

SUPERFASCIAL LUMPS

SKIN & SUBCUTANEOUS TUMOURS & CYSTS

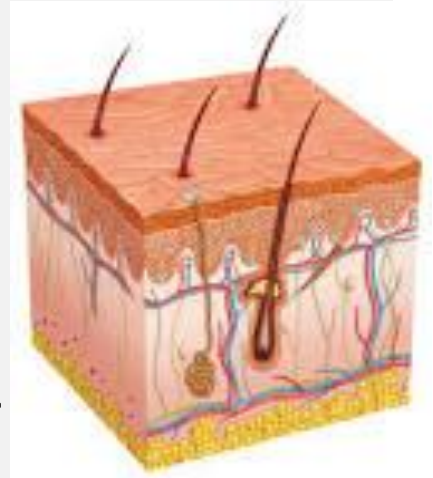
Dr. Mohammad Al-Akeely
Associate Professor
Department of Surgery

Skin anatomy

Epidermis: openings of glands

Papillary dermis: basal cell layer

Dermis : contains sweat & sebaceous glands



Benign skin tumours

papilloma (wart):

- . Finger like projection of all skin layers
- . usually infective (papilloma virus)
- . pedunculated or sessile

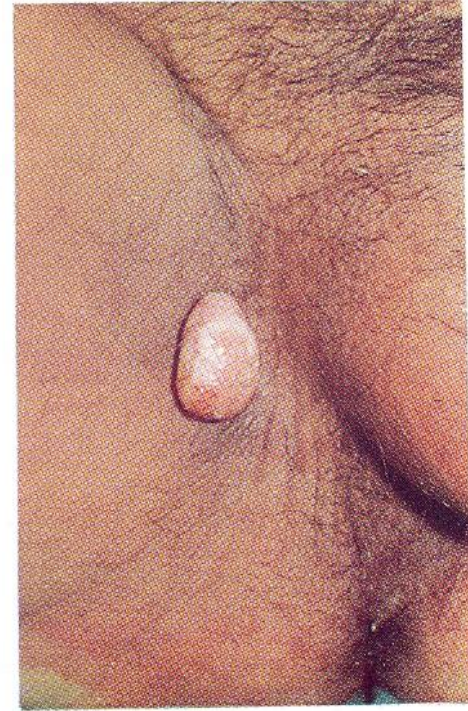
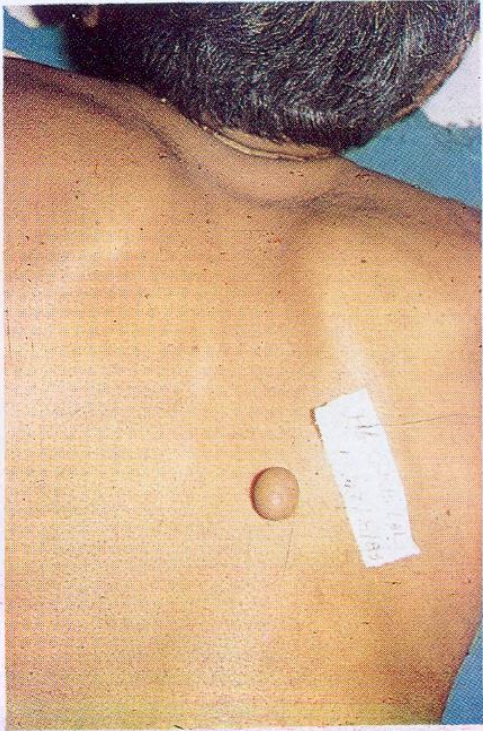
Rx : .Cauterization (small or multiple)

.Excision (large)

- Pedunculated papilloma



- Sessile papilloma



SCAR

Fibrous tissue proliferation following :

. trauma

.surgery

.infection

.It is usually flat.

Hyper trophic scar

Excessive fibrous tissue in a scar

- . confined to the scar
- . no neovascularization
- .wound infection is an important factor
- .clinically it is a raised , non tender swelling with no itching
- .it may regress gradually in six months
- . does not usually recur after excision



Hyper trophic scars:



Keloid



Excessive fibrous and collagen tissue
with *neovascular proliferation* in a
scar

.usually extends beyond the original
scar

Keloid continue

Initially raised , pink , tender , itchy
and may ulcerate.

More common in dark skinned people

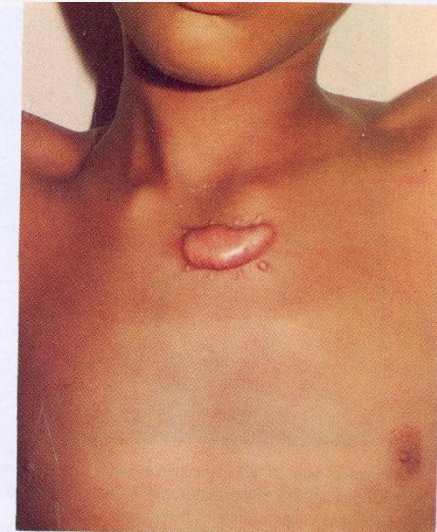
Progressive v.s. non progressive

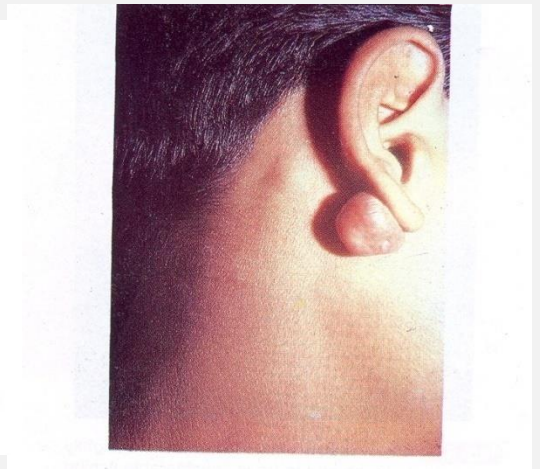
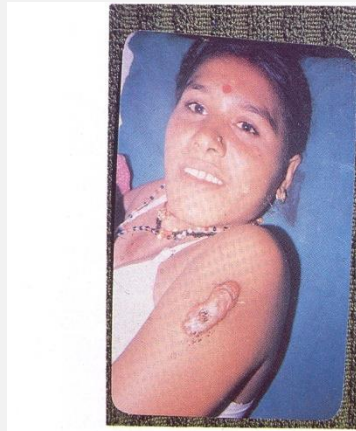
Aquired v/s spontaneous

Rx

.Injection (hyaluronidase , steroids etc.)

