Skin





number of cells is known to

- Freckles

Q4: Mention 2 staging ✓ systems? 1) Clark's level 2) Breslaw's thickness (the Most accurate)



seborrhoeic keratosis

-in the elderly " aka senile warts ".

-special diagnostic feature : because they are patches of thick squamous epithelium they can be picked off if you try to pick the edges with a blunt forceps.

-when it peals off , it leaves a patch of pale-pink skin with slight bleeding.

-no other skin lesion behaves like this.

- doesn't need surgery. Completely benign.



- If a nevus undergoes changes in the pigmentation or in the shape or ulceration it indicates a melanoma.

 we size _______ Features of melanoma
 - We differentiate the nevus from the vascular anomaly by its color.





Hairy nevus

- It's premalignant and must be surgically removed.
- Congenital.
- Black or brown pigmented area with excess hair growth.

ما فن حل اش ما ر الريدارى

 In general, hair tuft or lipoma or hairy nevus located at the lower end of the back, it is associated with spina bifida.





Q2: What is the micro-organism causing this? - Group A streptococci (GAS – mc!), Staph. Aureus



Erysipelas

1. usually caused by streptococcus bacteria (beta hemolytic group A).

2. Erysipelas is more superficial than cellulitis.

3.It's typically more **RAISED** and **DEMARCATED**.

4. The infection may occur on any part of the skin including the face, arms, fingers, legs and toes, BUT IT TENDS TO FAVOR THE EXTREMITIES.

5. Fat tissue is most susceptible to infection, and facial areas typically around the eyes, ears, and cheeks.





Q: a patient post-splenectomy due to RTA: Q1: What is the micro-organism causing this? - Meningococcus

Q2: How can you prevent it? MCV Vaccine

Vaccine should be 14 days BEFORE surgery, and in case of emergency surgery like this case it should be as soon as possible after surgery not 14 days after, others said in elective surgeries, it should be given 14 days before the operation But in emergent surgeries, it should be given at least 14 days post operatively.



Post-Splenectomy: We Give MCV, PCV, HiB

Post Splenectomy Vaccination

- Non-elective
 - Non-elective splenectomy patients should be vaccinated on or after postoperative day 14.
 - Asplenic patients should be revaccinated at the appropriate time interval for each vaccine.
- Elective
 - Elective splenectomy patients should be vaccinated at least 14 days prior to the operation.
 - Asplenic or immunocompromised patients (with an intact, but nonfunctional spleen) should be vaccinated as soon as the diagnosis is made.
 - Pediatric vaccination should be performed according to the recommended pediatric dosage and vaccine types with special consideration made for children less than 2 years of age.
 - When adult vaccination is indicated, the following vaccinations should be administered:
 - Streptococcus pneumoniae
 - Polyvalent pneumococcal vaccine (Pneumovax 23)
 - Haemophilus influenzae type B
 - Haemophilus influenzae b vaccine (HibTITER)
 - Neisseria meningitidis
 - Age 16-55: Meningococcal (groups A, C, Y, W-135) polysaccharide diphtheria toxoid conjugate vaccine (Menactra)
 - Age >55: Meningococcal polysaccharide vaccine (Menomune-A/C/Y/W-135)

| Vaccine | Dose | Route | Revaccination |
|---|--------|------------------|------------------------------|
| Polyvalent pneumococcal | 0.5 mL | SC* | Every 6 years |
| Quadravalent meningococcal/diphtheria conjugate | 0.5 mL | IM upper deltoid | Every 3-5 years [†] |
| Quadravalent meningococcal polysaccharide | 0.5 mL | SC* | Every 3-5 years |
| Haemophilus b conjugate | 0.5 mL | IM* | None |

*Administered in the deltoid or lateral thigh region.

[†]Contact the manufacturer for the latest recommendations prior to revaccination.

Non melanoma skin cancer



لأنه تكستنى متأخ

Q: Lesion on the face <1cm: Q1: What is the Dx?

- Basal cell carcinoma (BCC) as the Mc site is mose
- Q2: What is the MCC?
- Long exposure to sunlight

Q3: Mention 2 ways of Mx?

