Edited past paper

PLASTIC SURGERY

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1. Concerning erysipelas, all of the following statements are wrong except:

A. Is caused by staphylococcus.
B. Is typically painless.
C. Is effectively treated by penicillin.
D. Hands are mainly involved.
E. The lesion has ill-defined flat edges.

Answer: C

A is wrong : GAS is the most common cause of non-purulent skin and soft tissue like erysipelas.

B is wrong : erysipelas mainly affect the upper layer of the skin, the typical symptom is painful and shiny light-red swelling of a quite clearly defined area of skin.

D is wrong : it mainly involves lower limb and face.

E is wrong: specific to erysipelas >> raised, sharply demarcated lesions. VS specific to Cellulitis >> poorly defined lesions with induration.

2. Regarding necrotizing fasciitis, all of the following statements are true, Except:

A. Most commonly caused by (flesh-eating) streptococci
B. Immunosuppression is present in the majority of cases.
C. Hemorrhagic bullae are evidence of skin necrosis.
D. Early aggressive debridement is the only hope of survival.
E. The muscles are characteristically spared.

Answer: E >> Necrotizing fasciitis (most common NSTI): rapidly progressive infection resulting in extensive necrosis of superficial and deep fascia and overlying subcutaneous fat .

> Necrotizing fasciitis is a subset of aggressive skin and soft tissue infections that cause **muscle fascia and subcutaneous tissue necrosis**. The infection typically travels along the fascial plane, which has a poor blood supply.

A is true: most cause are caused by bacteria called group A strep, or streptococcus pyogenes

B is true : most commonly found in the setting of systematically or locally immunocompromised individuals.

C is true: hemorrhagic bullae are small vessel involvement in the dermis that can result in necrosis of overlying skin with associated blisters and extravasation of RBCs.

D is true: Management>> 1. Admit all pts with suspected NSTI to hospital for treatment, 2. If clinical features suggest NSTI start immediate surgical and medical Tx (surgical exploration with debridement , Broad- spectrum antibiotic therapy. *from AMBOSS

3. A woman aged 30 years has an indurated , suppurating , painful , diffuse mass in the skin and subcutaneous tissues of both axillae and left groin. The most likely diagnosis is:

A. Carbuncles
B. Mycosis fungoides
C. Hidradentitis suppurativa
D. Infected epidermoid cyst
E. Actinomycosis

Answer: C

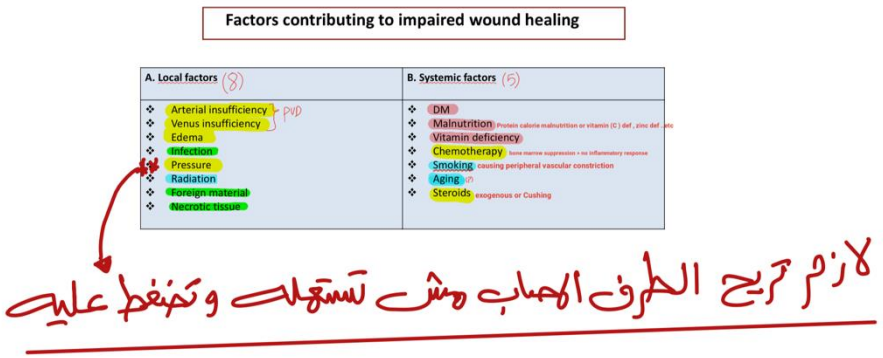
Clinical features

- Localized in intertriginous areas containing apocrine glands (most commonly the axillae, groin, inner thigh, perineal and perianal areas)
- The first lesion is usually a solitary painful inflammatory nodule that progresses to an abscess that may open or regress spontaneously.
- Sinus tracts may form between multiple recurrent nodules and drain foul-smelling, seropurulent discharge.
- Development of open and closed comedones
- Scarring ranges from small, individual acneiform scars to thick scarred plaques that affect larger areas of skin.

4. Regarding zone of ischemia (injury zone), all of the following are true, EXCEPT:

A. Tissues are not devitalized initially.
B. Tissues can progress irreversibly to necrosis.
C. Over-resuscitation can increase the tissue damage.
D. Under- resuscitation can increase the tissue damage.
E. Limbs should be dependent to improve circulation.

Answer: E



لازم تريح الطرف المصاب وش تستعمل وتضغط عليه

The burn wound, and surrounding tissues classically have been described as a system of several circumferential zones radiating from primarily burned tissues, as follows:

1. **Zone of coagulation** - A nonviable area of tissue at the "epicenter" of the burn
2. **Zone of ischemia or stasis (Injury zone):** Surrounding tissues (both deep and peripheral to the coagulated necrotic areas), which are not devitalized initially but, due to microvascular insult, can progress irreversibly to necrosis over several days if not resuscitated properly
3. **Zone of hyperemia** - Peripheral tissues that undergo vasodilatory changes due to neighboring inflammatory mediator release but are not injured thermally and remain viable.

The primary aim of management should be to preserve the tissues in ischemic areas (zone of injury) by:

1. **Proper fluid resuscitation to maintain adequate perfusion and proper tissue oxygenation in the initial stages.**
2. **Minimizing tissue edema which has a negative effect on micro-circulation and decreases tissue perfusion, this is achieved by proper fluid resuscitation (avoid over-resuscitation) and by elevation of injured limbs.**
3. **Proper burn wound management later**.

   If the above measures are not performed properly, more necrosis will follow, and the degree of burn would increase, and second-degree burn may become third.

5. Regarding the degree of burn injury, all of the following statement are true, EXCEPT:

A. Burns assessed initially as first degree may change to second degree burn on the next day.
B. Full-thickness burn is characterized by thrombosed dermal vessels.
C. The degree of burn determines the systemic management of the burn victim.
D. The second degree burned skin is blanching to pressure.
E. In the face skin appendages may extend to subcutaneous tissues.

Answer: C

1. **The depth of burn damage (degree):** determines the **local management and outcome of** the burn wound.

2. **The surface area involved in burn**, this is the percentage of the burned area to the total body surface area. **This determines the prognosis (mortality rate) and the systemic management and complications,** initially fluid resuscitation depends on the percentage of burn injury, later the percentage of burn determines the systemic complications as sepsis, catabolism and decreased immunity.

A. If the above measures are not performed properly, more necrosis will follow, and the degree of burn would increase, and second-degree burn may become third.

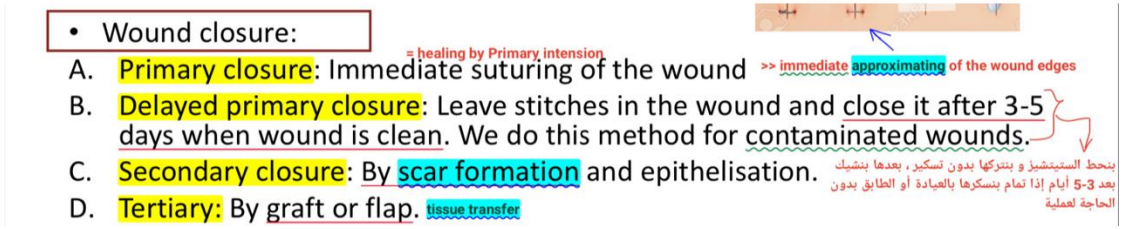
B. **Third degree burn (full thickness),** necrosis of the whole skin (epidermis and dermis) and its skin appendages, clinically there is an **eschar** which is simply -the burned necrotic skin -, it is **insensitive**, **leathery**, hard, **inelastic**, **and may show thrombosed dermal vessels. It takes months to heal and leaves significant scarring, to avoid scarring it should be skin grafted.**

D. **Second degree burn (partial thickness),** necrosis of the epidermis and varying depth of the dermis, characterized clinically by **pain** (due to irritation of the dermal sensory nerves), **erythema**, **blisters(bullae)**, the burned area is **wet with exudate** (weeping), **blanching** denoting intact dermal vascularity, and **preservation of skin elasticity. It takes 1-4 weeks to heal and leaves variable degrees of scarring.**

6. A 25 year old man presented to you with 3cm lacerated wound with minimal skin loss on the right ear inflected by human bite, the best method of repair is:

A. Primary closure.
B. Skin graft.
C. To allow healing by secondary intention.
D. Delayed primary closure.
E. Delayed skin graft

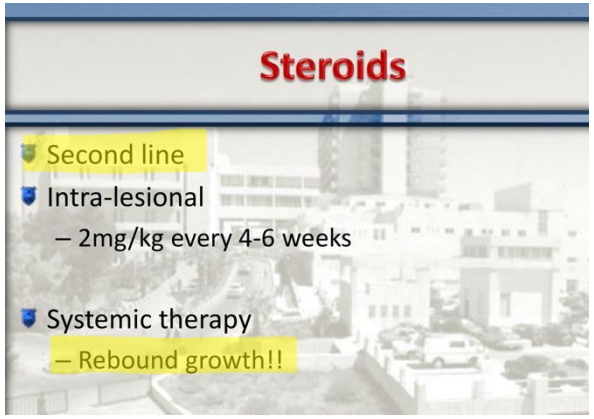
Answer: D >> human bite= contamination

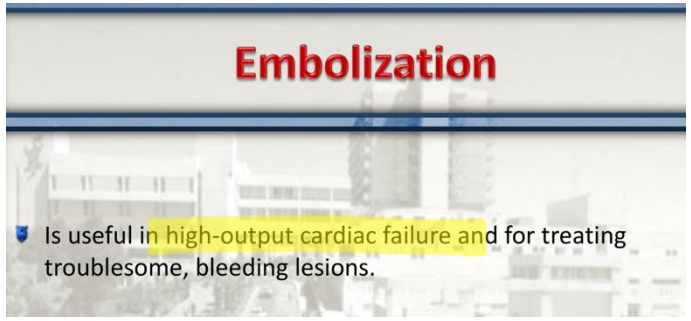


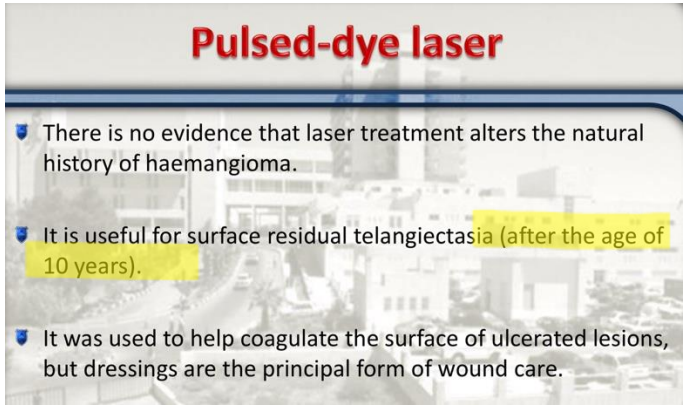
2. **<u>Lacerated wounds</u>**: characterized by jagged edges, caused with blunt instruments, they are associated with moderate degree of necrosis and contamination, if patient arrives within six hours, these wounds are managed by wound excision, (to transform it into an incised wound) and then direct closure.

7. The best management of 7*7 cm hemangioma on the trunk of 8 month old infant:

A. Systemic steroid therapy
B. Laser
C. Surgical excision
D. Embolization
E. Observation







Answer: E

Treatment of hemangiomas

- **As they resolve spontaneously, they are usually managed by expectant observation: follow up to check for involution and to check for possible complications.**
- **If it is hemangioma you reassure the family, it will involute and resolve spontaneously.**
- **Treatment is indicated when they are complicated.**
- **First line of treatment is by systemic steroids or beta blockers (propranolol) which induce involution of the lesion.**
- **Other methods include LASER or surgery.**

8. In managing electrical burns, all of the following are true, EXCEPT:

A. Dark red urine should be managed by hydration.
B. Fluid resuscitation is based on Parkland's formula.
C. Patients may have bone fractures.
D. Limb vascularity should be evaluated.
E. Patients suffer from massive hidden muscle burn.

Answer: B

In managing electrical burns, the following should be noticed:

1. Patients have **cardiac arrythmias,** so they should be monitored for cardiac arrythmias.
2. Due to the muscle damage, myoglobin is released from the damaged muscles leading to myoglobinemia and myoglobinuria that caused **acute renal failure**. good hydration, and alkalization of urine are measures to be used to prevent this renal impairment.
3. Also, due to the muscle damage, patients are liable for **compartment syndrome**, so limb vascularity should be observed, and fasciotomy considered.
4. due to severe muscle contraction patients may have **bone fractures.**
4.The severity of the electrical burn is not evident, and cannot be estimated, as in the case of thermal burn, which depends on the percentage of the burned skin, **so fluid management could not be based on a calculated Parkland's formula as in thermal injury,** but on close clinical observation, urine output, serial hematocrit values, and CVP readings.

9. The following statements regarding malignant melanoma are true, EXCEPT:

A. Dysplastic or atypical nevi are precursor lesions for malignant melanoma.
B. Hereditary melanoma shows AD transference with variable percentage.
C. Melanoma with unknown primary mostly presents with nodal metastasis.
D. Thin melanoma means thickness of less than 1mm.
E. Chemotherapy is treatment of choice for in situ melanoma.

Answer: E

- **Surgical excision**: full-thickness excision with appropriate **safety margins**
  - **0.5–1 cm safety margin:** melanoma in situ (T0)
  - **Other margins according to Breslow depth**: thickness from the granular layer to the lowest detectable tumor cell. The Breslow index correlates with the risk of metastasis.

Breslow classification of invasive melanoma			
Breslow stage	**TNM stage**	**Modified by AJCC**	**Safety margin**
I Thin	**pT1**	≤ 1.0 mm	1 cm
II	**pT2**	1.01–2 mm	1–2 cm
III	**pT3**	2.01–4 mm	2 cm
IV	**pT4**	≥ 4 mm	
If tumor thickness > 1 mm (Breslow stage ≥ II): perform sentinel lymph node biopsy			

- **Origin**
  - Melanocytes from the epidermal skin layer
  - A precursor lesion (e.g., congenital or atypical nevi, lentigo maligna) in ⅓ of cases
- **Risk factors**
  - **UV radiation** exposure
  - Light skin
  - Dysplastic nevi, giant congenital nevi, or inherited skin conditions (e.g., dysplastic nevus syndrome, familial atypical mole, melanoma syndrome, xeroderma pigmentosa)
  - Immunosuppression
  - Genetics [2]
    - **BRAF gene** mutations; V600E is the most common mutation [3]
    - CDKN2A gene mutations [4]

Melanoma with an unknown primary

- Represents 3% of melanomas
- Diagnosis is by exclusion
- Nodal metastases are the most common presentation
- Prognosis is similar to melanomas with a known primary.

10. Regarding skin graft take, all of the following statements are true EXCEPT:

A. Graft take does not occur over Eschar.
B. Neovascularization of the graft occur in 7 days.
C. Graft take is poor over cortical bone.
D. Meshed grafts take is better than non- meshed grafts.
E. Graft take is poor on lower limbs compared with face.

Answer: B

Graft take

The process by which the graft is integrated in the recipient site and acquires new blood supply.

HOW DOES (SKIN GRAFT TAKE) OCCURE

Skin graft take passes through two stages:

1. PLASMATIC CIRCULATION: in the first 1-2 days, the graft is nourished from the underlying recipient site by the process of imbibition or diffusion (plasmatic circulation).

2. NEOVASCULARIZATION: within 2-3 days, the graft blood vessels are joined with the recipient site vessels, the latter process is called Neovascularization.