.Excision & grafting



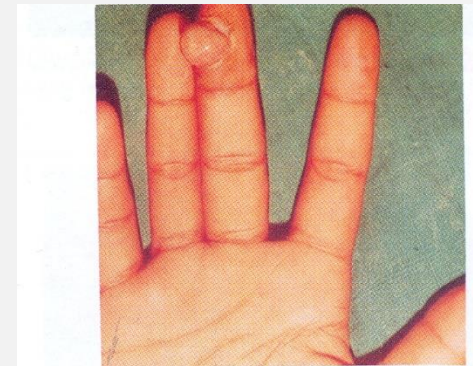




Pyogenic granuloma

- . Excessive granulation tissue growth in ulcers.
- . Firm, bright , red selling that bleeds on touch.
- . recurrent bleeding when exposed to Trauma.

Rx : cauterization v.s excision .





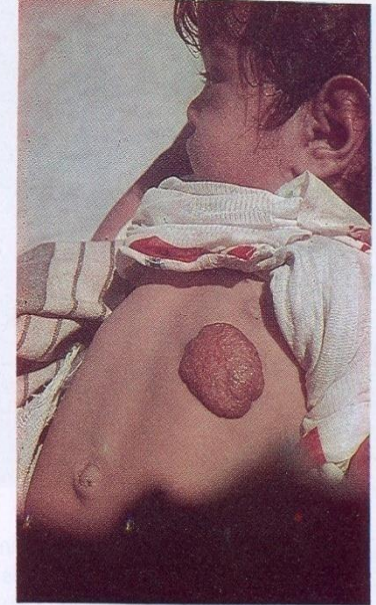
Haemangioma

It is a developmental malformation of blood vessels rather than a tumour.

Types: *capillary , cavernous ,arterial.*

It commonly occurs in skin & sub cutaneous tissue

but other organs (e.g lips , tongue ,liver ,brain) may be affected.



Malignant skin tumours

Basal cell carcinoma (BCC) :

- . Ulcerated tumour of basal cell layer of skin.
- . Middle aged white tropical males (Australia).
- . common in face.
- . low grade and slowly growing tumour (years)

Clinically:

- . Rolled-in edges (inverted) with attempts of healing .
- . floor shows an un healthy granulation with a scab.
- . The base is indurated and may be fixed to bone.
- . spreads locally (usually no L.N metastases).

Rx : radio therapy & surgery





Squamous cell carcinoma

(Epithelioma)

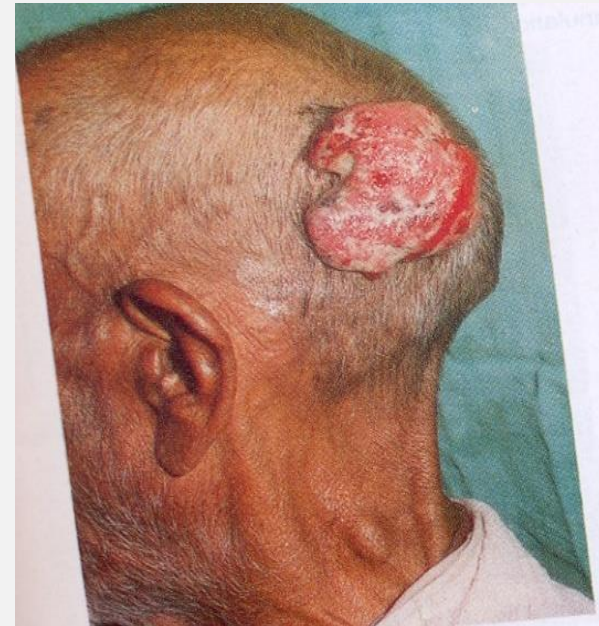
- .Arise from squamous cell layer of skin or mucus membrane.
- .It may arise from metaplasia of columnar epithelium due to chronic irritation (gall bladder, bronchus, stomach .etc.)
- .It can occure any where in the body, M>F .
- .More malignant and rapidly growing than BCC.
- .Edges are rolled out (everted)

Spreads :

locally , L.N ,and blood

Rx:

Radiotherapy & Surgery





Marjolin ulcer

It is a low grade squamous cell carcinoma arising in chronically inflammed ulcers or scars.

Rx:

Radiotherapy & Surgery





Naevus (mole)

- .A localised cutaneous malformations.
- .Includes moles & birth marks.
- .They may present at birth ,or even later.

Types:



Junctional , intradermal , compound, bluenaevus, juvenile and freckle

Naevus cont;

Evidences of malignant change :

(very important)

.Increase in size

.change to irregular edge

.change in thickness

.change in colour

.change in surrounding tissue

.symptoms e.g: itching, bleeding discharge

.lymphadenopathy

.microscopic evidence

Malignant Melanoma

It is rare but most rapidly infiltrating skin tumour

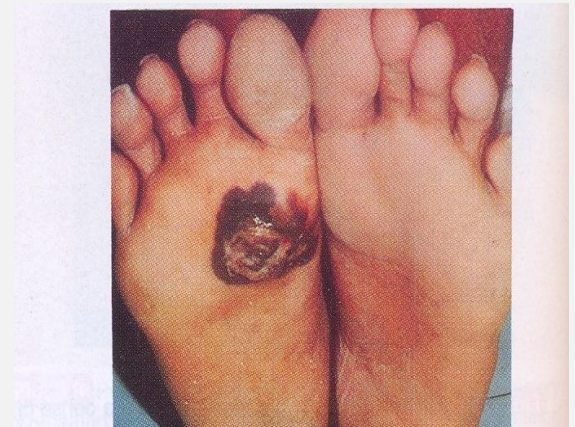
De-novo (10 %) , Pre-existing naevus (90 %).