- A) Non surgical:
- + medical treatment treatment imiquimod 05-Flurouracil ralesin-(topical immunotherapy, intralesional interferon INJ, photodynamic)
- B) Surgical (Excisional or destructive):
- Destructive: cautery, curettage, cryotherapy, CO laser ablation
- Excisional: Moh's micrographic surgery (MMS), Wide local excision



Q6: Name 2 complications? - METS, Ulceration Croduct alor

Q7: Potential METS rate: - <0.55 (from google) حمال

Q8: Do you expect to find enlarged LN? rarely mets to LM - No (local disease)

Q9: What does the arrow indicate? Rodent ulcer (complication of BCC)

Arising in the germinating basal cell layer of epithelial cells.

Nodular (ulceration, telangiectasia,) pearls).

Morphea (many sites at the same time/more aggressive than the nodular type). Slow growing. Local (rare risk of metastasis). I pigmented









وهياع يصفن عندى جياري الحالي Bcc الحالي الحل التي مشو اختار؟ الحل التي مسم ال HX واللي هو ان Smoker وهاد AF مجم ل عن حك (vB = ve ip Q1: What is the most probable Dx? up ali الصورة Squamous cell carcinoma. Q2: What is the LN of this area? Submental and submandibular?? mostly

heavy smoker presented with

sun exposure

> MC cancer

advanced

Q3: What will you do to confirm Dx? **Biopsy for histopathology.**

basal laxer/malpighian

Arising from epidermal cells. Skin type 181 Risk factors: sun exposure/pale skin/ arsenic/ $\frac{1}{2}$ pigmentosum/ immunosuppression. Actinic keratosis : the precursor skin lesion. in 207. Raised, slightly pigmented skin lesion/ulceration/exudate/ itching. Dx: excisional biopsy for small lesion/incisional biopsy for large lesions. Most common sites : head, neck and hand. / Face thand - Forearm Involves the lower lip and BCC involves the upper lip or above this level.



Q1: Name the lesion?

- Onion cluster cells

Q2: Mention the Dx? - SCC (Squamous cell carcinoma)





Q: Two patients came to ER complaining of neck swelling:

Q1: What is the pathology? - Carbuncle

Q2: MCC?

- Staphylococcus Aureus

Q3: Mx?

- Incision, drainage and antibiotics





Carbuncle is an abscess larger than furuncle, usually with one or more openings draining pus onto the skin



not in slides

Q2: Mention one risk factor? DM

Q3: it is more common in? In the back of the neck

Q4: Name 1 treatment? Incision and drainage plus antibiotics







actinic keratosis

Keratoacanthoma

self limiting growth and subsequent regression of hair follicle cells Q1: Dx of picture (1)? Keratoacanthoma
Q2: Dx of picture (2)? Actinic Keratosis
Q3: Dx of picture (3)? Sebborhoeic Keratosis
Q4: Dx of picture (4)? Necrobiosis Lipodica

Q5: Which doesn't have pre-malignant potency? 3

Q6: Picture 2 can convert to? SCC





Q1: What is this? - Lipoma

Q2: What is the risk of wound infection after removal (% of wound infection)?

- 1-3% (clean wound)



Q: Give 2 DDx of a scalp lump? 1) Sebaceous cyst 2) Epidermoid cyst→





Sebaceous cyst

-Benign subcutaneous cyst filled with sebum.

found in hairy areas
 (scalp, scrotum , neck ,...).

- Most small cysts do not require treatment. Large or painful cysts may be removed surgically or by liposuction.

Important note: if there is a scalp lesion like this it's impossible to be lipoma as a differential diagnosis since lipoma emerges from fat under the skin and scalp area is devoid from fat.



Lipomatosis

AD condition in which multiple lipomas are present on the body.



Q1: Describe what you see?

Café au lait macules
 Neurofibromas

Q2: What is your Dx?

- Neurofibromatosis

Q3: Mention type of inheritance? - Autosomal Dominant







Q: what is this and where do we find it??

A: **Suppurative Hydradinitis** in axilla Found in sites of apocrine glands: axilla ,buttocks and perineum etc.

- caused by staph. Aureus.