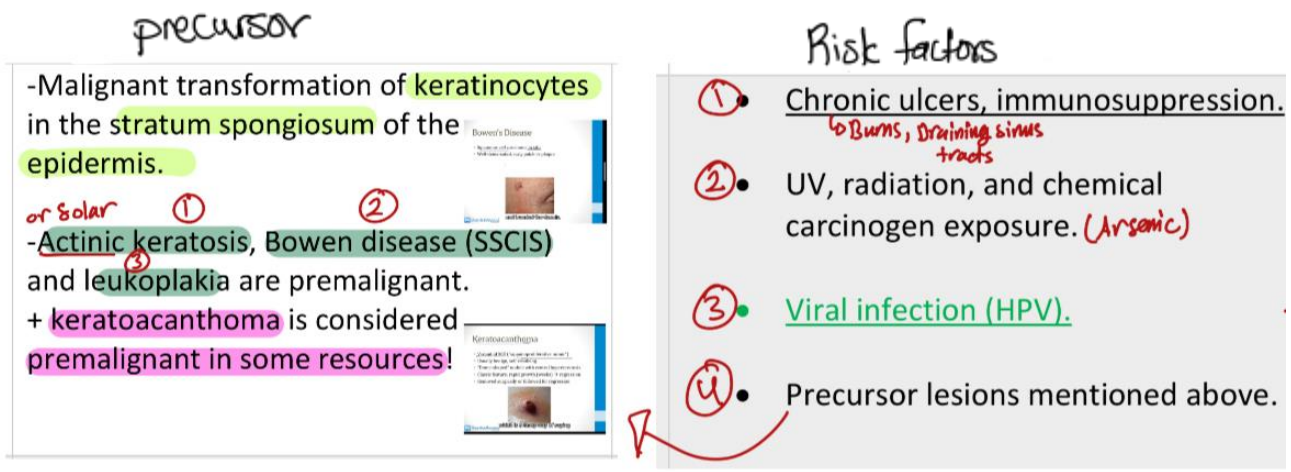
Factors affecting graft take:

1. **Vascularity of the recipient site.**
   This is the most important factor. Skin graft take is poor on avascular areas, such as cortical bone bared of its periosteum, cartilage devoid of its perichondrium, tendons bared of its peritendon, and over irradiated areas, graft take does not take place on prosthesis.

11. The following are precursor lesions for squamous cell carcinoma EXCEPT:

A. Keratocanthoma.
B. Leukoplakia.
C. Bowen's disease.
D. Actinic keratosis.
E. Chronic ulcers.

Answer: E >> it's a risk factor not precursor.



12. The following statements regarding tissue expansion are true, EXCEPT:

A. Creation of additional tissue.
B. Increased vascularity of tissues.
C. The epidermis becomes thinner with tissue expansion.
D. Formation of capsule around the expander by foreign body reaction.
E. Caution with patients with irradiated skin.

Answer: C >> thinner dermis not epidermis

What is tissue expansion?

Tissue Expansion is a procedure performed to promote the growth of healthy supplementary skin used for the replacement of damaged skin. This reconstructive procedure is an option for almost any area of the body, allowing plastic surgeons to repair skin damaged by both congenital and acquired defects.

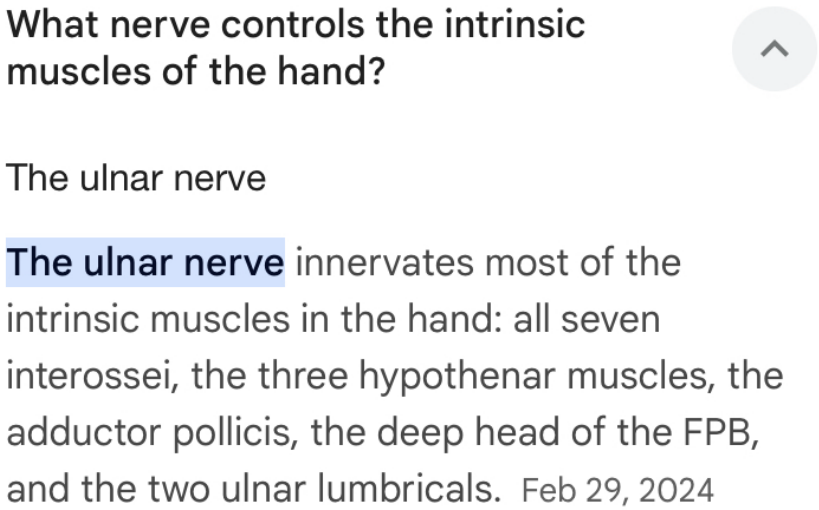
Changes in Tissue Expansion

Structure	Physical Changes	Cellular Changes
Epidermis	Increased thickness	Increased mitotic rate
Dermis	Decreased thickness	Increased collagen
Fat	Decreased thickness	Fat necrosis
Muscle	Decreased thickness	Increased mitochondria
Blood Supply	Increased vascularity	Increase angiogenesis

13. Wasting of the intrinsic/ small muscles of the hand can be expected following injury to:

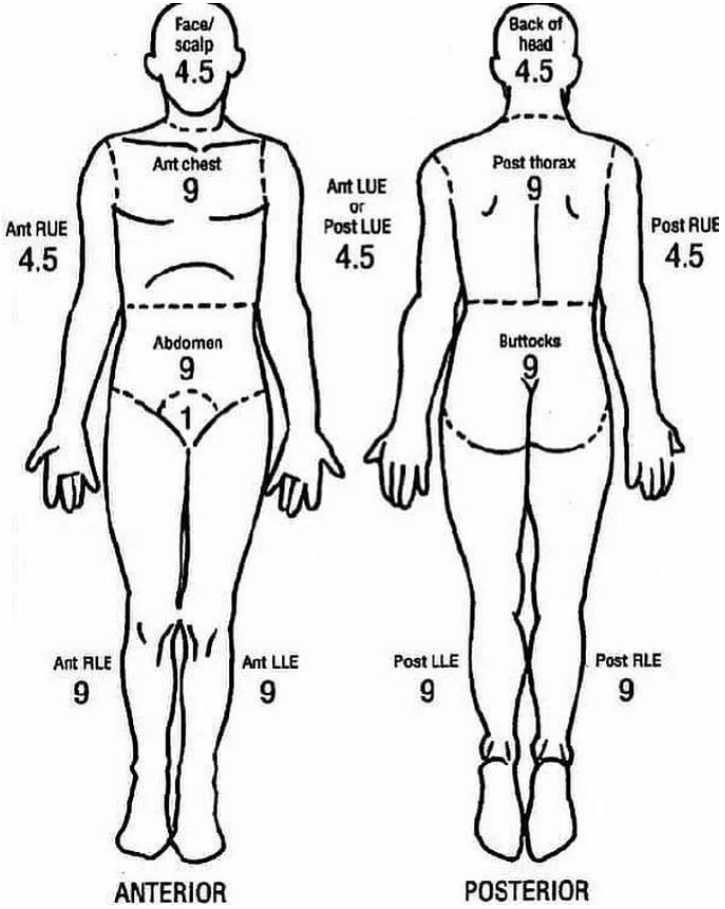
A. Radial nerve.
B. Brachial nerve.
C. Ulnar nerve.
D. Median nerve.
E. Axillary nerve.

Answer: C



14. A 33 y/o female involved in a house fire, sustained burn to bilateral lower extremities anterior torso entire left upper limb and her genitalia, approximately what percentage of the total body surface area is burned.

A. 64%
B. 36%
C. 46%
D. 72%
E. 54%



Answer: A

Bilateral lower extremities>> 18% ,18%

Anterior torso >> 9% (ant. Chest) , 9% (ant. Abdomen)

Left upper limb>> 9%

Genitalia>>1%

18+18+9+9+9+1= 64

15. Which of the following characteristics best distinguish keloid scar tissue from hypertrophic scar tissue?

A. Collagen fibers parallel to the direction of wounding.
B. Extension beyond original scar.
C. Improved by surgical excision alone.
D. Increased fibroblast density.
E. Location on flexor surfaces and areas of motion.

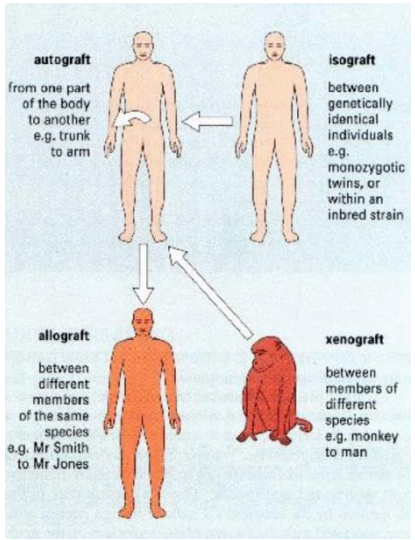
Answer: B

Hypertrophic scar	Keloid scar
Improves with time (within 2 years)	Does not improve with time
No genetic predisposition (can occur in caucasians)	Genetic predisposition (blacks with nigroid features). Autosomal dominant with incomplete penetration
Limited ot the borders of the original wound	Extends beyond the margins of the wound.
Less collagen	More collagen
Distinct bundles with fine fibers	Large collagen fibers with closely packed fibrils
Fibers parallel to the dermis	Fibers random in orientation
Less cytokines	More cytokines
Myofibroplasts present (undergo contraction formation)	Absent myofibroplasts (do not undergo contracture formation)

16. The transfer of tissue between genetically identical twins is called:

A. Autograft
B. Xenograft
C. Allograft
D. Isograft
E. Composite graft

Answer: D



17. The following are causes of compartment syndrome of extremities EXCEPT:

A. Fractures.
B. Superficial partial thickness burn circumferential.
C. High pressure injection injuries.
D. Hemorrhage into compartment.
E. Snake bites.

Answer: B >> electrical burns & 3rd degree burns (full-thickness) because of eschar.

18. Which of the following statement is correct regarding basal cell carcinoma (BCC)?

A. The skull provides an effective barrier to invasion of basal cell carcinoma.
B. Radiation therapy and surgical excision have similar cure rate.
C. Flap reconstruction after excision of basal cell carcinoma will not significantly delay the diagnosis of recurrence.
D. Histiocytosis X will increase the risk of BCC.
E. Caucasian Europeans and Mediterranean races have about the same rate of basal cell carcinoma.

Answer: B.

19. A 16 year-old boy presented to emergency room with a tender red and fluctuant swelling in the right forearm of 2 days duration. He reported a pencil-stick injury at the site of swelling one week ago. The most likely diagnosis is:

A. Abscess.
B. Lymphangitis.
C. Cellulitis .
D. Clostridium tetani.
E. Gas gangrene.

Answer: A

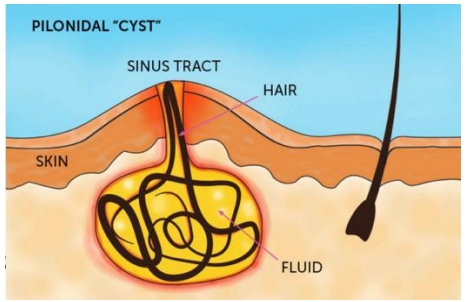
20. Which of the following statements regarding pilondial sinus is true:

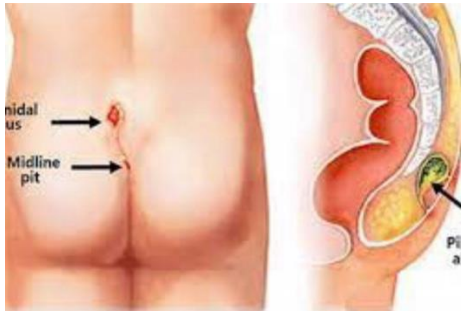
A. Hair is rarely found in the sinus.
B. It is more common in women.
C. It is congenital in most cases.
D. The primary opening is always in the midline.
E. Is more common in blacks.

Answer: D

A pilonidal sinus is a small hole or tunnel in the skin at the top of the buttocks, where they divide (the cleft). It does not always cause symptoms and only needs to be treated if it becomes infected.

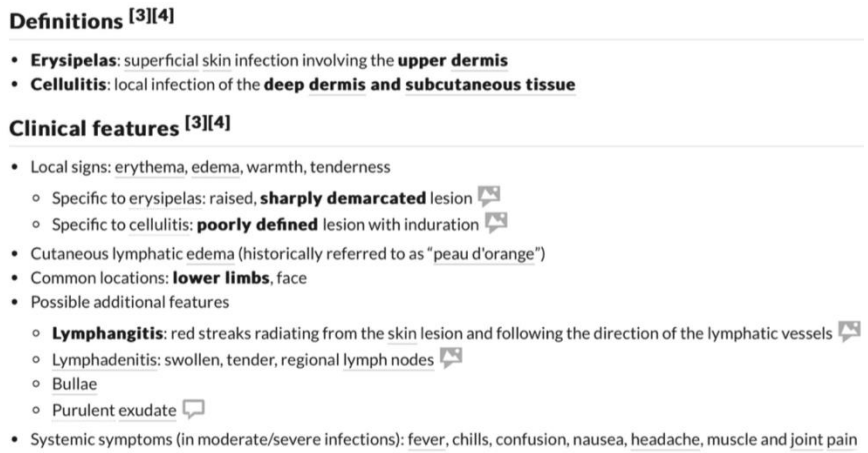
Epidemiology. Incidence of pilonidal disease is about 26 per 100,000 population. Pilonidal disease occurs predominantly in males, at a ratio of about 3-4:1. It occurs predominantly in White patients, typically in the late teens to early twenties, decreases after age 25, and rarely occurs after age 45.





21. Which of the following statements regarding cellulitis is TRUE?

A. This is non-suppurative spreading infection of the skin.
B. It is rarely caused by wounds.
C. It is commonly caused by staphylococci.
D. Gram negative organisms do not cause cellulitis.
E. Penicillin is an effective treatment



Definitions [3][4]

- **Erysipelas**: superficial skin infection involving the **upper dermis**
- **Cellulitis**: local infection of the **deep dermis and subcutaneous tissue**

Clinical features [3][4]

- Local signs: erythema, edema, warmth, tenderness
  - Specific to erysipelas: raised, **sharply demarcated** lesion
  - Specific to cellulitis: **poorly defined** lesion with induration
- Cutaneous lymphatic edema (historically referred to as "peau d'orange")
- Common locations: **lower limbs**, face
- Possible additional features
  - **Lymphangitis**: red streaks radiating from the skin lesion and following the direction of the lymphatic vessels
  - Lymphadenitis: swollen, tender, regional lymph nodes
  - Bullae
  - Purulent exudate
- Systemic symptoms (in moderate/severe infections): fever, chills, confusion, nausea, headache, muscle and joint pain

Answer: E

A wrong : it's a non suppurative infection of the deep dermis.

B wrong : in both erysipelas and cellulitis the most common point of entry for the pathogen is a small skin lesion.

C wrong : caused by GAS

D wrong : it can be caused by Pasteurella multocida which is a gram-negative encapsulated coccobacilli.