Metastasis :

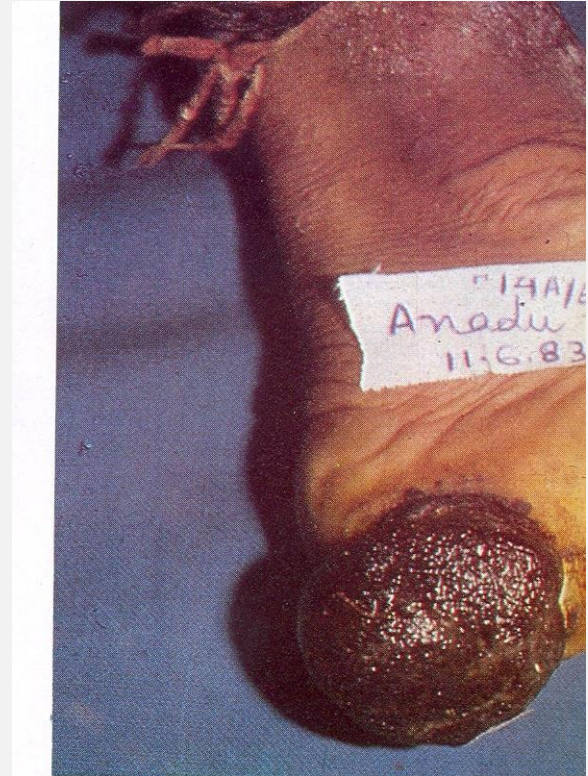
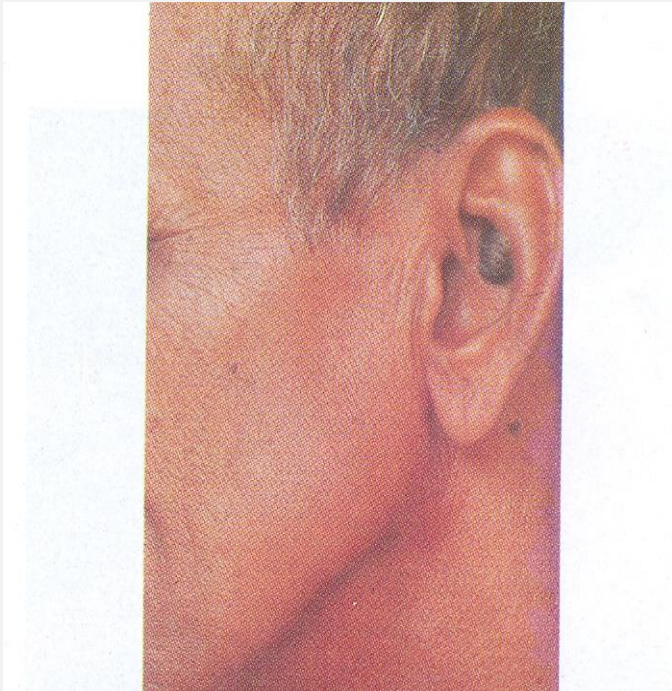
Local & satellite nodules.

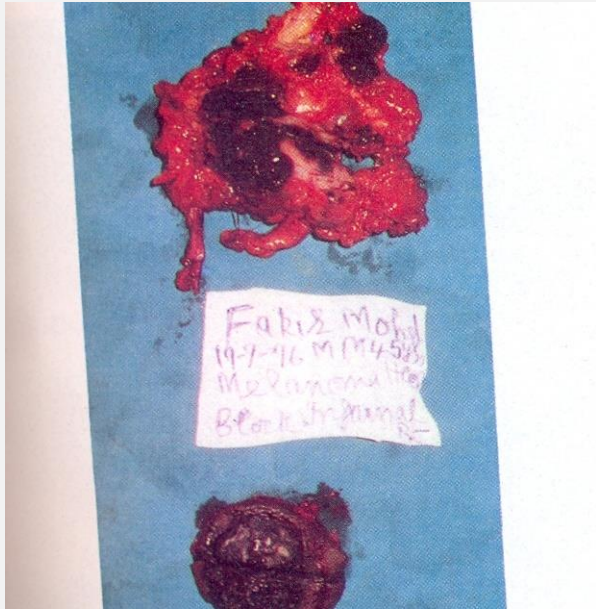
Lymphatic.

Blood (liver, lung, bone etc;.









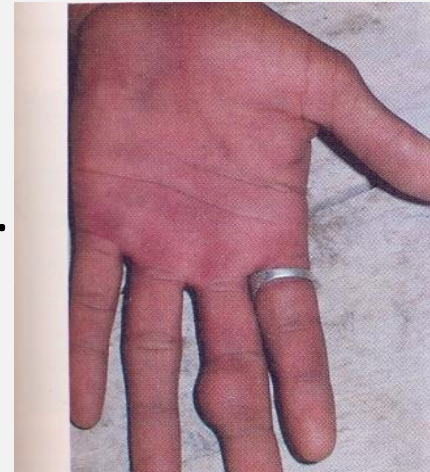
Satellite nodule



Skin Cysts

Implantation Dermoid :

- .It is a post traumatic dermoid.
- .Commonly in fingers and hands of farmers & taylor's.
- .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



RX:

Excision is curative.

Implantation dermoid in ear







Sebaceous Cyst

It is a retention cyst due to blockage of its duct.

Lined by squamous epithelium and contains sebum and desquamated epithelium.

