

Common skin and soft tissue tumors

Dr.Khalid Al-Zahrani

Skin lesions

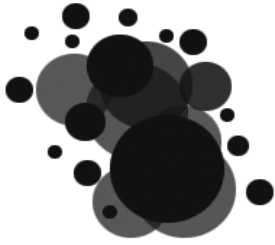
- Pigmented vs. non-pigmented.
- Benign vs. malignant.

Skin-benign-non-pigmented

- **Epidermal:**
 - ✓ SK. Serrokeratosis (can be single or multiple) patch stuck on skin
- **Dermal:** (from the hair follicle, sebaceous gland)
 - ✓ Tricoepitheloima. (in the face, can be single or multiple)
 - ✓ Sebaceous hyperplasia. (in glands, e.g. Rhinoferma→ gives a huge nose mainly from thick skin, foul smelling, presents in Caucasian and > 60 yrs old)
 - ✓ Apocrine vs. eccrine hydrocystoma. (a kind of a cyst arising from the sweat glands, grows with sweating, that's why it increases in the summer)
 - ✓ Eccrine→ thermal regulation, distriputed throughout body, apocrine → in axillary region, function at puberty

Skin-benign-pigmented

- **melanocyte based:**
 - ✓ Epidermal:
 - Café-au-lait.
 - ✓ Dermal:
 - Mongolian spot. (greenish or bluish discoloration in the back and buttock due to decreased migration of melanocytes, appears in neonates then disappears)
 - Blue nevus.



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- **Nevus cell based:**
 - ✓ Nevus cell is actually a melanocyte w/out dendrocytes but rounded with a large nuclei
 - ✓ Congenital. (Giant hairy nevus where the carrier risk for melanoma is 5-10%)
 - ✓ Acquired:
 - Junctional-mixed-dermal (7abba al 5al)

Skin-benign-pigmented

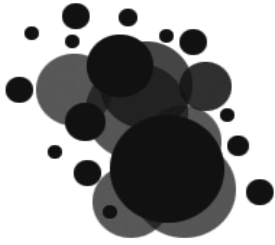


Congenital hairy nevus

- has a malignant potential
- difficult to excise if too large like in this case

Nevus





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Skin-premalignant

(Pre-malignant lesions are benign but can develop into malignant)



Cutaneous horn

- main feature the length > the width (the base)
- May transform to squamous cell ca, in this case needs excision.



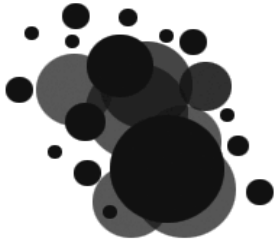
Leucoplakia

- Present in buccal mucosa and commensure
- Due to irritation as a result of (sharp teeth, smoking, alcohol, poor hygiene, spicy food)
- May transform to squamous cell ca.
- Rx: biopsy (if benign only stop the irritating factor)



Nevus capitis of Jadson

- In pediatric pts. (grows w/ age)
- May transform to BASAL cell ca.
- Excised before puberty (12yrs old)



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Porokeratosis

- Will transform to Basal cell ca. in 30% of cases
- Brownish patches, seen in elderly,

Skin-malignant



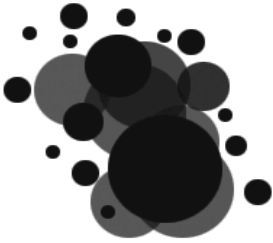
Squamous Cell Ca.

- High risk of malignancy → examine LNs
- Common in :
 - ✓ Fair skin people
 - ✓ ultraviolet light C (C is more carcinogenic than B)
 - ✓ Immunocompromised pts. (specially after transplant)
- It can metastasize to??
- Rapid growing tumor



Basal Cell Ca.

- The most common malignant skin lesion (common site is the nose)
- It doesn't metastasize & slowly growing



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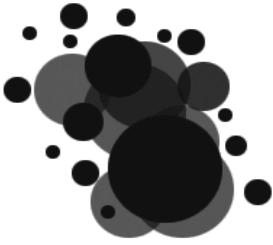
- The most common type is nodular BCCa
- It may ulcerate causing Rodent ulcer
- To confirm Dx, we need biopsy which can either be incisional (whole tumor, if it was small) or excisional (take a small piece)
- Rx: surgical excision + safe margin

☒ N.B: 1st treatment modality for both BCC & SCC is surgery, but it's the margin that differs. In SCC with wide margin(1 cm), but in BCC with narrow margin(3-4 mm).