22. Which one of the followings is a good predictor for spontaneous closure of enterocutaneous fistula?

A. Previous radiation therapy
B. Presence of underlying abscess
C. Long fistula tract
D. Short fistula tract
E. Presence of foreign body in the fistula tract

Answer: C

❖ **Enterocutaneous Fistula** → from GIT to skin
(entero – cutaneous = bowel to skin)

- Causes
  - Anastomotic leak.
  - Trauma/ iatrogenic.
  - Infections → Abscess/ TB/ Amebiasis.
  - Crohn's disease.
  - Diverticulitis (m.c.c of colovesical fistula).
  - Inflammation.
  - Inadvertent suture into the bowel.
  - Vascular compromise.

Factors increase rate of closure:

- Decrease output
- Long tract > 2 cm
- Small orifice < 1 cm

23. Which of the following is the commonest site for venous ulcer?

A. Foot
B. Lower 1/3 leg and ankle
C. Lower 2/3 of leg
D. Middle 1/3 of leg
E. Upper1/3 of leg

Answer: B

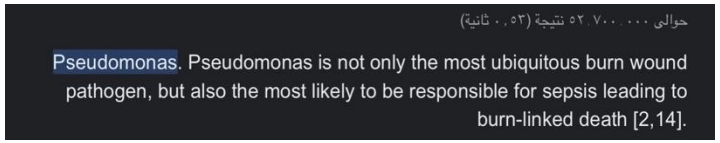
Venous ulcers [14][31][11]

- **Definition**: an open skin lesion of the leg or foot in an area affected by venous hypertension [11]
- **Etiology**: usually caused by CVI with or without complications (e.g., untreated stasis dermatitis) [13]
- **Clinical features** [32]
  - Most frequently occurs just **above the ankle** (gaiter region)
  - Manifests as a shallow ulcer with irregular borders
  - Typically **mild pain** and pruritus
  - Additional clinical features of CVI are usually present, e.g., edema, varicose veins.

24. What is the most common organism to cause burn sepsis?

A. E. coli.
B. Pseudomonas.
C. Group A Streptococci.
D. Enterococcus.
E. Staph. Epidermidis.

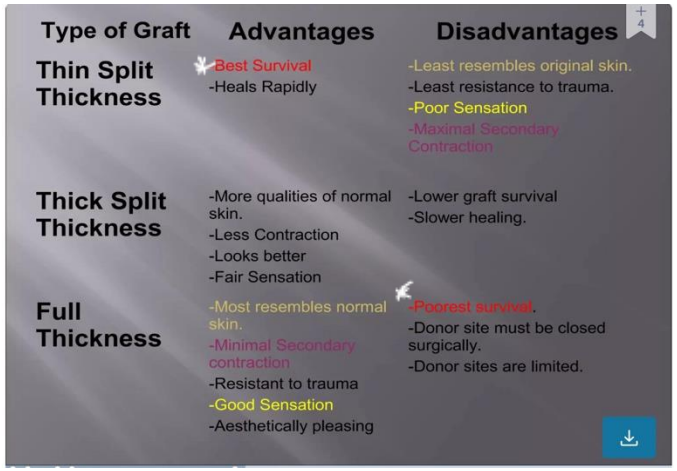
Answer: B



25. Compared with split-thickness skin graft, full-thickness skin grafts have all of the following, EXCEPT:

A. Can cover only limited areas.
B. Donor sites are usually closed primarily.
C. They have better final sensation
D. Result in more successful graft take.
E. Ideal coverage over joints

Answer: D



Type of Graft	Advantages	Disadvantages
Thin Split Thickness	-Best Survival -Heals Rapidly	-Least resembles original skin. -Least resistance to trauma. -Poor Sensation -Maximal Secondary Contraction
Thick Split Thickness	-More qualities of normal skin. -Less Contraction -Looks better -Fair Sensation	-Lower graft survival -Slower healing.
Full Thickness	-Most resembles normal skin. -Minimal Secondary contraction -Resistant to trauma -Good Sensation -Aesthetically pleasing	-Poorest survival. -Donor site must be closed surgically. -Donor sites are limited.

Skin grafts

SKIN GRAFTS

1.Split thickness skin grafts (STSG)

- Epidermis and part of the dermis
- Donor area heals by regeneration (similar to the healing of superficial second degree burn).
- The same donor area can be re-harvested after healing.
- Almost any area of the body may be used as a donor site, so large areas of skin defects may be covered with STSG.

Full thickness skin grafts (FTSG)

Consists of the whole skin (epidermis and dermis)

Taken from areas of loose skin as the donor area is closed by approximation of the edges (direct closure), due to this fact, only small areas could be covered by FTSG.

FTSG is superior to STSG from functional and cosmetic aspects: Better texture, better color matching with less pigmentation problems, more durable, less wound contraction; they have better sweat and sebaceous glands function, it grows with the child, and they have better final innervation.

Although FTSG are better they have 2 drawbacks: they are less available to cover large areas, and they are more difficult to take.

FTSG is superior to STSG from functional and cosmetic aspects: Better texture, better color matching with less pigmentation problems, more durable, less wound contraction; they have better sweat and sebaceous glands function, it grows with the child, and they have better final innervation.

What type of skin graft to use, STSG or FTSG?

- When the area to be covered is small and needs good durable skin as on the hand and joints, or needs good cosmesis, as on the face then FTSG is used.
- But if we need to cover large areas, as in major burns, then STSG is the logic choice.

26. Regarding cleft palate, all of the following statements are true, EXCEPT:

A. Hearing loss is secondary to ear infections.
B. The newborn has abnormal swallowing.
C. Early repair is associated with abnormal facial growth.
D. It results from failure of palatal shelves to meet in the mid-line.
E. Palatal muscles are abnormally inserted.

Answer: B

1. Feeding

For normal feeding the baby should suckle the milk and then swallow it. It is so important to educate the mother that babies with cleft palate have **defective sucking**, simply because they cannot create negative pressure inside their oral cavity to suckle (the mouth is communicating with the atmosphere through the nose). This makes breast feeding difficult. **Although suckling is defective, swallowing is normal.**

Question 26 cont..

A. secretory otitis media is not properly treated it would be complicated by bacterial acute otitis media (recurrent ear infections) that may lead to with and hearing loss. So remember that hearing loss in cleft palate patients is not congenital by acquired due to repeated ear infections.

C. ***TIMING OF SURGICAL REPAIR OF CLEFT PALATE***

Speech therapists believe that, the earlier the cleft palate repair is, the better the outcome of speech would be, so they encourage early repair, but the facial surgeons think that early surgical repair would interfere with the facial bony growth leading to retardation of maxillary growth (dish face). So the compromise between these two opinions is to operate at 1 year of age.

Lip → 3 months

palate → 1 year

D+E Failure of this valve mechanism is called **VELOPHARYNGEAL INCOMPETENCE.**

Among many causes, **cleft palate is the most common cause of this incompetence**, which is attributed to 3 abnormalities in the patient with cleft palate:

1. The mechanical defect of the cleft.
2. Hypoplasia of the palate.
3. Abnormal insertion of the palatal muscles

Surgical correction of cleft palate, aims at closure of the cleft palate to restore the velopharyngeal competence.

27. Regarding high voltage electric burns, all of the following statements are true EXCEPT:

A. May be associated with decreased level of consciousness.
B. May cause cardiac arrest.
C. Affects muscles more than skin.
D. May be associated with dark urine.
E. Fluid resuscitation depends on Parkland’s formula.

Answer: E

28. Regarding the management of burns, All of the following statements are true, EXCEPT:

A. Prophylactic antibiotics decrease incidence of burn sepsis.
B. Intra-venous fluid resuscitation is not indicated in an adult with 10% full-thickness burn.
C. Superficial second degree burns heal usually within 1-2 weeks.
D. Spontaneous separation of the eschar is done by bacterial enzymes.
E. Limbs with third degree burns are usually complicated by contractures if not grafted.

Answer: A

ANTIBIOTICS

Are used to treat infections, but not prophylactically

Prophylactic antibiotics are contra-indicated in burns, for the following reasons:

- Studies did not prove that prophylactic antibiotics decrease the incidence of sepsis.
- Antibiotics increase the incidence of fungal infections.
- Antibiotics increase the incidence of bacterial resistance.

Question 28 cont..

B → ❑ burn shock is seen in adults with burns greater than 15-20% and in children with burn more than 10-15% .

C → 1st degree , 2nd degree , 3rd degree
< 1week < 1month months

D→ The modern treatment of burn, evolved in the last decades, is to excise the eschar early (**early escharectomy**) and cover the burn wounds by skin graft, rather than waiting for the natural, bacterial assisted spontaneous separation of the eschar, the **Advantages of early escharectomy and grafting are:**

29. The dominant type of collagen in tendon is ?

A. Type I.
B. Type II.
C. Type V.
D. Type IV.
E. Type III.

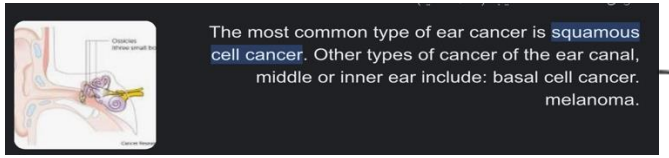
Answer: A

Type 1	Found within tendons and ligaments
Type 2	Found within the cartilage
Type 3	Found in bone marrow
Type 4	Found in the basement membrane
Type 5	Found in the hair and surface of cells

30. The most common cancer of the ear is:

A. Malignant melanoma.
B. Basal cell carcinoma (BCC).
C. Squamous cell carcinoma (SCC).
D. Metastatic deposits.
E. Adnexal tumor

Answer: C



→ Sun exposed areas

31. A patient with grossly contaminated wound presents 12 hours after an accident , his wound should be managed by:

A. Thorough cleaning and primary repair.
B. Thorough cleaning with debridement of all dead and devitalized tissue without primary closure
C. Primary closure over a drain
D. Covering the defect with split skin graft after cleaning
E. Covering it with a full thickness skin graft

Answer: B

Question 31 cont..

MANAGEMENT OF DEFECTS

1. WHEN **NOW: When the wound is clean.
**LATER OR DELAYED: when the wound is not clean.

** **Clean:** means **minimal bacterial load (contamination and infection)**, and **minimal necrotic tissue**, this depends on two factors:

1. **MECHANISM OF INJURY, AND INSTRUMENT USED**: Crushing injuries, and injuries inflicted by blunt instruments are usually associated with a degree of contamination and tissue damage.
2. **TIME ELAPSED FROM INJURY TO PRESENTATION**: if this time is more than 6 hours, then the wound is considered contaminated, an exception to this rule is the face, in which primary closure could be done within 24 hours, this is due to the excellent vascularity of the face.

HOW: Wounds are closed by one of 5 methods:

1. Direct closure.
2. Healing by secondary intention.
3. Skin grafting; split thickness, or full thickness.
4. Flaps. Local or distant.
5. Prosthesis

Depending on the degree of tissue necrosis and contamination, wounds are classified into:

1. **Incised wound**: caused with sharp, relatively clean instruments, like kitchen knife, these wounds have minimal necrosis and contamination. These wounds are closed primarily if patient arrives within six hours.

2. **Lacerated wounds**: characterized by jagged edges, caused with blunt instruments, they are associated with moderate degree of necrosis and contamination, if patient arrives within six hours, these wounds are managed by wound excision, (to transform it into an incised wound) and then direct closure.

3. **Crushed wounds**: seen in industrial and severe road traffic accidents, associated with heavy contamination and severe tissue revitalization.
   These wounds are managed by wound opening, cleaning, irrigation and adequate debridement, which means excision of the devitalized tissue.
   This procedure is repeated daily till the wound is clean with no dead tissue, when it could be closed.

   Primary closure is contra-indicated in these crushed wounds, as the dead tissue, contamination, and the tissue tension due to inflammatory edema will predispose to infection, especially gas gangrene and tetanus.

32. All are true regarding keloid EXCEPT:

A. Grows beyond would margin
B. Excess collagen deposition
C. Precancerous leading to cancer
D. More common in female
E. Blacks are at high risk

Answer: C

Keloids are considered as benign fibroproliferative skin tumors growing ٢٠١٩/٠٨/٠٧ beyond the site of the original dermal injury.

✓ Keloids : cancer like
✓ More common in black people (Negros)
✓ There's genetic predisposition (multiple genes on short arm of ch.7)
✓ Beyond the site of trauma
✓ Won't improve with time
✓ If excised surgically >> re-occurs (genetics)


Hypertrophic scar	Keloid scar
Improves with time (within 2 years)	Does not improve with time
No genetic predisposition (can occur in caucasians)	Genetic predisposition (blacks with nigroid features). Autosomal dominant with incomplete penetration
Limited ot the borders of the original wound	Extends beyond the margins of the wound.
Less collagen	More collagen
Distinct bundles with fine fibers	Large collagen fibers with closely packed fibrils
Fibers parallel to the dermis	Fibers random in orientation
Less cytokines	More cytokines
Myofibroplasts present (undergo contraction formation)	Absent myofibroplasts (do not undergo contracture formation)

33. The tensile strength of the wound starts and increases after:

A. Immediate suture of the wound
B. 3–4 days
C. 7–10 days
D. 2-3 weeks
E. 6 months

Answer: B

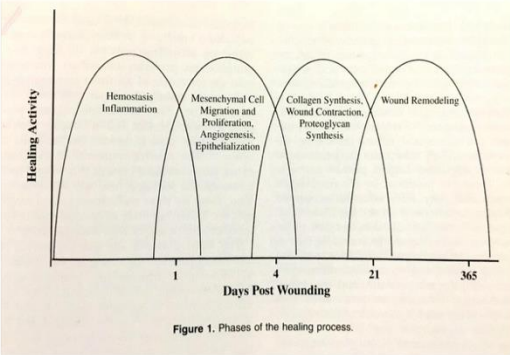


Figure 1. Phases of the healing process.

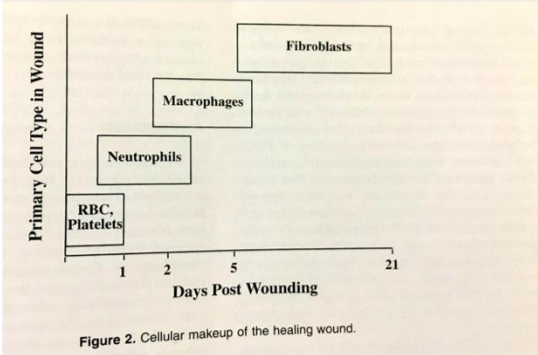
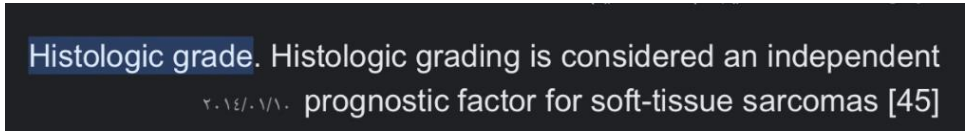


Figure 2. Cellular makeup of the healing wound.

34. Which of the following is the most important prognostic factor for soft-tissuesarcomas?

A. Histological subtype.
B. Grade
C. Age at presentation.
D. Necrosis.
E. Co-morbidities.

Answer: B



35. A 30-year-old woman who is morbidly obese is admitted to the burn unit withpartial-thickness burns on 40% of the total body surface area involving the trunkand lower extremity. Maintenance of which of the following is the mostappropriate measure to guide proper fluid management of the patient?

A. Arterial systolic pressure greater than 90 mmHg
B. Cardiac output greater than 5 L/min
C. Mean arterial pressure greater than 55 mmHg
D. Pulse rate less than 120 bpm
E. Urinary output of 0.5 mL/kg/h.