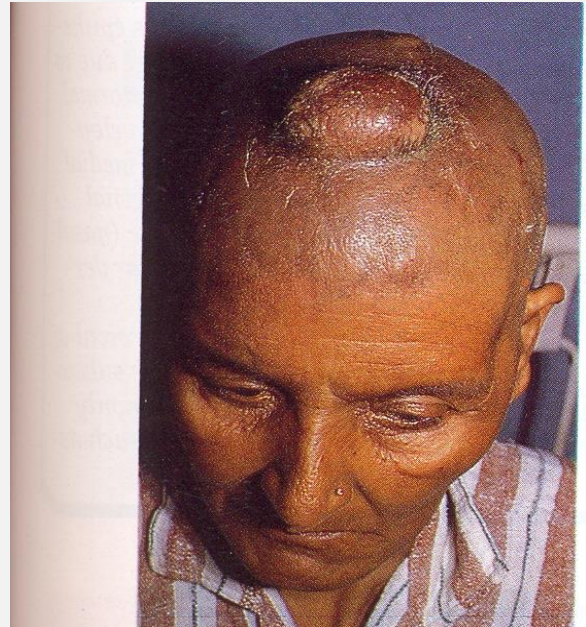
Commonly in scalp , Face , scrotum and vulva
(never in palm & sole).

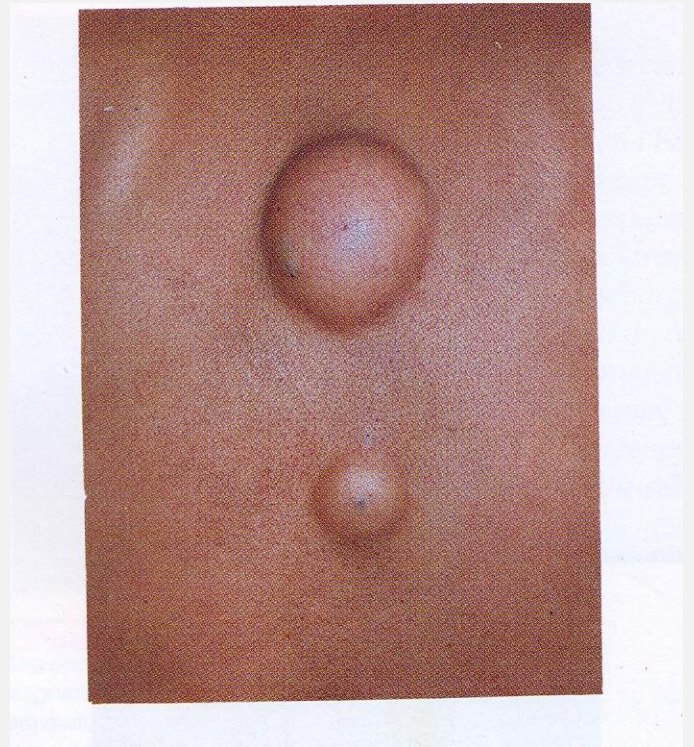
Clinically:

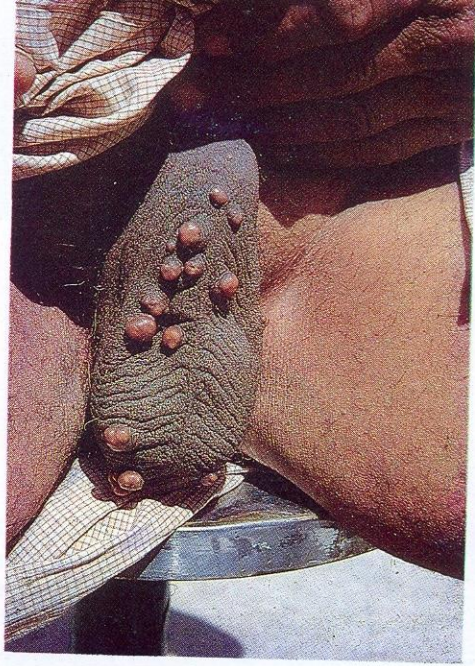
Spherical, cystic or tense swelling , attached to skin with punctum that may discharge sebum upon squeezing.



NB :Indentation and fluctuation tests may be positive .But transillumination test is negative







Seb. Cyst

cont;

Complications:

cosmetic

Infection

ulceration

Cock peculiar tumour (granuloma due to ulceration)

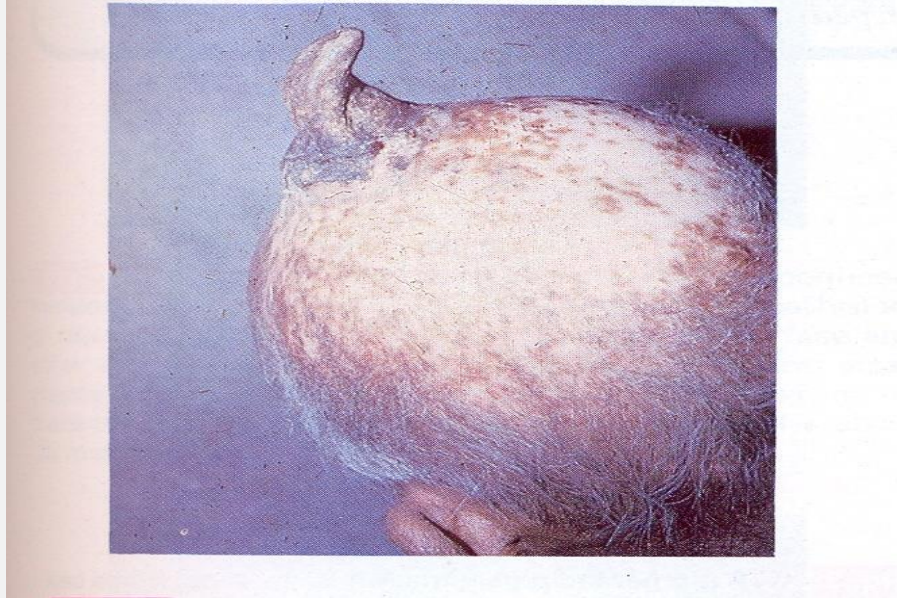
sebaceous Horn (inspissated secreted sebum)



Rx :

.Excision for un infected cyst .