- Treatment : antibiotics/ excision of skin with glands for chronic infection.

Gas Gangrene

Caused by Clostridium perfringens. Surgical emergency.



Contusion

- Bruising injury caused by blunt trauma.
- Small hematoma is resorbed by itself (except on the face; need to be opened and evacuated)
- Large hematomas : if <24 hrs managed by aspiration, if > 24 hrs by incision and drainage.





Abrasion

Managed by dressing to prevent 2ry bacterial infection.



What is the type of this wound ? How is it treated?

It's an incised wound. Within the first 6 hours (or the first 24 hours in the face) it's treated by primary closure if the edges can be approximated without tension.



Lacerated wound usually caused by blunt objects. First, we clean the edges (wound excision) to transform it to incised wound, then if within first 6 hours without contamination we close it by closure if the edges can be approximated without tension.

Puncture wound

- Caused by pointed objects.
- Management: tetanus vaccine/ excision/ removal of foreign bodies.



Avulsion flap

- Undermined laceration in the dermis and subcutaneous tissue.
- Management: debridement of edges/ excision of small avulsion flaps to prevent trap-door effect/suturing.







- During wound healing if the capillaries grow too vigorously they may form a mass covered with epithelium.
 Look for a history of trauma
 - Very rapid growth



Hypertrophic Scar





| ٥ | Hypertrophic scar | Keloid scar | |
|-----------------------|---|--|--|
| improvement gentic | Improves with time (2 years) | No improvement with time | |
| | No genetic predisposition | Genetic predisposition | |
| collagen | Less collagen | More collagen | |
| cytokines fibers | Less cytokines | More cytokines | |
| | fibers parallel to the dermis | Fibers random in orientation | |
| extention | Remains within the borders of the original scar | Extends beyond the original scar margins | |
| S1'2e | Regress spontaneously or by medication | | |



Treatment :

- Surgery (Z- plasty, W- plasty) / artificial skin/steroids/pressuretherapy/ topical silicon/low dose radiation/laser (CO2 and argon)/ calcium channel blockers/ interferon. Q1: Name the Dx? - Keloid

Q2: Name 2 RF? 1) <u>Dark skin</u> 2) <u>FH</u>x

Q3: Name two characteristics?
1) Extend beyond borders of original wound
2) More common in <u>darker skin</u>
3) Require <u>years to develop</u>
4) Thick collagen





Granulation tissue

(sign of healing ulcer)

Inspection






Q1: Name the Dx? - DM/Peripheral arterial disease

Q2: Causes?

- Prolonged pressure
- Uncontrolled long standing DM

Neurotrophic Ulcers:

punched-out appearance painless. Muscle atrophy may be noted.

Q1: What is the most common etiology of this ulcer.

- Neuropathic Diabetic Ulcer

Q2: What is the most important step to accelerate healing? - Diabetic control, Decrease pressure at the area, Try to prevent infection and increase perfusion to the area





 SCC arises in a long standing benign ulcer or scar (long standing venous ulcer or scar of old burn).

- Need 20-30 years to develop.



Pressure sores grades

1) Erythema for >1 hour after relief of pressure (Hyperemia).

2) Blisters with break in dermis, erythema requires 36 hr to disappear when relieved. (Ischemia, pressure 2-6h).

3) SC tissue and muscle involvement, skin is blue and thick (Necrosis, pressure > 6 h).

4) Bone and tendon involvement, frank ulcer develops.



Surgical treatment of pressure sores

- 1 excisional debridement.
- 2 partial or complete ostectomy.
- 3 closure of the wound with healthy, durable tissue. Closure can be either :
 - direct closure (in very small pressure sores).
 - skin grafts.
 - flaps.

Flaps :

- Local tissue flaps.
- Myocutaneous flaps.
- Fasciocutaneous flaps.

Contributing factors : 1- pressure. 2- immobility. 3- shear (tangential pressure). 4- moisture. 5- malnutrition.







Q: An 80 year old, bedridden male had this lesion in the buttock and lower back area.

Q1: What is this lesion? Pressure ulcer (bed sore)

Q2: What is the most common cause? Pressure? From hard surface in thic case (bed)



Frost bite

- Tissue freezing injury.
- Mc type of cold injury.
- At temperature (-2c).