Answer: E

- Urine output is the most sensitive indicator of tissue perfusion.

- In adults it should be 0.5-1 ml / kg / hour, In children it should be 1-2 ml / kg / hour.

- Higher urine output may indicate over-resuscitation that leads to harmful tissue edema.

36. According to Parkland formula, a 50-kg adult patient involved in flame burn, had third degree of the right lower limb, second degree burn to the right upper limb and first degree burn to the left upper limb. He should receive in the first 8 hours:

A. 3600 cc Ringer's lactate
B. 7200 cc Ringer's lactate.
C. 2700 cc Ringer's lactate.
D. 5400 cc Ringer's lactate.
E. 1800 cc Ringer's lactate.

Answer: C

Parkland's formula:

- Fluid in the first 24 hours = 4 X Weight X % of burn
- Half of the calculated fluid is administered in the first 8 hours , and the remaining half over the next 16 hours.
- Ringer's lactate.

Type of fluids to be given:

Because the capillaries are leaky initially, it is wise to give crystalloids (Ringer's lactate) , in the first 24 hours, and to give colloids thereafter.

only partial thickness and full thickness burns are included in the calculation → only 2nd and 3rd degree

% of burn =

Rt. lower limb + Rt. upper limb =

18 + 9 = 27%

4 x 50 x 27 = 5400 → total over 24hrs

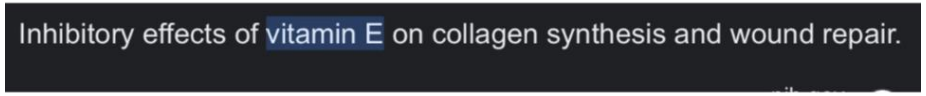
↓

half = 2700 in the first 8hrs

37. The vitamin which has inhibitory effect on wound healing is :

A. vitamin C
B. Vitamin D
C. vitamin A
D. vitamin E
E. vitamin B complex

Answer: D



38. Wrong about compartment syndrome:

A. Fasciotomy of all affected compartments
B. Absent pulse is an early sign

Answer: B (it is very late)

Clinical features

Signs and symptoms of ACS typically **progress rapidly** over a few hours but the presentation and onset are highly variable. [1][2][3]

- **Early features**
  - Pain out of proportion to the extent of apparent injury
    - Worsens with passive stretching or extension of muscles
    - Extreme tenderness to touch
  - Soft tissue swelling
  - **Tight, wood-like muscles**
- **Later features**
  - Neurologic deficits
    - Paresthesia (e.g., pins and needles sensation)
    - Sensory deficits
    - Muscle weakness or paralysis
  - Impaired perfusion
    - Cold extremity with pallor or cyanosis (uncommon)
    - Absent or weak distal pulses

COMPATRMENT SYNDROME

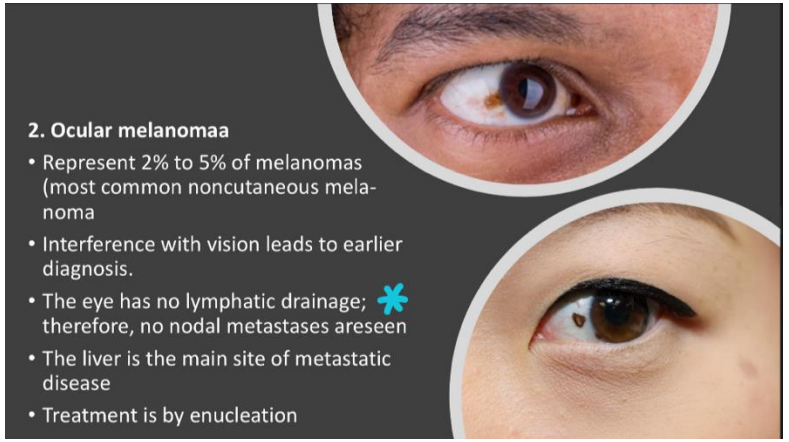
An increase in the pressure inside a skeletal muscle compartment above the capillary pressure (32 mm/Hg), thatleads to decreasing capillary perfusion and muscle ischemia.

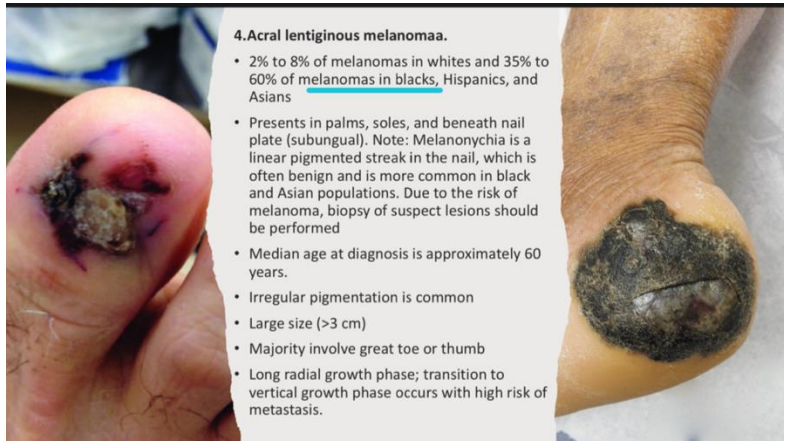
Clinically it is characterized by severe undue pain in the affected limb along with paresthesia and numbness. The affected limb is tense. At the beginning the pulses may still be palpable (because in compartment syndrome the intra-compartmental pressure is above the capillary pressure which is 32 mm/Hg, not enough to close an artery).
Pressure should be releived by fasciotomy within 6 hours to avoid permanent muscle ischemic necrosis.

39. Wrong about melanoma:

A. Ocular melanomas metastasize to cervical lymph nodes
B. Acral lentiginous melanoma is the most common type in blacks.

Answer: A





40. About burns, all are true except:

A. 2nd degree burns usually treated by skin grafts
B. 3rd degree burn causes loss of the tissue elasticity

Answer: A

Note that the deeper the burn the more dermis is necrotic so:
- Less pain due to damage of dermal nerves.
- Healing is by fibrosis rather than regeneration. So leaving more post burn contractures
- More loss of skin elasticity, so it compresses the limbs that needs escharotomy.

DEGREE OF BURN

This determines the local management of the burn wounds , In partial thickness burn, part of the dermis containing skin appendages is preserved, from these epithelial elements, the burn wound would heal by **REGENERATION**, within weeks, hence the local treatment of the burn is **conservative (no skin grafts)**. While in full thickness burn all the dermis with the epithelial elements are lost, so the burn wound would naturally heal by **FIBROSIS**, a process usually takes longer period, and leaves an unstable scar, with all its **functional**, and **cosmetic** complications, to avoid this unfavorable fate, full thickness burns, should be treated by **skin grafting**, better sooner than later. According to the previous discussion, the deeper the burn is, the more the scarring would be, and the more time is taken to heal.

41. Wrong about electrical burns: make sure

A. Hypokalemia is common

B. High voltage >> severe damage

C. Damage is proportional to tissue resistance

Answer: A >> burn

3.ELECTRICAL BURNS:

- The severity of burn depends on the voltage.
- Tissue damage is inversely related to the **tissue resistance.**
- Nerves, muscles, blood, and blood vessels have low resistance, so they are affected most, while skin, and tendons, have high resistance, hence, they are less burned.
- Although nervous tissue is the most sensitive to electric injury, the major effect of electric burn involves the muscles due to their bulk.

42. Wrong about early escharectomy:

Answer: Removed by bacteria.

The modern treatment of burn, evolved in the last decades, is to excise the eschar early (**early escharectomy**) and cover the burn wounds by skin graft, rather than waiting for the natural, bacterial assisted spontaneous separation of the eschar, the **Advantages of early escharectomy and grafting are:**

1. Decrease the duration of hospital stay.
2. Decrease the incidence of burn wound sepsis, by elimination of the dead tissue and bacteria.
3. Helps early mobilization of the patient, decreasing joint cotractures.
4. Shortens the catabolic state, minimizing the protein breakdown, and malnutrition.
5. Better cosmetic outcome.

43. Wrong about cleft palate:

Answer: Hearing loss is congenital.

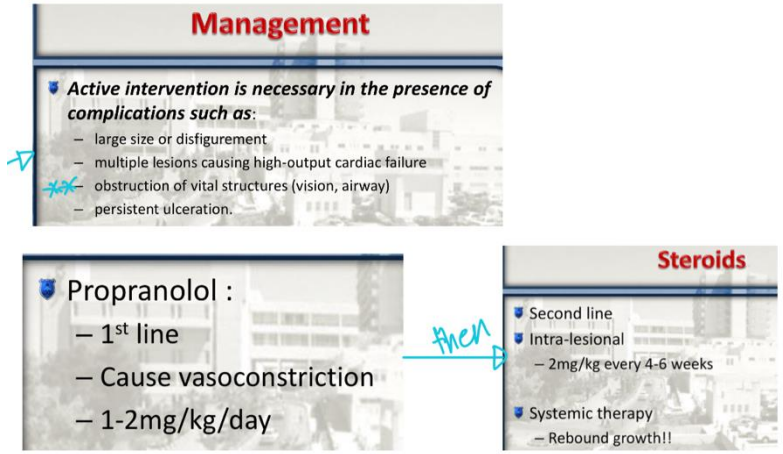
Cleft Palate

Cleft palate is not an aesthetic problem as cleft lip, but it is associated with many functional problems: **feeding**, **speech, regurgitation of food from nose and may lead to hearing loss due to recurrent ear infections**. Normally Eustachian tube is patent to equalize pressure. Patients with cleft palate have Eustachian tube dysfunction due to abnormal insertion of muscles, so the tube is not patent (obstructed) so fluids will accumulate in the tube leading to **secretory otitis media** which is evident by accumulation of fluids behind the ear drum, this is treated by the ENT specialist by drugs as anti-histamines, or by drainage of the fluids surgically by puncturing the ear drum and putting tubes (Gromet tubes) for continuous drainage. If secretory otitis media is not properly treated it would be complicated by bacterial acute otitis media (recurrent ear infections) that may lead to with and hearing loss. So, remember that hearing loss in cleft palate patients is not congenital by acquired due to repeated ear infections.

44. 8 month old baby with hemangioma on his upper eyelid obstructing the eye , management?

A. a. Laser
B. Steroids
C. Surgery
D. Observation
E. Embolization

Answer: B



45. True about wound healing:

Answer: Activation of coagulation cascade.

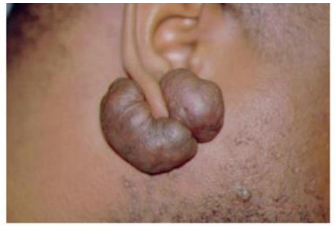
- Stages of wound healing:
  - Early stage:
    - Tissue injury
    - Coagulation
    - Inflammation: during the inflammatory phase, polymorphs are recruited during the first 24-48 hours. Macrophages play their role in 48-72 hours. Fibroblasts follow. Macrophages function as phagocytic cells. They are the primary source of growth factors (cytokines), which regulate the whole process of wound healing.
  - Intermediate phase:
    - Mesenchymal cell migration and proliferation
    - Epithelization from the edges of the wound and remaining appendages.
    - Angiogenesis: the formation of new blood vessels
  - Late phase:
    - Matrix formation: collagen synthesis by fibroblasts. Collages fives tissues their strength and integrity.
    - Wound contraction
    - Proteoglycan synthesis: this is more important in the healing of fractured bones.
  - Final phase: this is the stage of wound remodeling. This occcurs by the breakdown and resynthesis of collagen. This stage can continue for 12-18 months.
- The stages of wound healing are not neatly arranged into distinct stages; these stages overlap.

46. Wrong about excessive wound healing:

A. Keloid doesn't improve with time
B. number of fibroblast in keloid and hypertrophic is more than normal ulcers.

Answer: B

✓ Keloids : cancer 🦀 like
✓ More common in black people (Negros)
✓ There's genetic predisposition (multiple genes on short arm of ch.7)
✓ Beyond the site of trauma
✓ Won't improve with time
✓ If excised surgically >> re-occurs (genetics)




- Common features:
  - Raised above the skin
  - Erythematous: ongoing inflammation; always reddish
  - Pruritic
  - Near the wound
  - Common in areas of stress and tension (joint over shoulder, upper back, anterior chest, and ear lobe)
- Hypertrophic scars develop insidiously 6-8 weeks after trauma. They worsen up to 6 months to 2 years. Then, they regress spontaneously or by medications. Keloid scars do not regress
- Both are more common in darkly pigmented races
- When excised, they have a tendency to re-occur months after treatment.
- Keloid scars tend to worsen during puberty and pregnancy.
- Fetal wound healing doesn't leave any scars.
- Keloids and hypertrophic scars do not have an increased number of fibroblasts; they have an increased activity of fibroblasts.

very important

47. Pressure ulcer which is wrong?

A. Stage 1 pressure ulcer is blanchable skin after 1 hour of removing pressure
B. All are colonized with bacteria
C. Repair by debridement and skin graft usually works.

Answer: C

A is true>> before one hour its nonblanchable

Microbiology [4]

The most commonly isolated bacteria include:

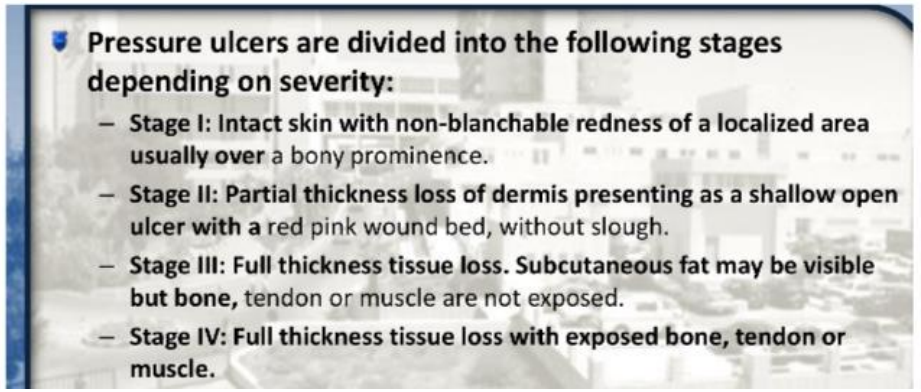
- Staphylococcus aureus
- Proteus mirabilis
- Pseudomonas aeruginosa
- Enterococcus faecalis

- Skin grafts: used in superficial ulceration with a success rate of 30% due to the presence of unhealthy underlying tissue
- Flapps: local tissue flap, fascio-cutaneous, or myocutaneous.

Pressure ulcers

Staging and grading: this system is a clinical system, and it has its limitations. Erythema, for example, is harder to detect in darker people

- Stage I: skin is intact, but reddened for more than 1 hour after relief of pressure. The muscle is involved, but it is not apparent clinically
- Stage II (ischemia): blister or other break in dermis with or without an infection. It develops if pressure was continuous for 2-6 hours. In contrast to hyperemia, redness from ischemia requires at least 36 hours to disappear.
- Stage III (necrosis): subcutaneous destruction into the muscle with or without an infection. Occurs if the pressure last for more than 6 hours. Usually, the skin is blue and firm
- Stage IV (ulceration): involvement of bone and joint with or without an infection.