Melanoma



- The most serious skin malignancy → can metastasize anywhere !
- Most melanomas arise de novo without pre-existing lesion.
- **Clinical types:**
 - ✓ *Superficial spreading.....67%*
 - ✓ *Nodular.....10% (worst than superficial)*
 - ✓ *Lentigo maligna melanoma*



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✓ *Acral lentiginous melanoma.* (mostly in blacks)

- The most important in this tumor is the **depth of the lesion:**

✓ Clark's classification (according to level of tumor)

✓ Breslow's classification (more accurate and the most imp. classification which based on thickness of skin)

- Rx: surgical removal with margin –if the depth of the lesion is 4mm, the margin will be 2-3cm.
- The deeper it is the wider the margin should be.
- Must be excised early because the prognosis is very poor
- **Clark's level:**

✓ *I. in situ.....100% (inbounded by basement membrane, doesn't go further)*

✓ *II. Papillary dermis.....99%*

✓ *III. Papillary/reticular..95%*

✓ *IV. Reticular dermis.....75%.*

✓ *V. subcutaneous.....30%.*

- **Breslow's:**

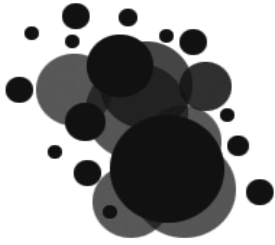
✓ *I. <0.75mm.....100%*

✓ *II. 0.76 – 1.5mm.....90%*

✓ *III. 1.51- 3.99.....88%*

✓ *IV. >4mm40%*

☒ Examine LN, screen for metastasis!



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Lipomas:

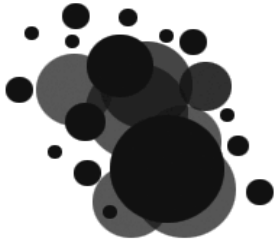
- The most common type is subcutaneous lipoma.
- Can be diffused.

Table 1 Classification of Benign Fatty Tumours of the Upper Limb.

| Cell Origin | Name of the Tumour | Tumour Sub-types |
|----------------------------------|-----------------------------|---|
| Immature fat cell (lipoblast) | Lipoblastoma | Circumscribed, diffuse |
| Mature brown fat cell | Hibernoma | — |
| Mature white fat cell (lipocyte) | (a) Dermal lipoma | — |
| | (b) Subcutaneous lipoma | Single vs. multiple, syndromal vs. non-syndromal, encapsulated vs. diffuse. |
| | (c) Sub-fascial lipoma | Sub-fascial lipomas of the digits, deep palmar lipomas of the hand, sub-fascial lipomas of the arm and forearm. |
| | (d) Muscle-related lipoma | Inter- and intra-muscular. |
| | (e) Bone-related lipoma | Intraosseous, parosteal. |
| | (f) Synovium-related lipoma | Tendon sheath lipoma, joint synovium lipoma. |
| | (g) Nerve-related lipoma | Encapsulated intra-neural lipoma, diffuse lipofibromatous hamartoma of nerve. |

Vascular lesions

- Tumors: they are either tumors or vascular mal formations
 - ✓ Hemangioma.
- Vascular malformation.
 - ✓ Low flow:
 - Capillary, lymphatic, venous or mixed.
 - ✓ High flow:
 - Arterial.
 - Arteriovenous.



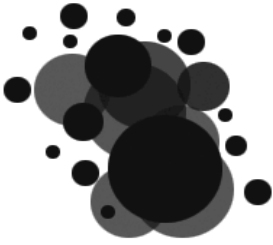
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| | Hemangioma | Vascular malformation |
|------------|---|--|
| Nature | A tumor, increase mast cells, proliferation of.... | Only a collection of abnormal blood vessels(it's not a tumor) |
| Clinically | Congenital, rapid growing appears in childhood, not at birth. the most common benign tumor in children | Present at birth even if not evident. Grows slowly & proportionate to growth of pt. |
| Radiology | | Venus: increase bone growth (hypertrophy) Arterial: obstructive growth (destruction of bone) |
| Rx | Wait and it will disappear (6-7yrs) but if it affects function e.g. Hemangioma eye lid or air way hemangioma Rx. will be medical (steroids) or surgical. | Unless there symptom don't do anything. If there are symptoms or affecting major function: surgical removal |

Vascular-benign





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How to differentiate?