Treatment: rapid warming (40-42 C)/ debridement

of clear blisters whereas hemorrhagic are left intact and aspirated if infected / elevation/ topical thromboxane inhibitor/ NSAID.

- Massage is contraindicated.



Chilblains

 - a type of non-freezing tissue injury.
 - caused by chronic high humidity and low Temp with normal core Temp.
 - seen commonly in mountain climbers.



Trench foot

- The extremities are exposed to damp environment over long periods at temperatures (1-10 C).
- Numbness/ tingling/ pain/ itching.
- The skin initially red and edematous then gradually turns to gray-blue discoloration.

- Non-tissue freezing injury.







Pernio is an inflammatory skin condition presenting after exposure to cold as pruritic and/or painful erythematous-to- violaceous acral lesions. Pernio may be idiopathic or secondary to an underlying disease.

- Non tissue freezing injury.





Cold urticaria

- Familial and acquired.
- History of cold stimulation.



Fight bite

* over the dorsal metacarpophalangeal (MCP).

* organism : Eikenella corrodens (specific to human mouth).

***Complications:** <u>celluliti</u>s; extensor tenosynovitis; septic arthritis.

*Management:

- 1) exploration (foreign body +extent)
- 2) local anesthesia
- 3) debridement

4)admission : drainage + (IV) antibiotics (amoxicillin +clavulanic acid)



Fournier Gangrene

necrotizing fasciitis in the perineum.

most commonly caused by c.perfringes.

Treat with tissue debridement and antibiotics.



Kaposi sarcoma

- malignant proliferation
 associated with HHV-8.
- Classically seen in three groups:
 1) Transplant recipient, early spread,
 Rx decrease immunosuppression.
- 2) older eastern European males, remain localized, Rx surgical removal.

3) AIDS(Aids defining disease) tumor spreads early, Rx increase antiretroviral therapy.



(cutaneous sarcoma appears as red hemispherical nodules or plaques)

- is it painful ? no it is painless
- usually associated with what
- ? HIV infection & AIDS



felon (whitlow): distal pulp space infection , if not treated results in osteomyelitis. cause : pricking.





infection of the nail fold, happens due to bad manicure or bad maneuvering of hangnails. Most common hand infection.



Tenosynovitis

 Infection of the synovial sheath surrounding tendon.

- The most causative organism of hand infection (tenosynovitis, felon, paronychia) is staph. Aureus.
- The 2nd is streptococcus.
- Initial treatment : oxacillin/ ampicillin.
- Then we do culture and give antibiotics of choice.
- If abscess formed, incision and drainage.
- Elevation to decrease the edema.
- Resting the organ to decrease the pain.

Antibioma

Hard, edematous swelling containing **sterile pus** following the treatment of an abscess with long term antibiotics rather than incision and drainage.

Treatment: exploration & drainage if it is indistinguishable from a carcinoma, otherwise spontaneous resolution takes place over several weeks.





Nevoid Basal Cell Syndrome



Presentation :

multiple BCC mostly on the face
 Cysts in the jaw.
 Intracranial calcifications.
 Rib abnormality (mostly bifid ribs).





Xeroderma pigmentosa



- an inherited premalignant condition associated with increase risk of all types of skin tumors.
- defect in the DNA repair genes







Skin graft

Q: What are the signs of graft take?

1.The graft is adherent to the recipient site.

2. Pink color.

3.The graft blanches with pressure (denotes vascularity).



Skin grafts

1- split thickness skin grafts :

- Epidermis and thin part of dermis.
- The donor site heals by epithelialization within 2 weeks.
- Used for large areas.

2- full thickness skingrafts:

- Taken from areas of loose skin as the donor area is closed by approximation of the edges (direct_closure).
- Used for small areas.







- This is dermatome.
- It's used for taking a split thickness skin graft.



Split thickness skin graft after it has been meshed, showing the small perforations that allow the graft to be expanded and cover a greater area and also allows any blood/serum to drain away.