48. Most common soft tissue sarcoma ?

A. Rhabdomyosarcoma
B. leiomyosarcoma
C. fibrosarcoma
D. Liposarcoma

Answer: C

في اختلاف بين المصادر

fibrosarcoma according to Michigan Manual of Plastic Surgery, some sources say its leiomyosarcoma, others say liposarcoma,American cancer society says undifferentiated pleomorphic sarcoma previously called malignant fibrous histiocytoma)

49. About erysipelas, all are true except :

A. caused by groub A strep
B. Painful
C. red, flat, skin lesion
D. face is common site
E. treated with penicillin

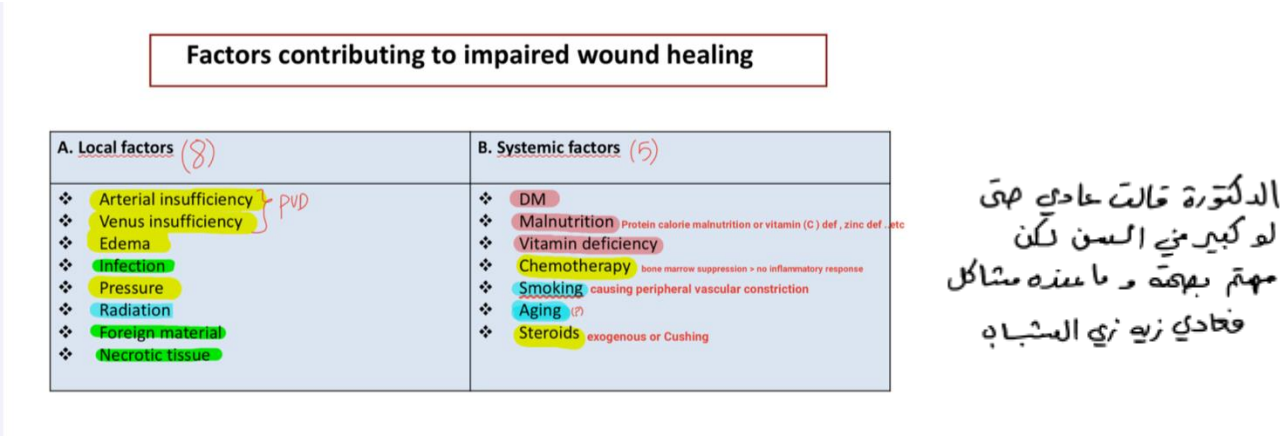
Answer: C

- Specific to erysipelas: raised, **sharply demarcated** lesion
- Specific to cellulitis: **poorly defined** lesion with induration

50. All contribute to bad wound healing except :

A. old age
B. Radiation
C. continuous pressure
D. Immunosuppression
E. Edema

Answer: A

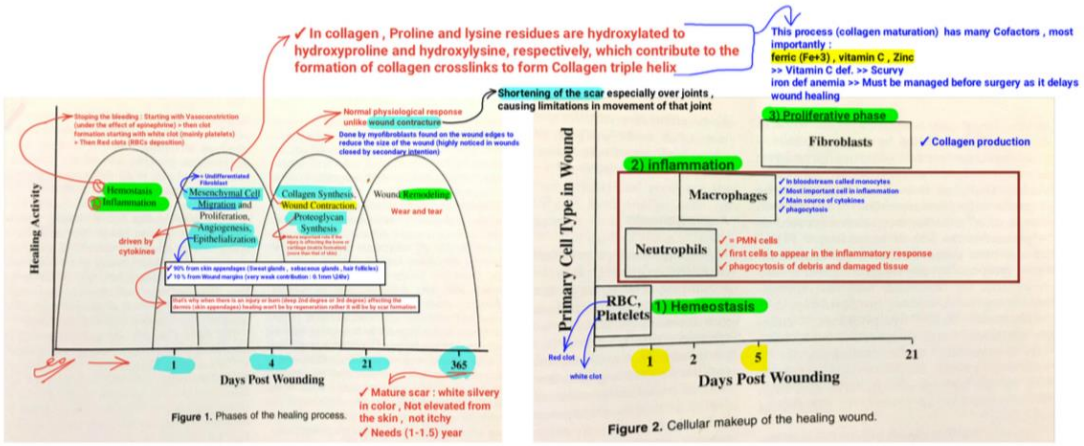


الدكتورة قالت عادي حتى لو كبير في السن لكن مهتم بصحته و ما عنده مشاكل فعادي زيه زي الشباب

51. Most potent inflammatory mediator :

A. Cytokines
B. Prostaglandins
C. Interferon
D. TGF
E. Leukotrienes

Answer: A



✓ Elastin is responsible for skin elasticity
✓ When there's a wound collagen is reproduced but Elastin No

✓ Each event is controlled by more than one type of cytokines
✓ Each type of cytokines causes more than one event

Healing Function	Cytokines Involved
Inflammatory Cell Migration	PDGF TGF-β TNF-α

52. Graft is not applicable if the recipient area is infected with:

A. p.aeruginosa
B. staph A
C. Group A strep
D. Ecoli
E. Klebsiella

Answer: C

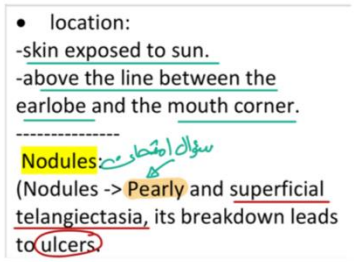
Factors affecting graft take:

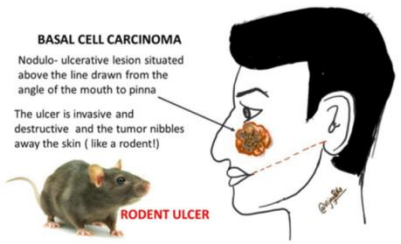
1. **Vascularity of the recipient site.**
   This is the most important factor. Skin graft take is poor on avascular areas, such as cortical bone bared of its periosteum, cartilage devoid of its perichondrium, tendons bared of its peritendon, and over irradiated areas, graft take does not take place on prosthesis.
2. **Bacterial load** (contamination and infection), especially that is caused by streptococcus, group A.
3. **Presence of barriers between the graft and the recipient area, as hematoma, seroma, debris, or foreign materials.**
4. **Immobilization**, the graft should be fixed to the recipient site, as graft mobility hinders imbibition and neovascularization.

53: Not a common site of BCC:

A. upper lip
B. cheek skin
C. lower lip
D. around the eye

Answer: C

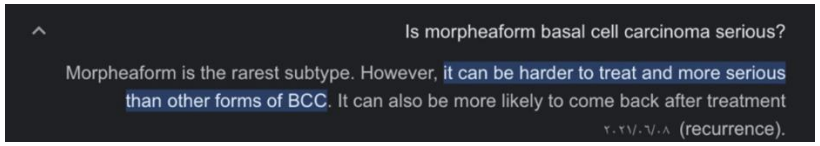


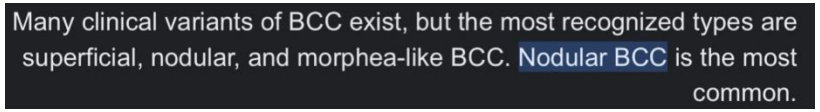


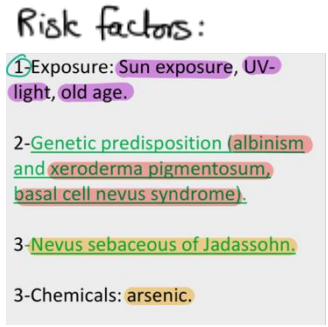
54. Wrong about BCC:

A. most common type is nodular
B. morphea is the highest type of recurrence
C. young age is risk factor
D. locally invasive

Answer: C





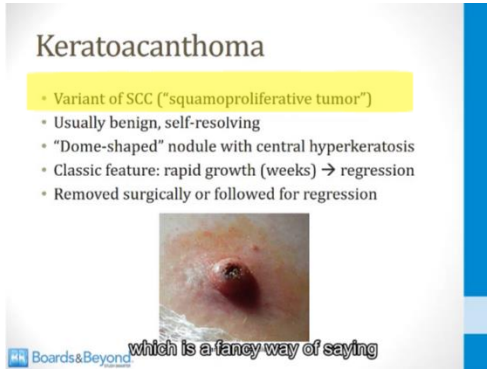


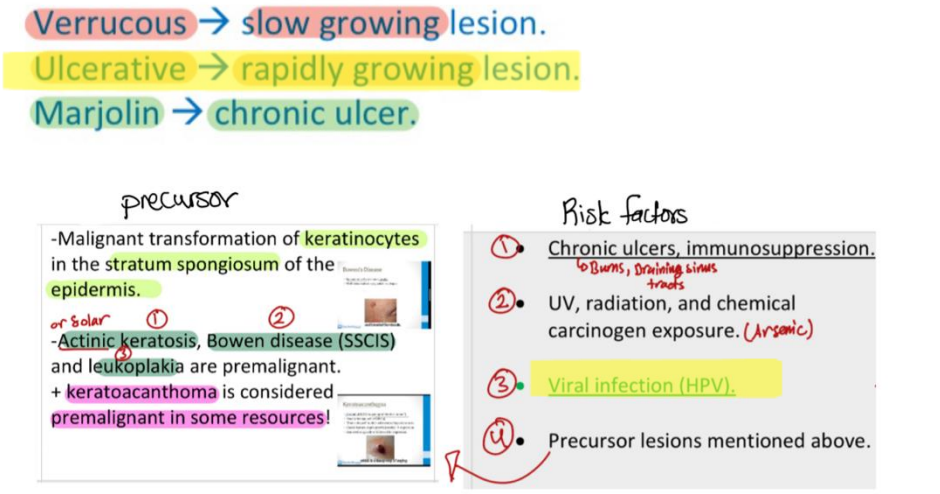
55. SCC which is wrong:

A. keratoacanthoma may resemble SCC clinically
B. ulcerative type is aggressive and highly locally invasive
C. 50% of leukoplakia eventually turn into SCC
D. HPV and HSV skin lesions have tendency to turn into SCC

Answer: C

Leukoplakia
Common
Men > women (2:1)
Higher correlation with tobacco and alcohol use
Moderate rate of malignant transformation (3% to 25%)
Moderate mortality





56. Wrong about melanoma :

A. less and better prognosis in females
B. most common type is superficial spreading
C. nodular type is poor prognosis
D. radiotherapy is the mainstay of treatment

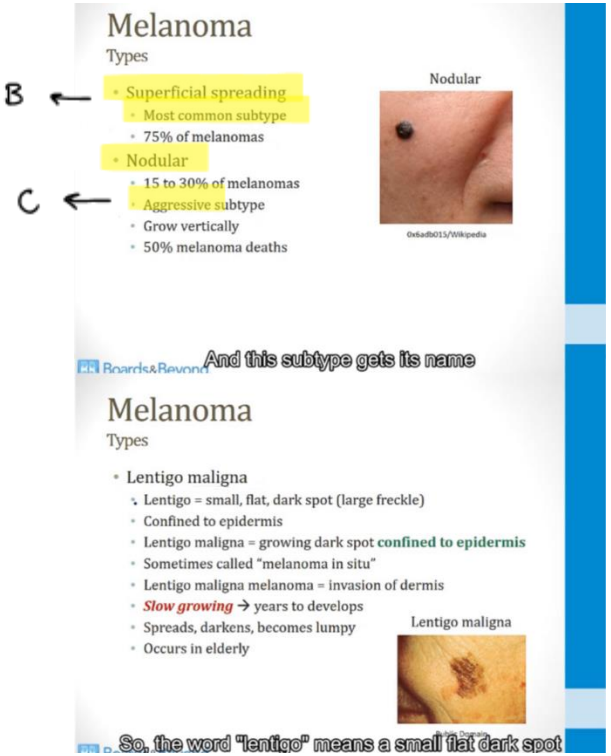
Answer: D

B. Definitive management of melanoma

1. **Wide local excision** is the treatment of choice.
2. **Recommended surgical margins** depend on tumor thickness (Table 11-5)
3. **subungual melanoma** requires amputation the distal to the distal metalingual joint for fingers, and proximal to the interphalangeal joint of the thumb

B. Demographic risk factors

3.Gender: Females have lower risk and better prognosis; the lower extremity is the most common site in females (Table 11-2). Males more commonly have lesions on the head and trunk.



57: All are true about soft tissue sarcoma, EXCEPT:

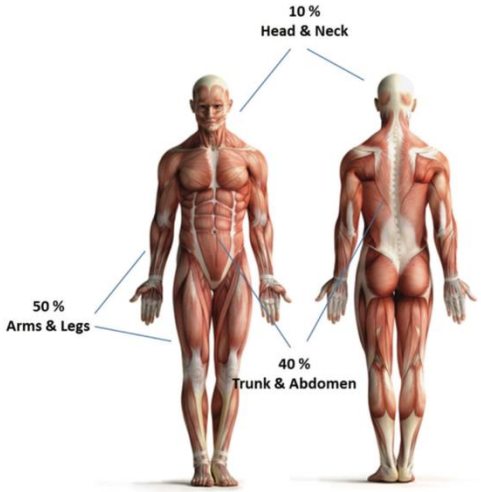
A. fibrosarcoma is resistant to chemo and radio
B. soft tissue sarcoma has capsule that we shouldn't remove during surgery
C. 50% in extremities

Answer: B >> they have capsule, but should be removed because its invasive.

Treatment for Fibrosarcoma

Most often a combined approach of surgery, chemotherapy and radiation is used. In some cases, the doctor may advise proton therapy instead of radiation therapy. Proton therapy targets the tumor and avoids organs and healthy tissue.

→ no surgery = no treatment



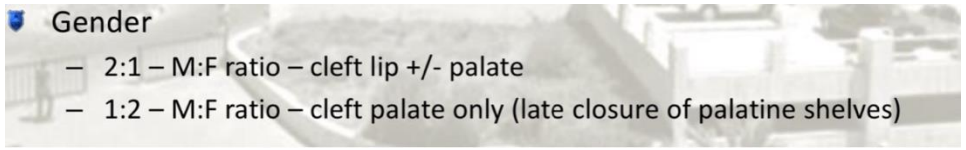
58. 60. Wrong about cleft lip and palate:

A. isolated cleft lip has incidence of 0.5/1000 live births
B. cleft lip is more common in female
C. eustachian tube dysfunction is due to poor insertion of palatine muscle
D. most common side effect of cleft repair is fistula

Answer: B

Cleft lip >> male

Cleft palate >> female



59. Most common of cleft lip and palate is:

A. unilateral isolated incomplete cleft lip
B. unilateral isolated cleft lip and alveolus
C. cleft palate
D. unilateral complete cleft lip
E. combined cleft lip and palate

Answer: E

60. Wrong about hyperproliferative wound healing:

A. equal in males and females
B. keloid is more common in blacks
C. keloid scar has TGF-beta
D. hypertrophic scar increased with older age

Answer: D

62. Wrong about hyperproliferative wound healing:

a. equal in males and females Not related to an ethnic group or gender

b. keloid is more common in blacks

c. keloid scar has TGF-beta

- **Pathophysiology**
  - Increased synthesis and unorganized deposition of collagen type I and collagen type III
  - Increased TGF-β expression and fibroblast proliferation

d. hypertrophic scar increased with older age

تقل وتختفي مع مرور العمر، وظهورها لا علاقة له بالعمر

Also there is TGF-β in hypertrophic scar

61. Wrong about vascular anomalies :

Answer: Vascular malformations grows proportionally as a part of the body then involutes at older age.