- Definition.
- Clinical.
- histology.
- Radiology.
- Skeletal.

Neurofibromatosis I

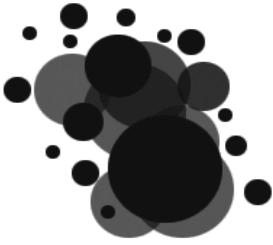
- Café-au-lait >6.
- 2 or more neurofibromas or one plexiform.
- Frekling.
- Optic gliomas.
- Lisch nodules.
- Osseous lesion.
- 1st degree relative.

We need at least 2 of these to diagnose NF1

Neurofibromatosis II

- Acoustic neuroma





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Ganglion cell tumors:

- The most common tumor in hand
- Occur usually inside rist joint
- It is a collection of fluid between rist bones
- Rx:
 - ✓ aspiration or
 - ✓ aspiration+ steroids
 - ✓ But if it is big or had recur causing symptoms- surgical removal+ ligation of the duct.

Others:

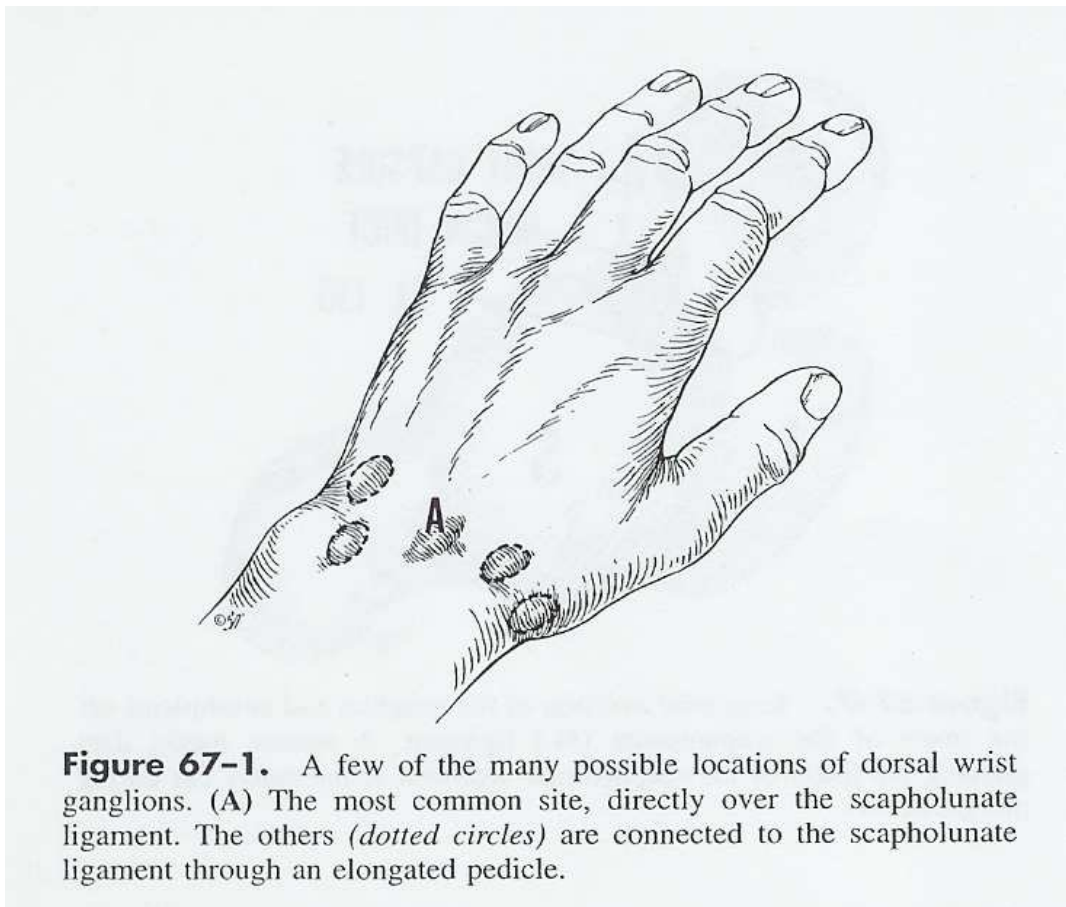
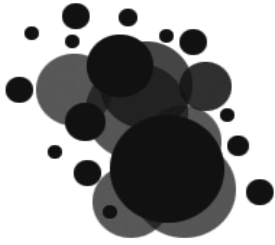


Figure 67-1. A few of the many possible locations of dorsal wrist ganglions. (A) The most common site, directly over the scapholunate ligament. The others (*dotted circles*) are connected to the scapholunate ligament through an elongated pedicle.



