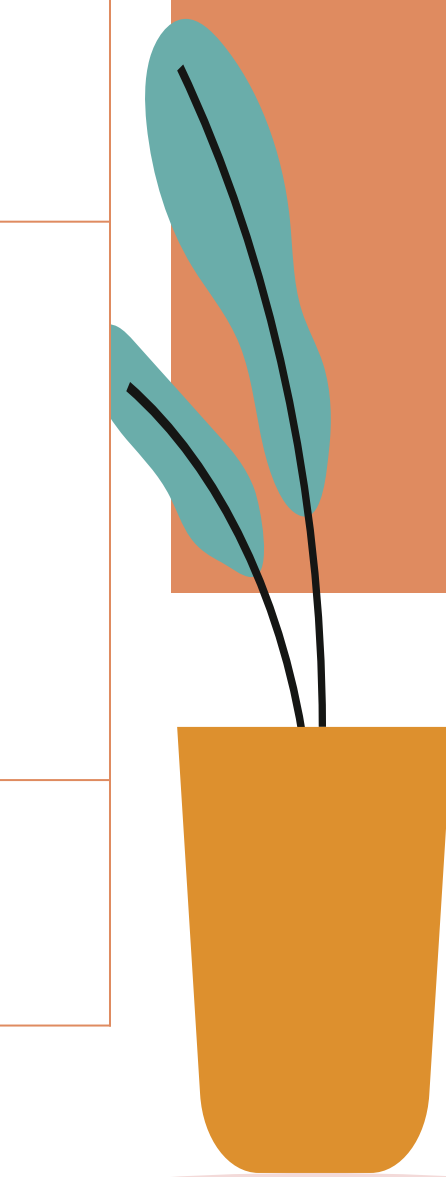


Implantation Dermoid (Acquired):

What?	-It is a post traumatic dermoid
Commonly in	- Commonly in fingers and hands of farmers or taylor
features	<ul style="list-style-type: none"> - Tense, may be hard tender swelling. - Attached to skin which may be scarred. - Contains desquamated epithelial cells. - Pain and ulceration may occur following repeated trauma
Treatment	Excision is curative
Examples	

Epidermoid (sebaceous) Cyst:


What?	Subcutaneous unilocular swellings arising from inflammation in a pilosebaceous unit. Which are common in the head, and axilla neck. They are called pilar cysts if present in the scalp (most commonly) or scrotum.
Clinical features	<ul style="list-style-type: none"> - Spherical, cystic or tense swelling, attached to skin with punctum, a black dot in the middle. It's very diagnostic that may discharge sebum upon squeezing. - They have thin wall of flattened epidermal cells and contain keratin. - If infection supervenes the cyst become hot, red and painful. - Lined by squamous epithelium and contains sebum and desquamated epithelium
N.B	<ul style="list-style-type: none"> -Indentation and fluctuation tests may be positive. -But transillumination test is negative. -Usually asymptomatic but there might be some complication
complications	<ul style="list-style-type: none"> Infection (symptoms are throbbing pain and redness). Ulceration. Cock peculiar tumour (granuloma due to ulceration). Sebaceous Horn (inspissated secretion sebum)
Treatment	- Uninfected cyst → Simple excision.




Examples for Epidermoid (sebaceous) Cyst:

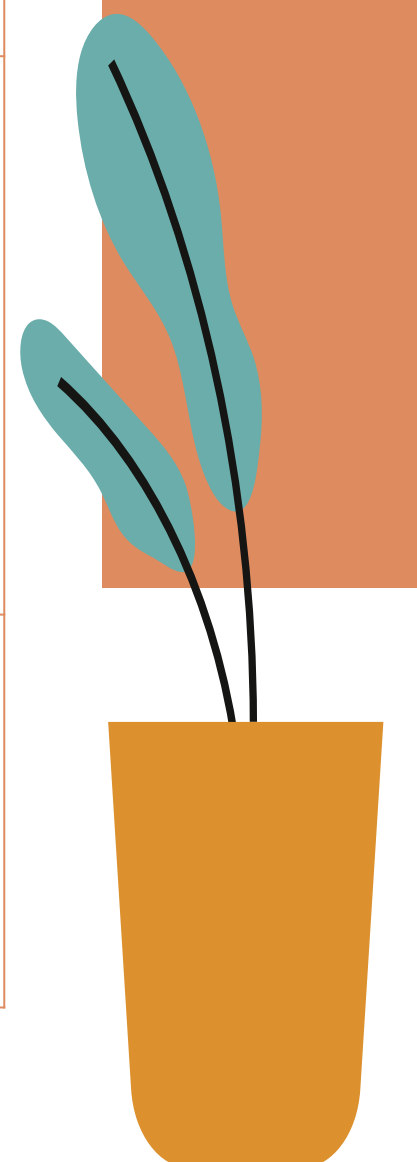


Lymphatic malformation (Cystic hygroma):



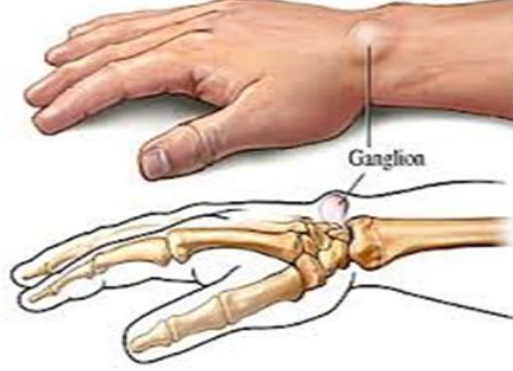




What?	A <u>congenital</u> malformation affecting lymphatic channels.
Commonly in	● Neck. ● Axilla. ● Groin. ● Mediastinum
features	<ul style="list-style-type: none"> - Appears early, painless, multilocular, irregular, filled with clear fluid (transillumination +ve). - Lined by columnar epithelium. - Becomes red when infected.
Examples	 <p>A new born baby with a huge mass in his head or face? Mostly it's lymphatic malformation</p>

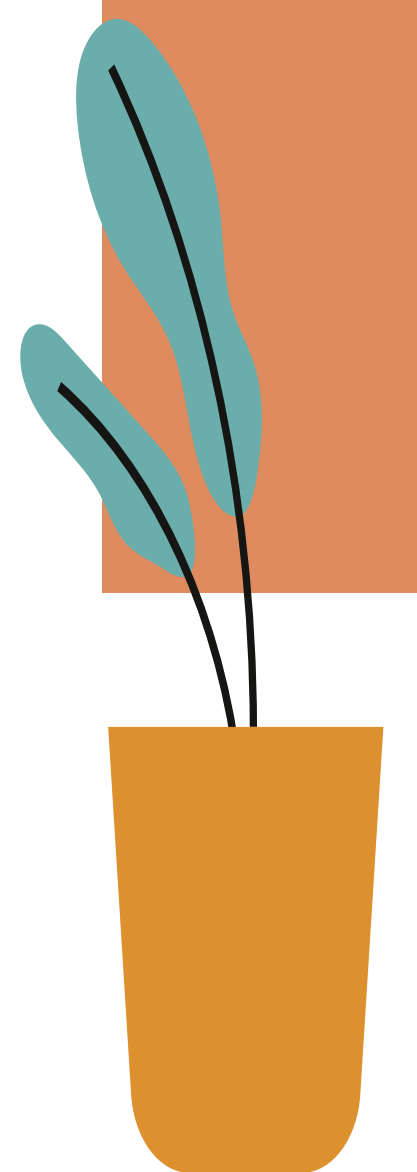
Branchial cyst

What?	- A congenital cyst in persistent cervical sinus below angle of mandible or behind mid s.mastoid muscle. It originates from the 2nd and 3rd branchial arches (cleft).
Clinical features	<ul style="list-style-type: none"> -Tense ,distinct edges, +ve fluctuation and -ve transillumination. -Contains cholesterol crystals
Examples	



Ganglion cyst:

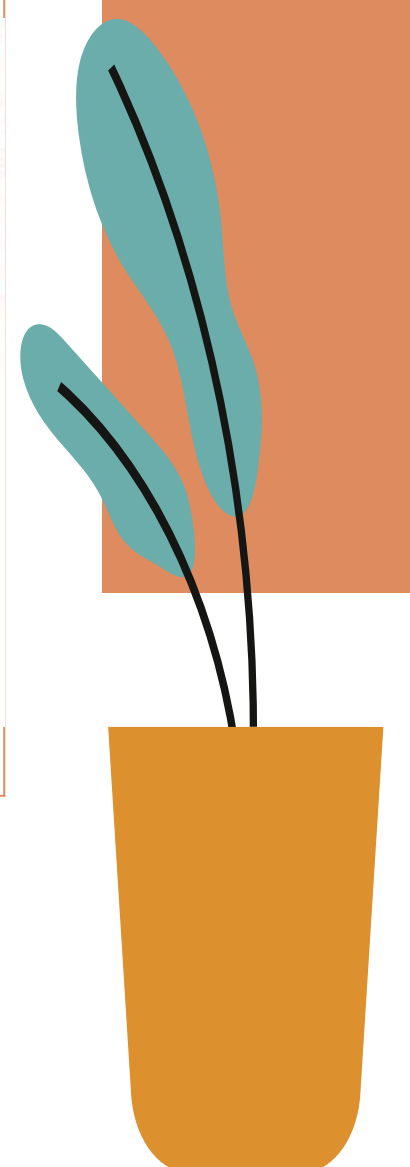
What?	<ul style="list-style-type: none"> - It's a cystic swelling of synovial membrane of tendon or capsule in small joints. - Myxomatous degeneration.
Commonly in	<ul style="list-style-type: none"> - Dorsum of hand and wrist. - Dorsum of foot and ankle. - Palmar aspect of wrist & fingers
features	<ul style="list-style-type: none"> -May be communicating. -Slowly growing lump. -Common in females. -Spherical, firm, painless, cystic swelling. -Mobile across tendon axis but limited along longitudinal axis.
Treatment	<p>Asymptomatic → reassurance.</p> <p>Symptomatic → aspiration or excision.</p>
Examples	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  <p>transillumination test</p> </div> <div style="text-align: center;">  <p>aspiration of ganglion</p> </div> <div style="text-align: center;">  <p>ganglion excision</p> </div> </div>



Tumors of muscles and connective tissue

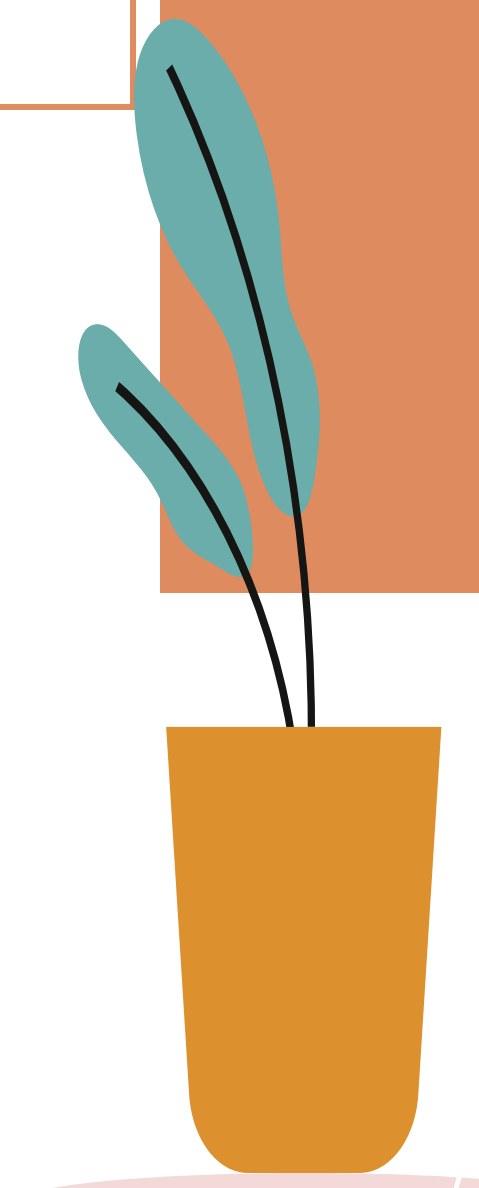
Lipoma:

What?	- Very common, slow growing and benign tumor of fat that forms a soft, mobile subcutaneous mass can be enclosed in a thin fibrous capsule (with well defined edges) or diffuse (with ill defined edges).
Commonly in	Common in trunk, neck and limbs
Clinical features	<ul style="list-style-type: none"> ● Painless, non tender, soft and lobulated lump. ● Well defined edges and skin is free. ● Slipping sign positive. ● Freely mobile. ● Fluctuation test is negative. ● Transillumination test is negative.
Complications	<ul style="list-style-type: none"> ● Necrosis/ulceration. ● Calcification. ● Haemorrhage. ● Infection. ● Rarely transform into liposarcoma.
diagnosis	<ul style="list-style-type: none"> ● Pure clinical diagnosis can be enough... we might also order CT ● Fine needle aspiration.
Treatment	<ul style="list-style-type: none"> ● Small asymptomatic lipoma → reassurance ● Large, symptomatic, and deep lipoma : <ul style="list-style-type: none"> ○ Excision after appropriate imaging. ○ No suspicion of malignancy → liposuction.
Examples	<p>Diffuse: high chance of malignancy</p> <p>Capsulated: low chance of malignancy</p> <p>multiple lipomatosis (Dercum's disease)</p> <p>ulcerated lipoma One of the indications for surgery</p>



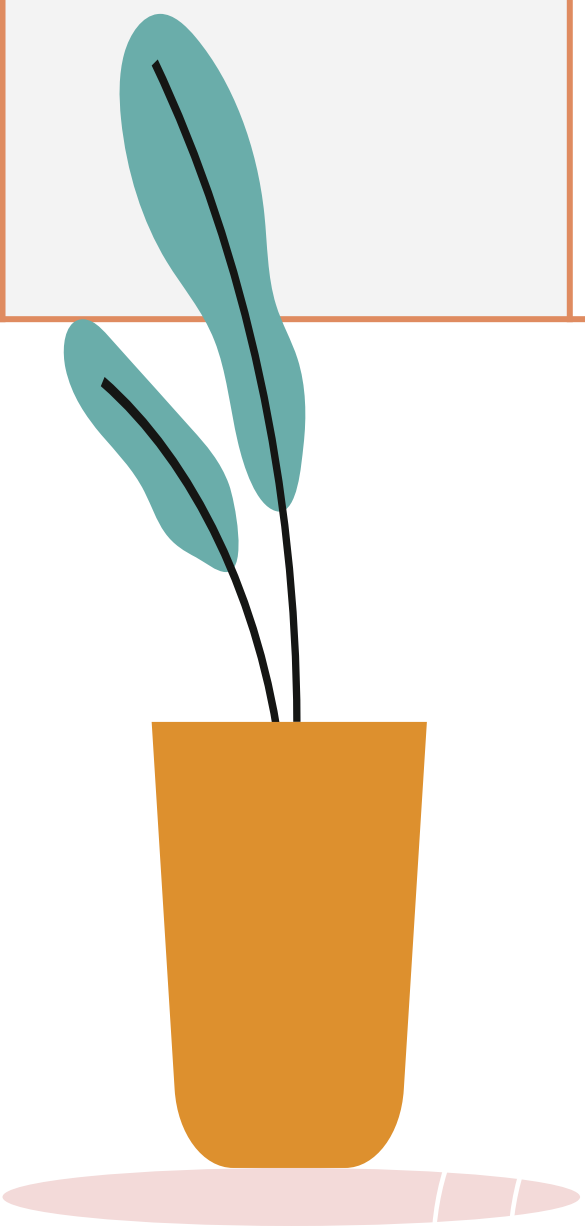
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	notes	treatment
Papilloma	Finger like projections of all skin layers, could be pedunculated or sessile	cauterization and surgical excision
Scars	<p>1-Hypertrophic scar: -Excessive fibrous tissue in a scar that is confined to the scar, with no neovascularization. -It is a raised, non-tender swelling with no itching.</p> <p>2-Keloids scars: -Excessive fibrous and collagen tissue, that usually extends beyond the original scar,with neovascular proliferation.</p>	<p>Hypertrophic scar: Silicone gel and steroid injections</p> <p>Keloids scars:injection, excision & grafting.</p>
infantile haemangioma	bright-red raised lesion with an irregular bosselated surface, which changes to a blue color when the baby cries,affects the skin (head, neck, trunk and extremities) usually compressible and painless	resolve spontaneously
Congenital dermoid	<p>-It is painless, spherical,cystic mass, having a smooth surface.</p> <p>-Common at lines of Embryonic fusion sites: scalp,Inner or outer angles of eyes, neck & root of nose.</p> <p>-Transillumination test → -ve.</p>	excision and drainage
Implantation Dermoid	-Tense, hard tender swelling, attached to skin which may be scarred.	excision is curative



cont.