1. They are structural abnormalities resulting from errors in the morphogenesis of embryonic vessels between weeks 4-10 weeks of gestation. first trimester
2. Almost always sporadic.
3. They appear at birth and their growth is parallel to the growth of the child. → They never go spontaneously
4. They are formed of mature endothelial cells which have normal turnover rate throughout their natural history. These cells have no receptors and no mast cells between them.
5. Vascular malformations can be one of tow types: either high flow or low flow (capillary, venous, lymph or combined).
6. Never goes spontaneously as hemangiomas and they do not respond to steroids.
7. It may need treatment if complicated or for cosmetic reasons.
8. Female: male is 1:1

62. About burn management all are true except:

A. bronchogenic pneumonia is the most common cause of death
B. CO poisoning is treated with 100% O2
C. causes hyponatremia and hyperkalemia
D. 1% sulfadiazine is a topically applied antibiotic that has spectrum against gram +ve & -vebacteria
E. the initial objective of treating chemical burns is to neutralize them

Answer: E

▪**The primary management of chemical burns is by irrigation of the area affected by water to dilute the chemical agent, this should continue for 2-4 hours in case of alkaline burn, and 30 minutes for burns caused by acids .**

alkaline burn, and 30 minutes for burns caused by acids. Note that we **DO NOT** apply acids to neutralize alkalis and vice versa. Because adding acid to alkali results in harmful heat production.

B. **CARBON MONOXIDE POISONING**: This is due to occupation of the oxygen carrying sites of hemoglobin by CO, which has 210 times higher affinity to hemoglobin than oxygen. The condition is diagnosed by estimation of carboxyhemoglobin level in the blood, the PO2 level may be normal, as this is an estimation of the oxygen dissolved in the plasma. The treatment is by administration of 100% oxygen in order to displace the tightly bound CO from hemoglobin.

D.
- Consider antiseptic ointments (e.g., silver sulfadiazine) or topical antibiotics (e.g., bacitracin) for 2nd-degree burns.
- Wound dressing: indicated in 2nd-degree burns

63. 11 month old infant, weighs 10kg, has a 20% TBSA burn, what is the fluid therapyto give:

A. 4ml/kg/1%TBSA RL
B. 3ml/kg/1% TBSA RL + D5W for maintenance

Answer: A

We give 4ml for each 1kg for each 1% of TBSA

64. Concerning chemical burns, what's wrong :

A. deeper penetration and more damage to tissue due to longer action
B. acids produce a barrier that limit their destructive effect due to coagulative necrosis
C. acids produce less damage than alkali
D. alkali produce liquefactive necrosis
E. management is irrigation by water for 30 mins for alkali

Answer: E

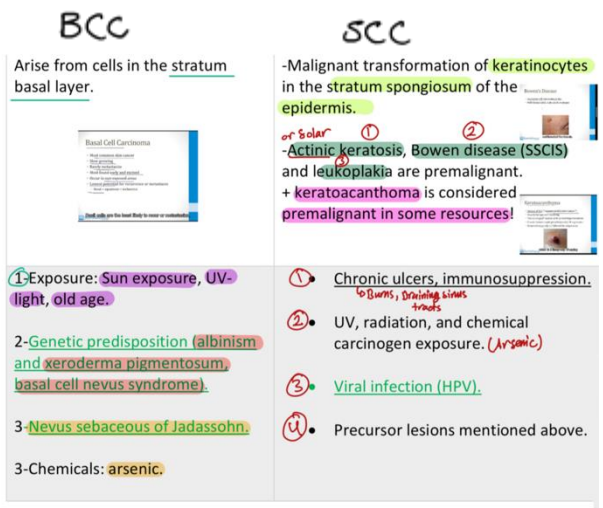
▪The primary management of chemical burns is by irrigation of the area affected by water to dilute the chemical agent, this should continue for 2-4 hours in case of alkaline burn, and 30 minutes for burns caused by acids .

Acid causes coagulative necrosis while alkali causes liquefactive necrosis (which is worse and deep)>> alkali needs more irrigation time

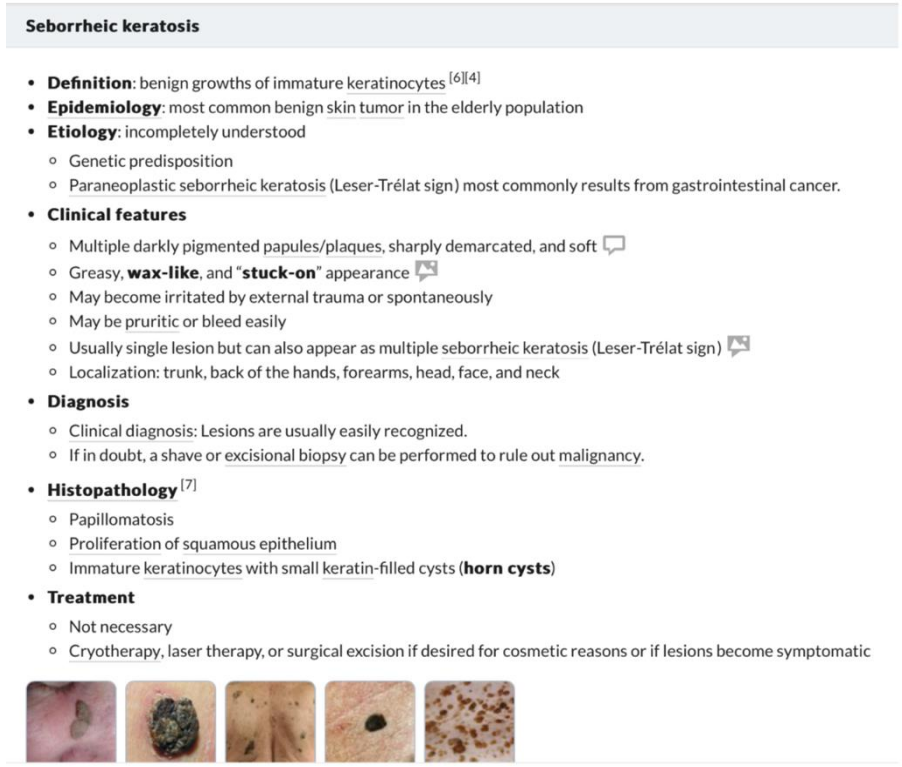
65. Not premalignant skin lesion :

A. seborrheic Keratosis
B. Erythroplakia
C. sebaceous nevus of jadassohn
D. Albinism
E. actinic(=solar) keratosis

Answer: A



BCC	SCC
Arise from cells in the stratum basal layer.	-Malignant transformation of keratinocytes in the stratum spongiosum of the epidermis. -Actinic keratosis, Bowen disease (SSCIS) and leukoplakia are premalignant. + keratoacanthoma is considered premalignant in some resources!
1-Exposure: Sun exposure, UV-light, old age. 2-Genetic predisposition (albinism and xeroderma pigmentosum, basal cell nevus syndrome). 3-Nevus sebaceous of Jadassohn. 3-Chemicals: arsenic.	Chronic ulcers, immunosuppression. UV, radiation, and chemical carcinogen exposure. Viral infection (HPV). Precursor lesions mentioned above.



Seborrheic keratosis

- **Definition**: benign growths of immature keratinocytes [6][4]
- **Epidemiology**: most common benign skin tumor in the elderly population
- **Etiology**: incompletely understood
  - Genetic predisposition
  - Paraneoplastic seborrheic keratosis (Leser-Trélat sign) most commonly results from gastrointestinal cancer.
- **Clinical features**
  - Multiple darkly pigmented papules/plaques, sharply demarcated, and soft
  - Greasy, **wax-like**, and "**stuck-on**" appearance
  - May become irritated by external trauma or spontaneously
  - May be pruritic or bleed easily
  - Usually single lesion but can also appear as multiple seborrheic keratosis (Leser-Trélat sign)
  - Localization: trunk, back of the hands, forearms, head, face, and neck
- **Diagnosis**
  - Clinical diagnosis: Lesions are usually easily recognized.
  - If in doubt, a shave or excisional biopsy can be performed to rule out malignancy.
- **Histopathology** [7]
  - Papillomatosis
  - Proliferation of squamous epithelium
  - Immature keratinocytes with small keratin-filled cysts (**horn cysts**)
- **Treatment**
  - Not necessary
  - Cryotherapy, laser therapy, or surgical excision if desired for cosmetic reasons or if lesions become symptomatic

66. TBSA can predict all of the following except:

A. mortality and morbidity
B. Sepsis
C. Joint contracture
D. time for healing

Answer: C

ESTIMATION OF THE PERCENTAGE OF BURN:

This determines the prognosis (mortality rate), and the systemic complications and the systemic management of the burn victim.

A. **The percentage of burn deretmines:**
B. The mortality rate (mortality rate increases as percentage increases).
C. Degree of hypovolemic shock (fluid deficit) and hence the fluid resuscitation.
D. Degree of malnutrition, Hypermetabolism, catabolism and protenn breakdown.
E. The propability of decreased immunity, sepsis, septic shock and their systemic complications as multi-organ failure increase with the increase in burn percentage.

67. All of the following are associated with increased requirements of fluid resuscitation except:

A. patient with inhalational injury
B. electrical burn
C. Infant
D. slim patient

Answer: D (slim = low weight = lower requirements)

68. Most important cell in wound healing:

A. neutrophil
B. Macrophage
C. Fibroblast
D. Lymphocyte
E. Endothelial

Answer: B

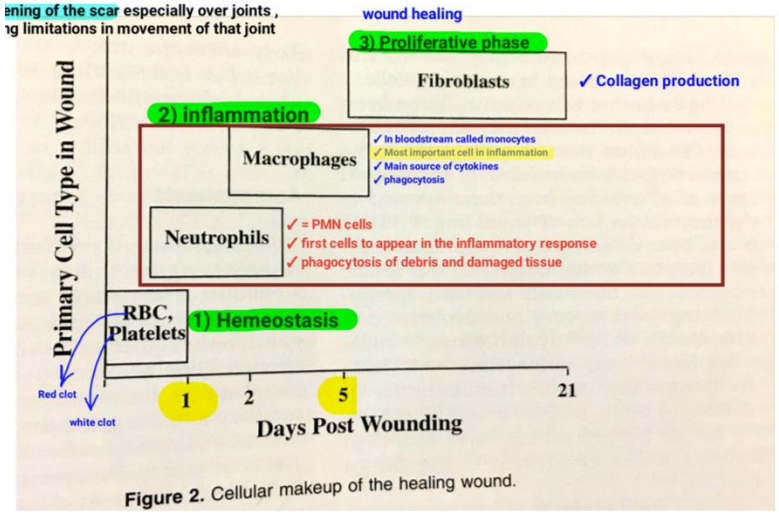


Figure 2. Cellular makeup of the healing wound.

69. 1 J Parkland formula : pt wt is 50 kg, had bilateral lower limb burn (full burn) ,fluids to be given for 8 hours:

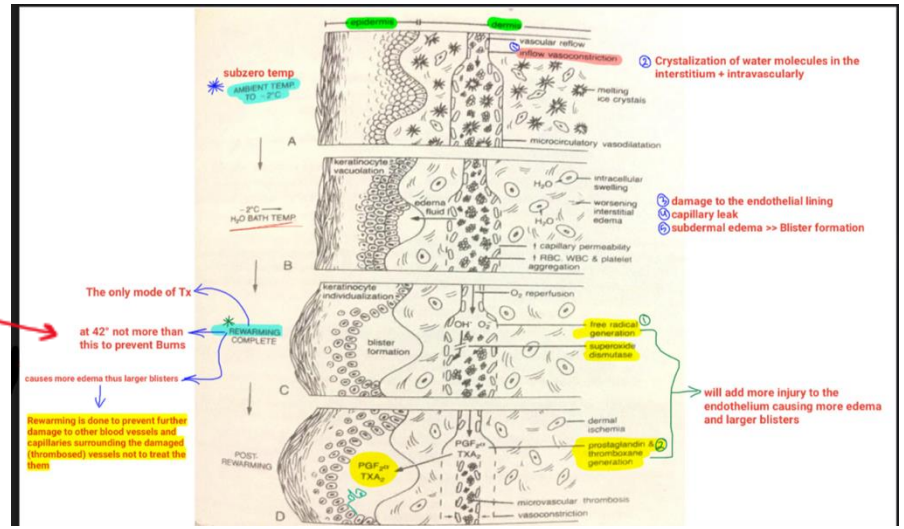
Answer: 3600 ml of ringer lactate.

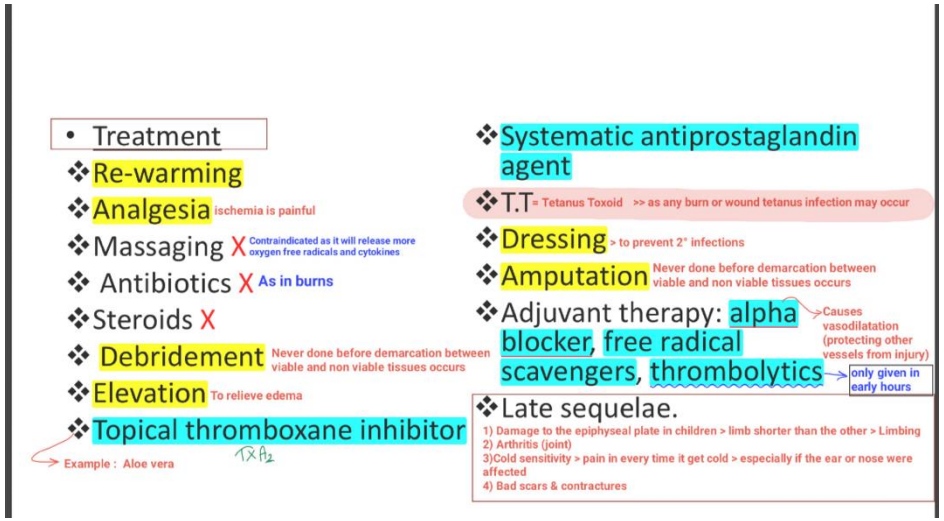
4 x wt x TBSA% = 4x 50x (18+18) = 7200 (for the 24 hrs) >> half in the first 8 hrs >> 3600

70. Most effective for frost bite:

A. Rapid warming (42 C)
B. Heparin
C. Hyperbaric oxygen
D. Sympathomectomy
E. Thromboxane

Answer: A





71. all true for pressure sores except :

A. Moisture decrease ischemia
B. caused by pressure >32 mm Hg
C. affects the sacrum and heels mostly
D. ischemia related to stretching of the underlying vessels

Answer: A

A

Pressure ulcer formation is accelerated in the presence of ***friction, shear forces, and moisture***.

B

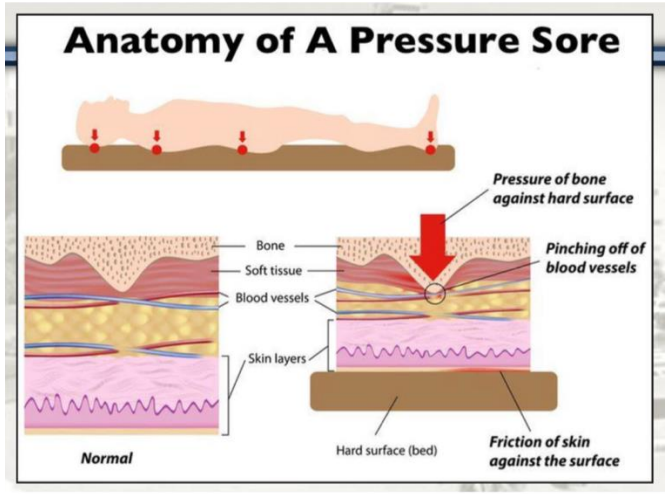
How much pressure is needed to cause a pressure ulcer?