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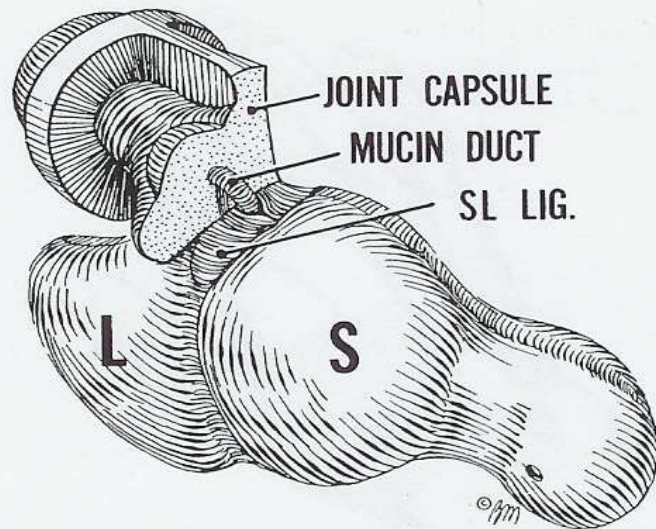
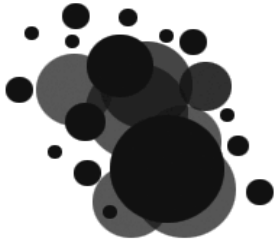


Figure 67-7. Tangential excision of the ganglion and attachments off the fibers of the scapholunate (SL) ligament. A minute mucin duct piercing the fibers of the scapholunate ligament is invariably cut during this dissection.

Pictures:

Skin-malignant

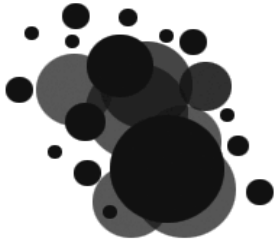




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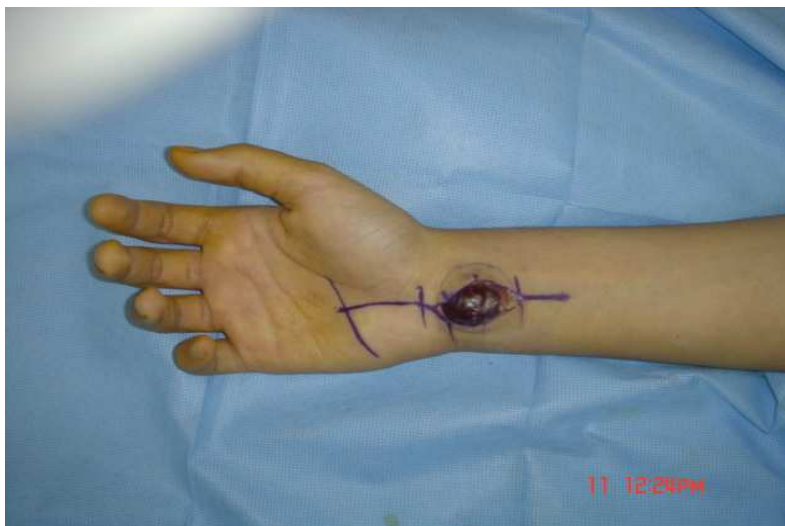


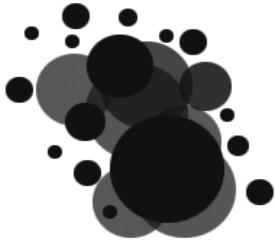


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Vascular-benign



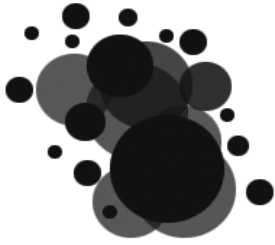


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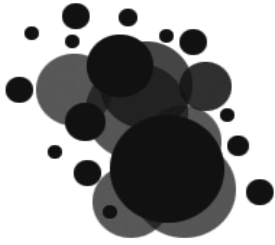
Nervous tissue



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