.Drainage followed by excision for infected cyst.



sebasceous horn



Infected sebaceous cyst.



Sebaceous cyst excision

Subcutaneous Lumps

Cystic swellings:

Congenital

dermoid cyst
cystic hygroma
haemangioma

Aquired

abcess
parasetic
haematoma

Solid swellings:

commonly benign:

shwanoma, neurofibroma, lipoma

(rarely malignant)



Traumatic haematoma

Dermoid cyst

Clinically four varieties:

1. Sequestration dermoid (congenital).
2. Implantation dermoid (acquired).
3. Tubulo-dermoid (congenital).
4. Terato-dermoid (congenital).

Sequestration dermoid

.It is a true congenital cyst .

Ectodermal tissue burried in mesoderm forming a cyst lined by squamous epith.and contains paste-like desquamated epith.

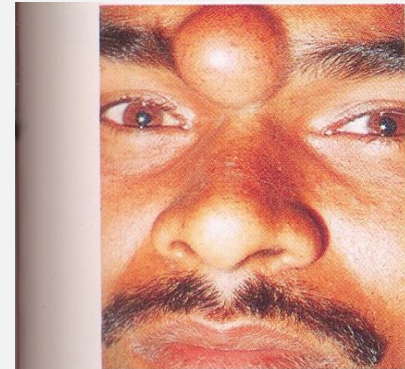
.Common at lines of Embryonic fusion sites:

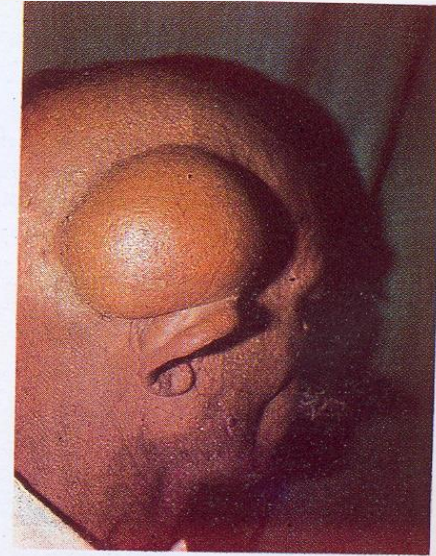
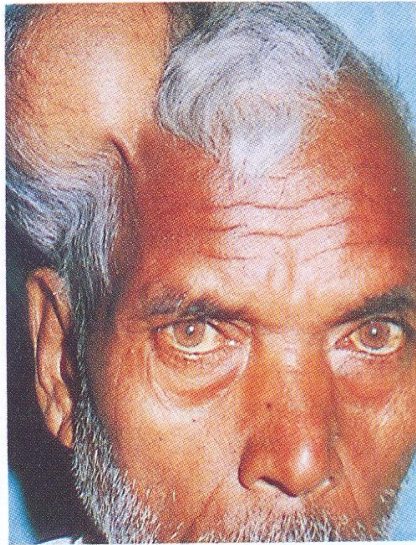
- . Midline: neck & root of nose.
- . Scalp.
- . Inner or outer angles of eyes.

Sequestration dermoid cont;

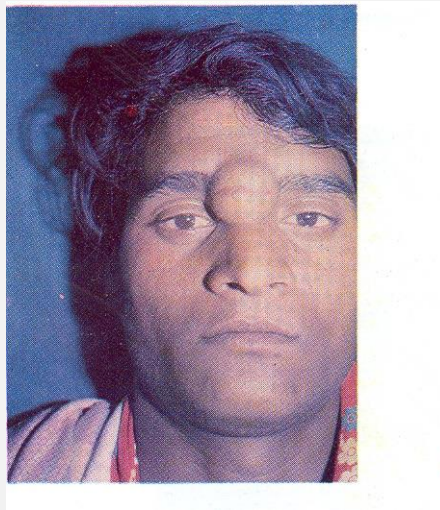
Clinical features:

- Painless, spherical, cystic mass.
- Appears in childhood or adults.
- Smooth surface.
- Not attached to skin cf. seb. cyst
- No punctum cf. seb. cyst.
- Not compressible cf. meningocele.
- Bone indentation (scalp)
- Trans-illumination test - ve .





Occipital dermoid



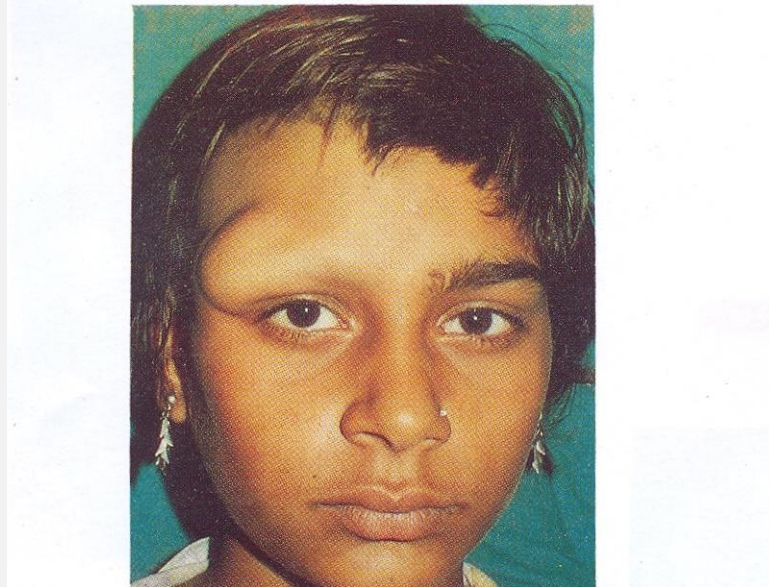
nasal root dermoid



nasal root dermoid



fore head dermoid



External angular dermoid



External angular dermoid



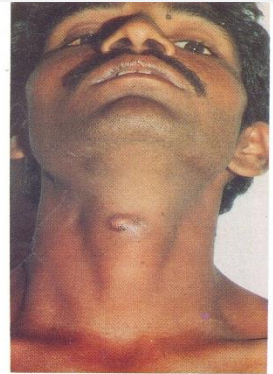
Submental dermoid



complications: infection

Tubulo-dermoid

Cystic swelling arising from the non-obliterated part of congenital duct or tube which fills up by secretions of lining epith.