External pressure of more than 33 mm Hg occludes the blood vessel so that the underlying and surrounding tissues become anoxic and if the pressure continues for a critical duration, cell death will occur, resulting in soft tissue necrosis and eventual ulceration.

C

Clinical features

- **Typical location**: over bony prominences, such as the **sacrum**, **heel**, greater trochanter, lateral malleolus, elbows



72. wrong about grafts:

A. graft neovascularization occurs in 2-3d
B. grafts on escahrs have poor take
C. grafts on bones (or something similar) have poor take
D. meshed grafts have poorer take than non-meshed
E. blanching is a sign of take

Answer: D (its better)

73. Wrong about electrical burn:

Answer: skin is most affected >> least affected (skin) , most affected (muscles)

74. Wrong about wound healing:

A. collagen type 1 is the most common in wound healing
B. inflammatory phase begins directly and continue for 2-3 days
C. source of epithelization mainly from wound edges
D. decrease of neovascularization in remodeling phase
E. scar vascularity is decreased in remodeling Phase

Answer: C

✓ 90% from skin appendages (Sweat glands , sebaceous glands , hair follicles)
✓ 10 % from Wound margins (very weak contribution : 0.1mm \24hr)

✓ In collagen , Proline and lysine residues are hydroxylated to hydroxyproline and hydroxylysine, respectively, which contribute to the formation of collagen crosslinks to form Collagen triple helix

This process (collagen maturation) has many Cofactors , most importantly :
ferric (Fe+3) , vitamin C , Zinc
>> Vitamin C def. >> Scurvy
iron def anemia >> Must be managed before surgery as it delays wound healing

Shortening of the scar especially over joints , causing limitations in movement of that joint

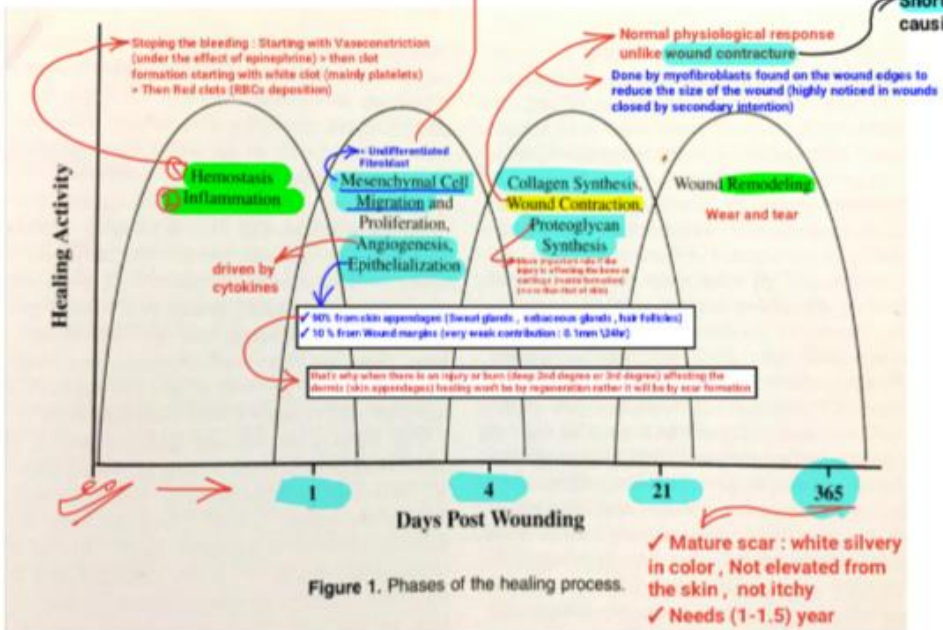


Figure 1. Phases of the healing process.

✓ Mature scar : white silvery in color , Not elevated from the skin , not itchy
✓ Needs (1-1.5) year

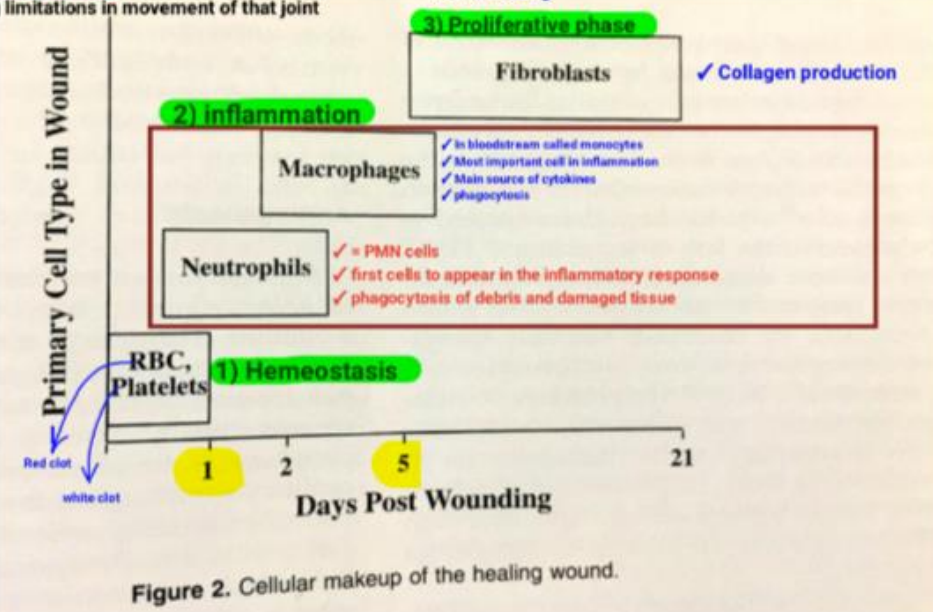


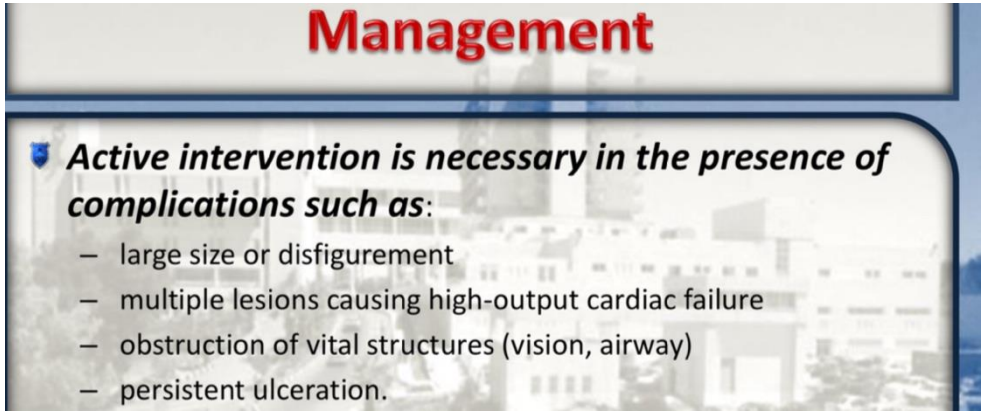
Figure 2. Cellular makeup of the healing wound.

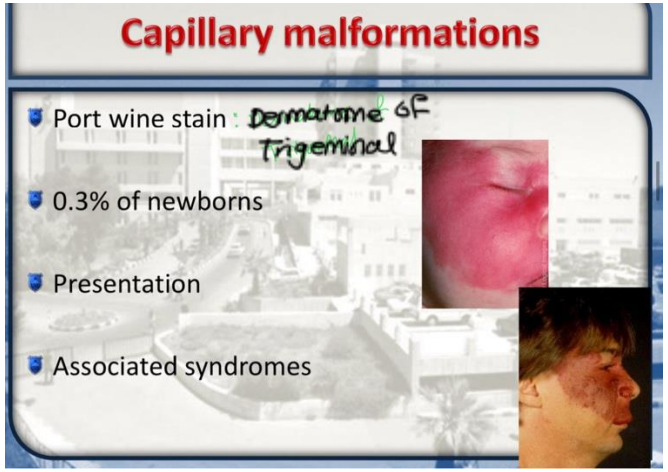
✓ Elastin is responsible for skin elasticity
✓ When there's a wound collagen is reproduced but Elastin No

75. about vascular malformation, all true except;

A. capillary malformation are confined to specific nerve distribution on the face
B. arterial malformation are mostly symptomatic
C. arteriovenous malformation in the limb can cause steal syndrome
D. hemangioma need no intervention and reassurance in all cases

Answer: D





76. All are accepted in the management of tetanus except :

A. give antibiotic
B. !are dose of tetanus toxoid
C. convulsion control
D. give human tetanus immunoglobulin
E. debridement of the wound

Answer: C

Treatment

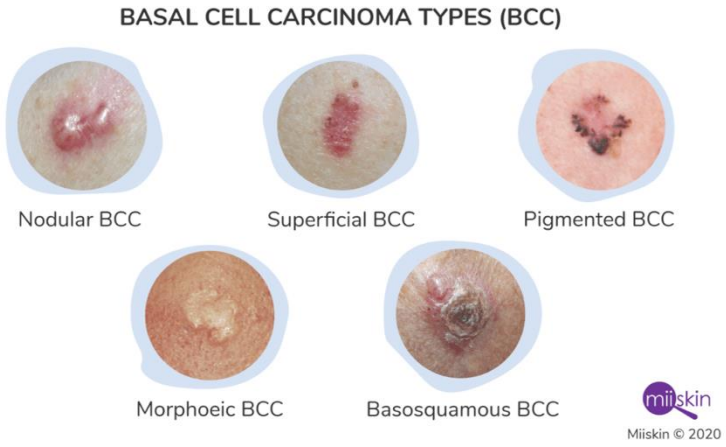
In addition to initial supportive care, management should focus on controlling the infection, eliminating toxin production, and neutralizing circulating toxins.

- **Wound cleaning and debridement**
- **Antibiotic treatment**
  - Drug of choice: metronidazole
  - Alternative: penicillin G
- **Active and passive immunization**
  - Single IM dose of **human tetanus immunoglobulin** (HTIG)
  - Tetanus toxoid-containing vaccine: for example, Tdap, Td, DTaP, DT, DPT, or tetanus toxoid, depending on age, previous immunization, or allergies (see "Tetanus prophylaxis" after injury in "Prevention" section below for details)
    - Inject in a separate site from HTIG
    - If the patient has not received initial immunization before infection: second and third dose 1–2 months and 6–12 months later, respectively
    - The still-intact receptor binding site of the tetanus toxoid induces antibody production and memory cell formation (active immunity).
- **Supportive care**: transfer to ICU, ventilation, benzodiazepines and/or paralytics for control of muscle spasms

77. all are clinical types of BCC except:

A. Nodular
B. Cystic
C. Subcutaneous
D. Pigmented
E. Ulcerated

Answer: C



cystic :

A relatively rare variant of nodular BCC is the cystic form, which shows cavities that may result from tumoral necrosis. It is a low-grade variant of

Ulcerated:

What type of nodular is ulcerated basal cell carcinoma?

Nodular: This is the most common type of BCC. Nodular BCC looks like a round pimple with visible blood vessels surrounding it (telangiectasias). Superficial spreading: This type causes lesions that appear as small, shallow marks on your skin that are slightly lighter in ٢٠٢٢/٠٨/٣١ color than the surrounding skin.

78. SCC all true except :

Answer: marjolin ulcer is less aggressive.

Verrucous → slow growing lesion.
Ulcerative → rapidly growing lesion.
Marjolin → chronic ulcer.

Subtypes and variants

Marjolin ulcer: an aggressive form of cSCC that typically develops from areas of **chronically damaged skin** such as ulcers (e.g., pressure ulcers, osteomyelitis) and scars (e.g., burn scars)

79. all decreases collagen synthesis except :

A. Hypoxia
B. Anemia
C. protein depletion
D. Infection

Answer: D

Infection >> inflammation >> fibroblasts >> collagen synthesis

80. full thickness vs partial thickness true except:

A. FTSG is associated with better take
B. to be used at exposed joints.

Answer: A

Although FTSG are better they have 2 drawbacks: they are less available to cover large areas, and they are more difficult to take.

81. all about burn is true except:

A. diagnosed as first degree in the first day then turned to be 2nd degree on the following day.
B. degree of burn affects the systemic management of burns.

Answer: B >> degree of burn decides the local management.

1. **The depth of burn damage (degree):** determines the **local management and outcome of** the burn wound.

2. **The surface area involved in burn**, this is the percentage of the burned area to the total body surface area. **This determines the prognosis (mortality rate) and the systemic management and complications,** initially fluid resuscitation depends on the percentage of burn injury, later the percentage of burn determines the systemic complications as sepsis, catabolism and decreased immunity.

82. head and neck in infant TBSA:

A. 14%
B. 16%
C. 19%

Answer: C

And because the children have different body proportions compared with adults: for axample, the surface area of the head and neck of the neoborn is around (20%) and decreases with age, while the percentage of the surface area of the lower limbs of the neoborn is 14% and increases with age.

83. which cell produce TN F-a:

A. activated t lymphocyte
B. Monocyte
C. damaged endothelial cells
D. Fibroblasts

Answer: B (activated macrophages)

Important cytokines	Acute (IL-1, IL-6, TNF-α), then recruit (IL-8, IL-12).	
Secreted by macrophages		
Interleukin-1	Causes fever, acute inflammation. Activates endothelium to express adhesion molecules. Induces chemokine secretion to recruit WBCs. Also called osteoclast-activating factor.	"Hot T-bone stEAK": IL-1: fever (hot). IL-2: stimulates T cells. IL-3: stimulates bone marrow. IL-4: stimulates IgE production. IL-5: stimulates IgA production. IL-6: stimulates aKute-phase protein production.
Interleukin-6	Causes fever and stimulates production of acute-phase proteins.	
Tumor necrosis factor-α	Activates endothelium. Causes WBC recruitment, vascular leak.	Causes cachexia in malignancy. Maintains granulomas in TB. IL-1, IL-6, TNF-α can mediate fever and sepsis.
Interleukin-8	Major chemotactic factor for neutrophils.	"Clean up on aisle 8." Neutrophils are recruited by IL-8 to clear infections.
Interleukin-12	Induces differentiation of T cells into Th1 cells. Activates NK cells.	Facilitates granuloma formation in TB.
Secreted by T cells		
Interleukin-2	Stimulates growth of helper, cytotoxic, and regulatory T cells, and NK cells.	
Interleukin-3	Supports growth and differentiation of bone marrow stem cells. Functions like GM-CSF.	
From Th1 cells		
Interferon-γ	Secreted by NK cells and T cells in response to antigen or IL-12 from macrophages; stimulates macrophages to kill phagocytosed pathogens. Inhibits differentiation of Th2 cells. Induces IgG isotype switching in B cells.	Increases MHC expression and antigen presentation by all cells. Activates macrophages to induce granuloma formation.
From Th2 cells		
Interleukin-4	Induces differentiation of T cells into Th (helper) 2 cells. Promotes growth of B cells. Enhances class switching to IgE and IgG.	Ain't too proud 2 BEG 4 help.
Interleukin-5	Promotes growth and differentiation of B cells. Enhances class switching to IgA. Stimulates growth and differentiation of Eosinophils.	I have 5 BAEs.
Interleukin-10	Attenuates inflammatory response. Decreases expression of MHC class II and Th1 cytokines. Inhibits activated macrophages and dendritic cells. Also secreted by regulatory T cells.	TGF-β and IL-10 both attenuate the immune response.
Interleukin-13	Promotes IgE production by B cells. Induces alternative macrophage activation.	Interleukin thirtEEn promotes IgE.