<p>Epidermoid (sebaceous) Cyst</p>	<p>-Spherical, cystic or tense swelling, attached to skin with punctum. may discharge sebum upon squeezing.</p> <p>-Indentation and fluctuation tests → + ve.</p> <p>-Transillumination test → -ve.</p>	<p>1-Uninfected cyst → Simple excision</p> <p>2-Infected cyst → Excision followed by drainage.</p>
<p>Cystic hygroma</p>	<p>-A congenital malformation affecting lymphatic channels. common in Neck, Axilla, Groin, Mediastinum. -Appears early, painless, multilocular, filled with clear fluid</p> <p>- transillumination → +ve.</p>	<p>Treat if there is compression symptoms</p>
<p>Branchial cyst</p>	<p>originates from the 2nd and 3rd branchial arches (cleft).</p> <p>-Tense ,distinct edges, fluctuation → +ve</p>	
<p>Ganglion cyst</p>	<p>-swelling of synovial membrane of tendon or capsule in small joints.common in Dorsum of hand ,wrist and palmar aspect of wrist & fingers</p>	<p>1-Asymptomatic → reassurance</p> <p>2-Symptomatic → aspiration or excision.</p>
<p>Lipoma</p>	<p>Slow growing and benign tumor of fat that forms a soft, mobile subcutaneous mass ,Painless, non tender, soft and lobulated lump, well defined edges and skin is free, slipping sign positive.</p> <p>-Dx: clinical diagnosis,CT and Fine needle aspiration.</p>	<p>-Small asymptomatic lipoma → reassurance</p> <p>-Large, symptomatic, and deep lipoma : Excision after appropriate imaging.</p> <p>if No suspicion of malignancy → liposuction.</p>



Quiz

1- A woman with history of earlobe trauma presented to you complaining of the shape of her earlobes after wound healing. On examination you see a scar with outgrowing beyond the scar edges. Which of the following is most likely correct about this scar.

- A-Squamous cells predominance with neovascularization
- B-Squamous cells predominance without neovascularization
- C-Rich in fibrous and collagen tissue with neovascularization
- D-Rich in fibrous and collagen tissue without neovascularization

2- A worried mother presented to you with her infant after she watched a medical show about skin cancer. She told you about a raised bright-red lesion on the skin of her child that changes to blue when he cries. Upon examination you suspected an Infantile haemangioma. What would you tell the mother?

- A- The lesion must be removed as soon as possible
- B-These lesions can resolve spontaneously
- C-We should inject the lesion with cortisone
- D-This is a suspicion of skin cancer

3-Transillumination test is negative in all of the following EXCEPT:

- A-Congenital dermoid.
- B-Epidermoid Cyst.
- C-Lipoma.
- D-Cystic hygroma

4- A 41 Y/O male presented with a mass on his scalp after examination it appeared to be a sebaceous cyst. Which of the following is not expected to be seen on examination?

- A-negative transillumination test
- B- punctum (black head)
- C-redness and tenderness
- D-negative Indentation and fluctuation tests

5-A 20 Y/O female presented with a keloid scar after an injury that happened 2 years ago, which of the following CANNOT be used for treatment?

- A- Hyaluronidase injections.
- B- vitamin D preparations.
- C- steroid injections.
- D- Excision and skin graft.

6-A 30 Y/O female presented to the clinic with a Spherical, firm, painless, cystic swelling on her wrist joint, this type of cysts can present in all of the following locations except?

- A- Dorsum of hand.
- B- Dorsum of ankle.
- C- head or scalp.
- D- Palmar aspect of fingers