Examples

- Thyroglossal cyst (remnant of thyroglossal duct).
- Post-anal dermoid (remnant of neuro-enteric canal).
- Epidermoid cyst in brain (rem. of neuro-ectoderm canal).

Teratomatous dermoid

Cystic swelling arising from the toti-potent cells with ectodermal preponderance.

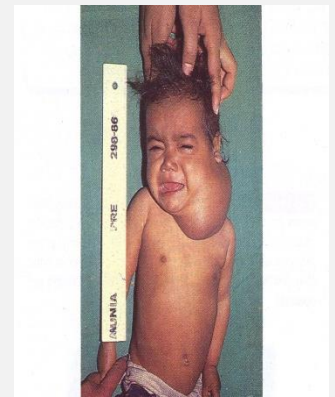
- Ovary ;Ovarian cyst.
- Testes :Teratoma
- Mediastinum.
- Reteroperitoneum.
- Pre-sacral area

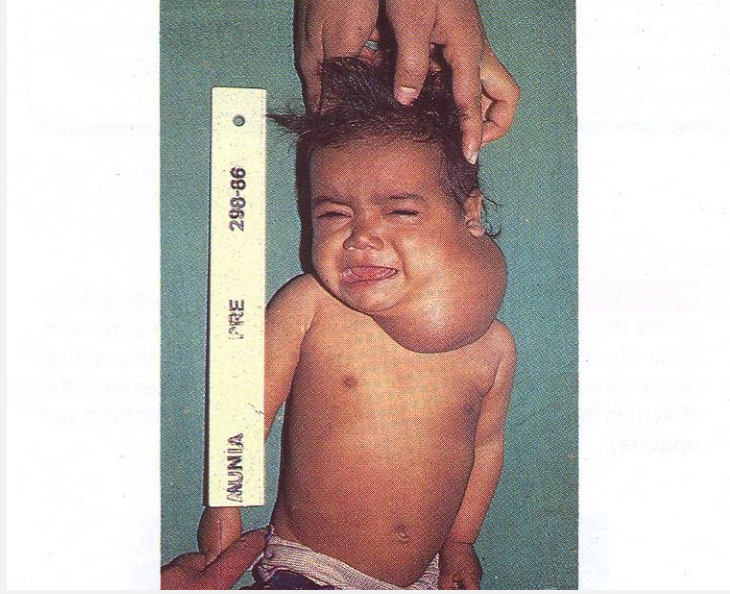
They usually contain derivatives of mesoderm (cartilage, bone, hair, cheesy material).

Cystic hygroma

A congenital malformation affecting lymphatic channels.

- .appears early , multilocular , filled with clear fluid (trans-illumination + ve).
- .lined by columnar epith.
- .Common in : neck, axilla, groin, medistinum and tongue.







Branchial cyst

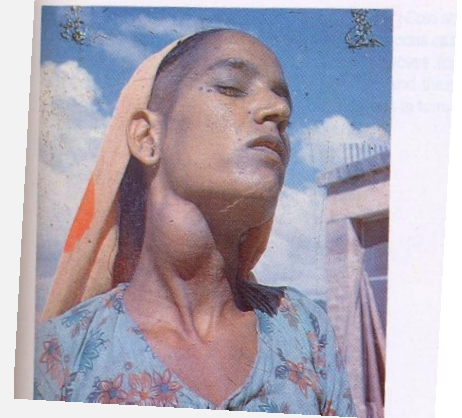
A congenital cyst in persistent cervical sinus

Below angle of mandible, behind mid s.mastoid.m
Tense ,distinct edges, +ve fluctuation and –ve transillumination.

Contains cholesterol crystals (diagnostic).

Differential diagnosis:

cold abscess, dermoid cyst , plunging ranula, cystic hygroma, carotid body tumour, lymph node, sub.mand.salivary gland.





Ganglion

It a cystic swelling of synovial membrane of tendon or capsule in small joints.

- . myxomatous degeneration.
- . may be communicating.

Common sites

- . dorsum of wrist
- . dorsum of foot and ankle.







Ganglion cont;

Clinically:

- Slowly growing lump.
- Common in females.
- Spherical, firm, cystic swelling.
- Mobile across tendon axis but limited along longitudinal axis.

Rx:

Asymptomatic: reassurance.

Symptomatic: aspiration or excision.