Flaps

- A flap is a piece of tissue carries its own blood supplies that is moved from its original site, to cover a defect.
- Skin flaps/ muscle flaps/ myocutaneous flaps/ fasciocutaneous flaps/ osseofasciocutaneous flaps.
- Flaps are used when grafts are insufficient to cover the defect, or they wouldn't be taken.
- To cover an avascular area.
- When we need a more bulky tissue to deal with the defect and skin is not enough.
- The donor area is managed by approximation if it was loose or by skin graft.











• QUESTION

مكرد رون ١

Wateen 2023

Name the finding







Keratoacanthoma



QUESTION

Harmony 2022

29. How would you expect this wound to heal?

- a. Delayed primary intention
- b. Primary intention
- c. Secondary intention
- d. Will form keloid scar
- e. Tertiary intention

Answer: B







• QUESTION

Harmony 2022



QUESTION



Harmony 2022

What is the type of cancer seen in this histology (biopsy taken from the nose tip):







BCCa



QUESTION



SOUL 2021

- 1.Dx of picture (1)?
- 2.Dx of picture (2)?
- 3. Dx of picture (3)?
- 4.Dx of picture (4)?
- 5. Which doesn't have pre-malignant potency?
- 6. Picture 2 can convert to?
- 7.Most common pre-malignant condition?





ANSWER

- 1.Keratoacanthoma
- 2 .Actinic Keratosis
- 3. Sebborhoeic Keratosis
- 4. Necrobiosis Lipodica
- 5. Picture 3 or picture 4 not sure
- 6. SCC
- 7.picture 2=Actinic Keratosis

1.20 191



• QUESTION

SOUL 2021

Give the diagnosis of the pictures (Similar pictures to those in the exam)





ANSWER



• QUESTION



SOUL 2021

name the: 1.Sign?

2.Diagnosis?







1.Onion cluster cells

2. SCC



QUESTION





- 1.Diagnosis
- 2. What is the Most accurate prognostic factor?
- 3. Increased melanin production with normal number of cells is known to cause?
- 4.Mention 2 staging systems?









1.Melanoma 2. The Depth hickness

3. Freckles

4. 1)Clark's level 2) Breslow's thickness


• QUESTION



2019 – Before

Two patients came to the ER complaining of neck swelling:

1.What is the pathology?

2. Most common organism?

3. Management?









1.carbuncle

2.Staphylococcus Aureas

3. drainage and give antibiotics



QUESTION



1.What is the likely diagnosis

- 2. What is the most common cause
- 3. What are 2 ways of treating for this ?patient
- 4. What is the safety margin?

5.write an alternative Mx?

- 6. Name 2 complications?
- 7. Potential METS rat?











1.Basal Cell Carcinoma (BCC)

2.long exposures to sunlight

3.a)nonsurgical: (topical immunotherapy, intralesional interferon INJ, photodynamic)

B) Surgical (Excisional or destructive): - Destructive: cautery, curettage, cryotherapy, CO laser ablation - Excisional: Moh's micrographic surgery (MMS), Wide local excision

4. (4-10)mm

5.Moh's micrographic surgery (MMS)

6.METS,Ulceration

7. 0.0028-0.55 (from google) 091 7



• QUESTION

2019 – Before

Q1: What is this? -

Q2: What is the risk of wound infection after removal (% of wound Infection)?)







1.Lipoma

2.1-3(clean wound)



QUESTION



2019 – Before

Give 2 differentials of this scalp lump?







1)Sebaceous cyst
 2) Epidermoid cyst



• QUESTION

2019 – Before

1.Describe what you see?

2.diagnosis

3. Mention type of inheritance?







- 1) Café au lait macules (irregularly shaped, evenly pigmented, brown macules)
 2) Neurofibromas
- 2.Neurofibromatosis
- 3. Autosomal Dominant



QUESTION

2019 – Before

1.Name the diagnosis.

2.: Name 2 risk factors?

3.Name two characteristics?







1.Keloid

2.1)Dark skin 2) Family histor

3.1)Extend beyond borders of original wound

- 2) More common in darker skin
- 3) Require years to develop
- 4) thick collagen







Serious complication that you fear from?



محدد بزن ۱۱





Transformation into SCC