transillumination test



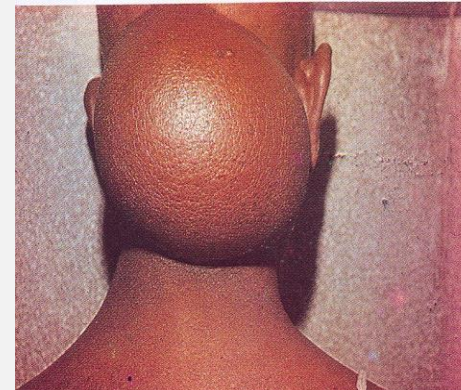
aspiration of ganglion



excision of ganglion

Lipoma

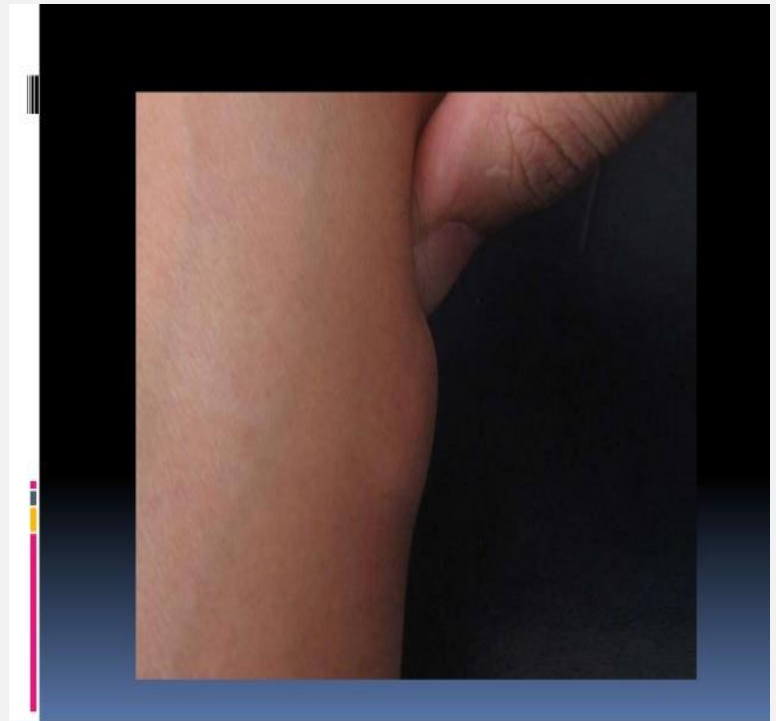
- It is a benign tumour of adipose tissue.
- The most common benign tumour in subcutaneous tissue.
- Common in trunk, neck and limbs.
- Encapsulated v.s. diffuse.
- May be mixed e.g: fibrolipoma , neurolipoma , haemangio-lipoma.
- Dercums disease (multiple lipomatosis).



lipoma cont,

clinical features:

- Painless ,non tender, soft and lobulated lump.
- Well defined edges and skin is free.
- Slipping sign positive.
- Freely mobile.
- Fluctuation test is negative.
- Trans-illumination test is negative.



Lipoma cont,

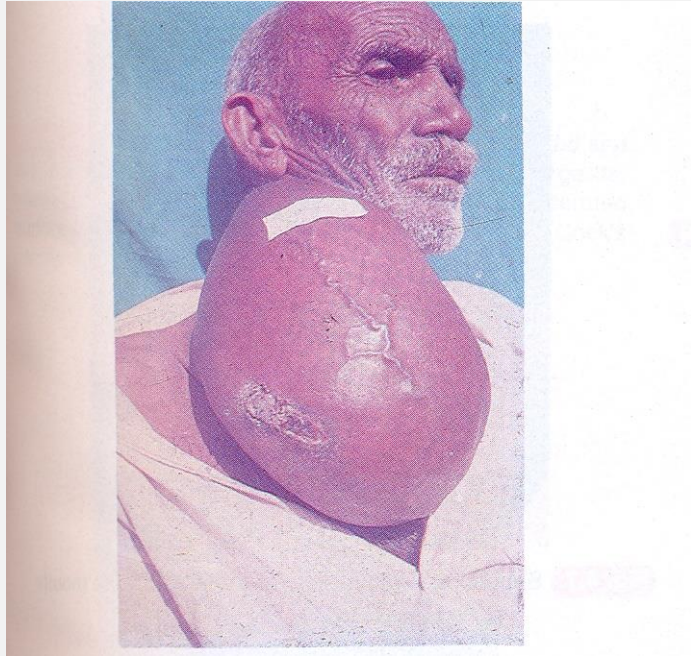
Complication

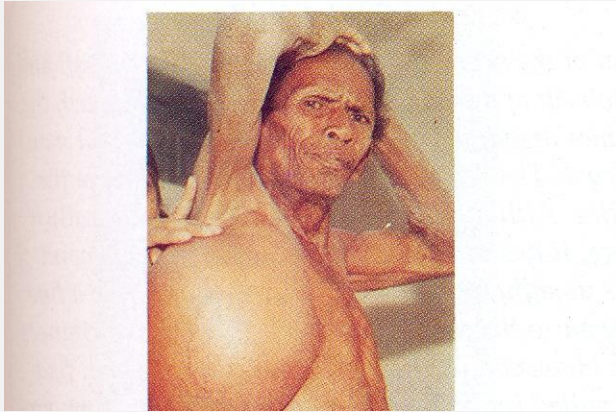
necrosis, calcification, haemorrhage, infection ,and rarely transform in to liposarcoma.

Diagnosis: FNA

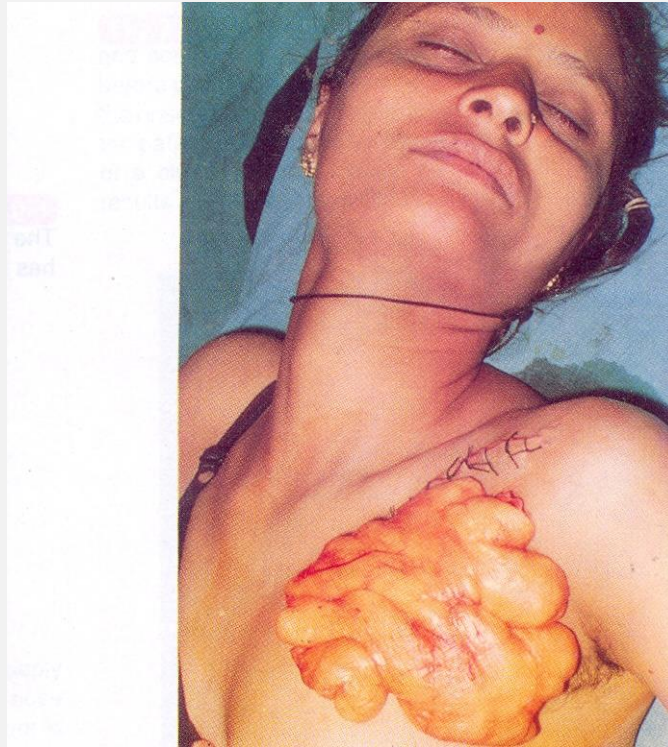
Treatment:

- Small asymptomatic lipoma: re-assurance
- Symptomatic lipoma :
 - surgical excision for encapsulated
 - liposuction for diffuse type.









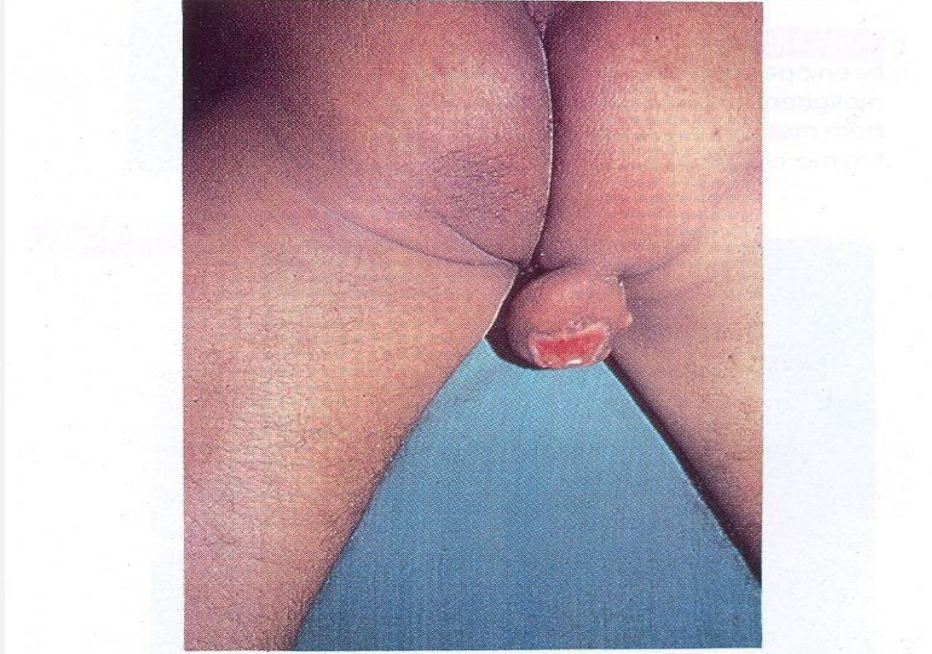






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multiple lipomatoses (Dercum's disease)



ulcerated lipoma

Gluteal liposarcoma



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LIPOSARCOMA

- Common in retroperitoneum, thigh & back
- Rapid growth
- Warm & vascular
- Dilated veins
- Restriction of mobility
- Skin fixation & fungation
- Hematogenous spread to lungs



NEUROFIBROMA

Tumour of nerve connective tissue (not neurons)

Types:

- Localised or solitary NF.
- Generalized (Von-Recklinghausen"s disease)
- Plexiform NF
- Elephantiasis NF
- Cutaneous NF

Neurofibroma cont:

Clinical features of N.F:

- Encapsulated, rounded or elliptical swelling.
- Smooth, firm with well defined edges.
- Tenderness and parasthesia may be present.
- Mobility may be deminished along nerve-axis.

Rx:

excision



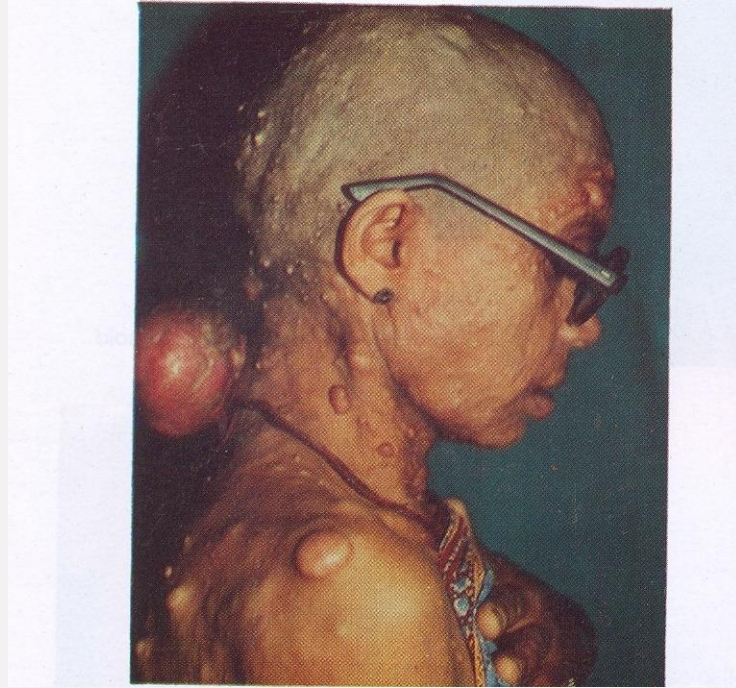
Figura 2. Mancha café-con-leche y nódulos cutáneos.
Figure 2. Café au lait spot and skin nodules.

Multiple neurofibromatosis (V-R disease)

- Inherited as an autosomal dominant disease.
- More common in males.
- Multiple tumors- with Cafe-au-lait spots.
- Peripheral and cranial nerves may be affected.
- May be associated with other tumors (eg, endocrine).









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Examples of exam cases :



A 25 years old patient presented to the surgical clinic complaining of a painless swelling at the front of the left thigh for 3 years and no other swellings . Examination revealed a spherical, soft ,lobulated , non tender lump which is freely mobile in subcutaneous tissue.

The most likely diagnosis is:

- a .*lipoma*
- b. *sebaceous cyst*
- c. *fibroma*
- d.*branchial cyst*

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A 16 years old girl presented to the clinic with a 2cm painless, cystic swelling lateral to the left eyebrow.
it was first noticed 5 years ago and was gradually increasing in size.

The most likely diagnosis is?

- a. Haemangioma.
- b. Abscess.
- c. External angular dermoid.
- d. Ganglion

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