84. which cell doesn't play a role in the healing of cleaned excised wound :

A. PMNls
B. myofibroblasts.
C. Macrophages

Answer: A (PMNIs >> it removes the debris and clean the area , wound is already clean so no need for it)

85. pressure sore, which is wrong

Answer: flaps are associated with minimal recurrence.

Flaps & grafts >> ^ reccurrence

- Skin grafts: used in superficial ulceration with a success rate of 30% due to the presence of unhealthy underlying tissue
- Flapps: local tissue flap, fascio-cutaneous, or myocutaneous.

86. cleft palate, which is wrong:

A. hearing loss due to recurrent ear infections
B. palatal muscles are wrongly inserted
C. early repair is associated with facial growth problem
D. problem in swallowing
E. caused by failure of palatal process meet at the midline

Answer: D

Discussed previously

87. Wrong about wound healing:

Answer: increase vascularity happens in remodeling phase.

88. Wrong abut 3rd degree burn:

A. skin will blanch upon pressure
B. painless skin

Answer: A (2nd degree burn blanch)

More burn degree >> less pain

89. One of the following is wrong regarding acute inflammation:

A. Capillary dilatation causes erythema of skin
B. Capillary leakage due to increase hydrostatic pressure
C. Capillary dilation causes increase permeability
D. Arteriolar dilatation causes hotness of skin

Answer: C (increased fenestration not dilation)

2. **Increased vascular permeability**
   - Inflammatory mediators (histamine, serotonin, bradykinin, and leukotrienes C_4, D_4, and E_4) rapidly trigger the retraction of endothelial cells → opening of interendothelial spaces and short-lasting paracellular leakage of plasma
   - Endothelial injury → endothelial cell necrosis and detachment → long-lasting leakage until the damaged area is thrombosed or repaired
   - Leakage of plasma content → edema and promotion of migration of immune cells and proteins to the site of injury or infection

90. Most imp. Contributing factor to pressure sore:

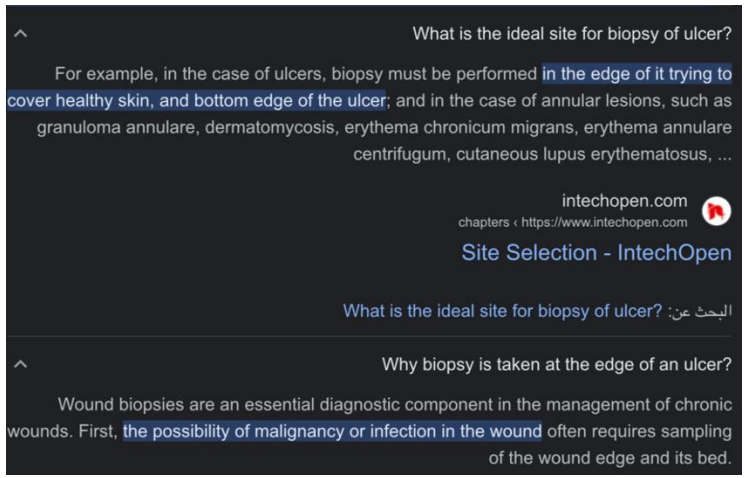
A. Pressure
B. Infection

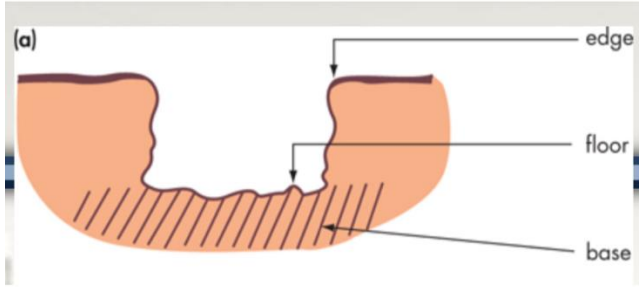
Answer: A

91. Wrong about ulcer:

A. The margin in the area immediately surrounding the ulcer
B. The edge is the relationship of the ulcer with the skin
C. Floor is what we see
D. The base is what lies underneath
E. Biopsy is best taken from the center of the ulcer

Answer: E (from edge)





92. Triggering factor for reepithelialization in wound healing:

Answer: loss of contact inhibition

93. Which of the following is true regarding skin:

A. epidermis is vascular
B. collagen is produced by angiogenesis
C. epidermis is 20% of the skin
D. skin appendages are mesodermal
E. Collagen increases the tensile strength

Answer: E

A wrong >> dermis is vascular

B wrong >> collagen stimulates angiogenesis (not the opposite)

C wrong >> less percentage than this

D wrong >> from ectoderm

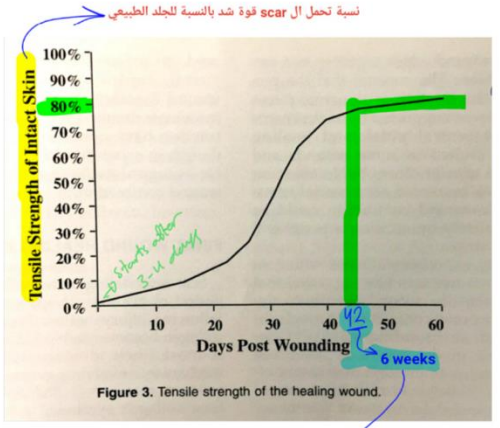


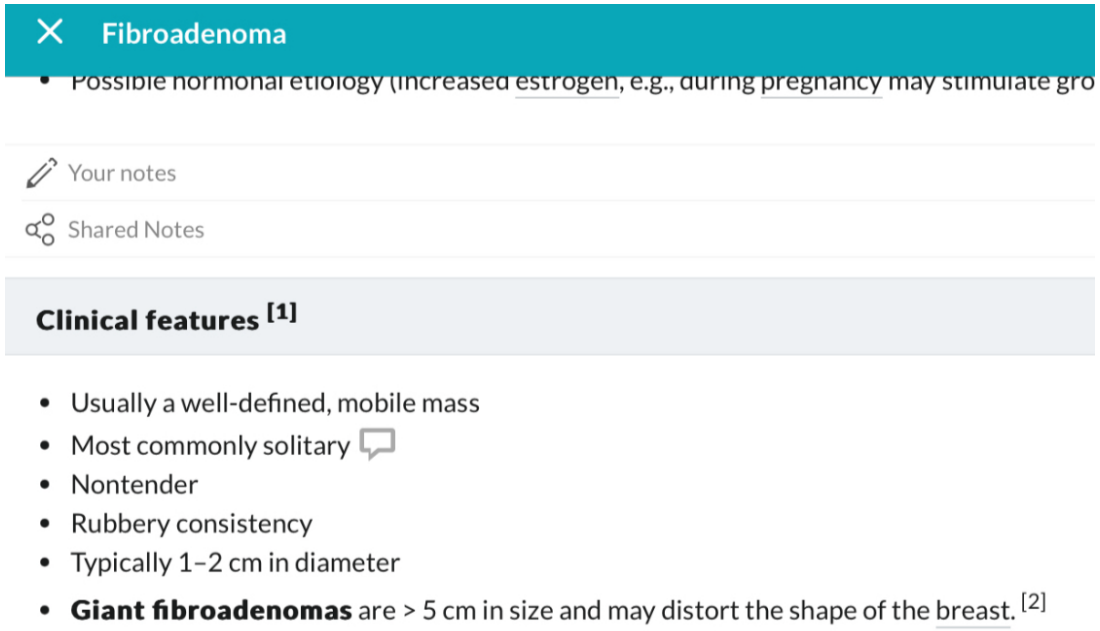
Figure 3. Tensile strength of the healing wound.

Table 1. THE ESTIMATED PREVALENCE AND HEALTH CARE COSTS OF CHRONIC WOUNDS.

Wound Type	Total Prevalence	Estimated Annual Cost
Pressure Ulcer[1]	0.04–0.08%	$1.3 billion
Venous Ulcer[2]	1–2%	$1 billion
Diabetic Ulcer[3] = Trophic ulcer	Total 0.15–0.3% (Diabetics 5–10%)	$1 billion

94. Fixed mass attached to skin all except:

Answer: Fibroadenoma



Fibroadenoma

- Possible hormonal etiology (increased estrogen, e.g., during pregnancy may stimulate gro

Your notes

Shared Notes

Clinical features [1]

- Usually a well-defined, mobile mass
- Most commonly solitary
- Nontender
- Rubbery consistency
- Typically 1–2 cm in diameter
- **Giant fibroadenomas** are > 5 cm in size and may distort the shape of the breast. [2]

95. most common cause of death in burn patients?

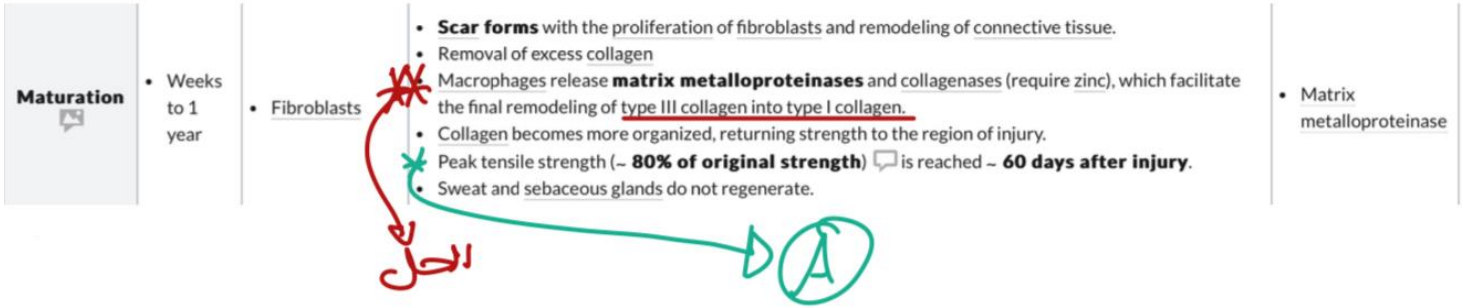
A. inadequate resuscitation
B. Pneumonia
C. UTI
D. Wound infection

Answer: B (bronchiogenic pneumonia)

96. All about wound healing is true Except:

A. 70-80% of strength can be maintained
B. Collagen lll replace collagen I
C. PMN add to tensile strength in wound repair
D. All stages of wound repair are affected by infection, malnutrition etc. ..
E. epithelization at first 2 day help to conserve fluids

Answer: B >> collagen type 1 replaces collagen type 3)



97. A person 20 year old 80 kg, 40% burn. which of the following is the correct fluid-resuscitation in first 24 hours:

A. 6400 RL first 8 hrs and 6400 RL next 16
B. 640 RL first 12 hrs and 640 RL next 12
C. 640 NS first 12 hrs and 640 RL next 12
D. 640 NS first 8 hrs and 640 NS next 16
E. 640 RL first 8 hrs and 640 RL next 16 +maintenance GW 5%

Answer: A

4 x 40 x 80 = 12800 (for first 24 hrs)

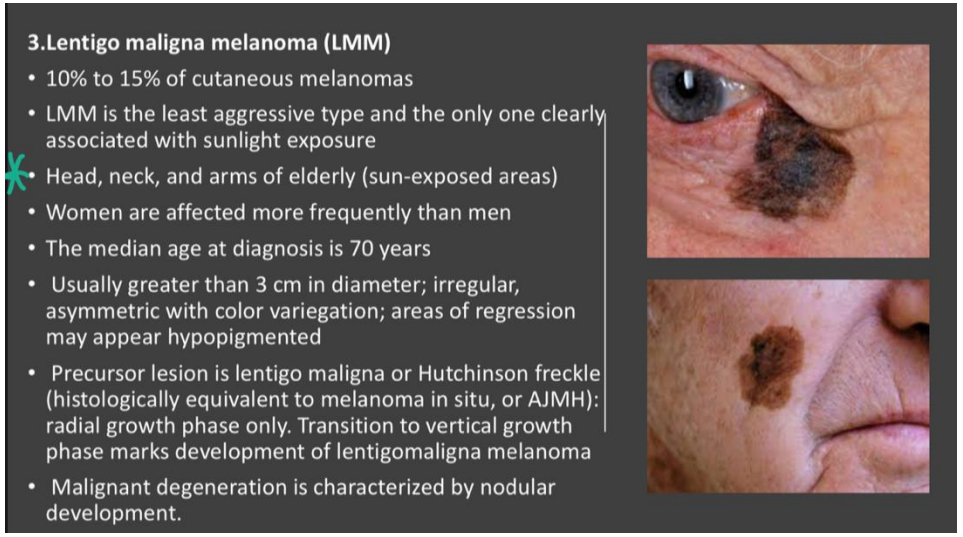
First 8hrs (half) = 6400

Next 16 hrs = 6400

98. All are true about skin tumors except:

A. BCC is more common than SCC
B. pigmented BCC can mimic malignant melanoma
C. exophytic BCC is more aggressive than ulcerative
D. lentigo maligna involves head and neck of elderly (+ arms)
E. prognosis of malignant melanoma is affected by depth of invasion

Answer: C (opposite)



99. Wrong about hypertrophic and keloid scars:

A. caused by excessive inflammatory response
B. treated by surgical resection
C. mast cells present in both
D. keloid inherited sometimes as autosomal dominant (+ chromosome 7)
E. keloid extend beyond the border

Answer: B

100. concerning burns management, which is wrong:

Answer: prophylactic antibiotics decrease mortality

Antibiotic Use in Burned Patients

Are used to treat infections, but not prophylactically

Prophylactic antibiotics are contra-indicated in burns, for the following reasons:

1. Studies did not prove that prophylactic antibiotics decrease the incidence of sepsis.
2. Antibiotics increase the incidence of fungal infections.
3. Antibiotics increase the incidence of bacterial resistance.

101. Anthrax is caused by :

A. bacteria
B. Fungus
C. Virus

Answer: A (bacillus anthracis)

102. Which of the following is wrong regarding carbuncles:

A. common in DM
B. not common in face
C. has multiple sinuses

Answer: C (has single sinuses)

A true (also common in dermatitis and impaired immunity.

B true (most common in the back of the neck)

Folliculitis, furuncles, and carbuncles [3]

- **Definitions**
  - **Folliculitis**: localized inflammation of the hair follicle (or sebaceous glands) that is **limited to the epidermis**
  - **Hot tub folliculitis**: pseudomonal folliculitis that appears 8–48 hours after exposure to contaminated water; usually a self-limiting condition that does not require antibiotic treatment
  - **Furuncle**: deep folliculitis beyond the dermis with abscess formation in the subcutaneous tissue
  - **Carbuncle**: confluent folliculitis that forms an inflammatory mass; abscess and skin necrosis may be present

103. Cellulitis, all are true except:

A. mostly in lower limb
B. fever chills are uncommon
C. caused by strep pyogens
D. lymphangitis is a complication

Answer: B

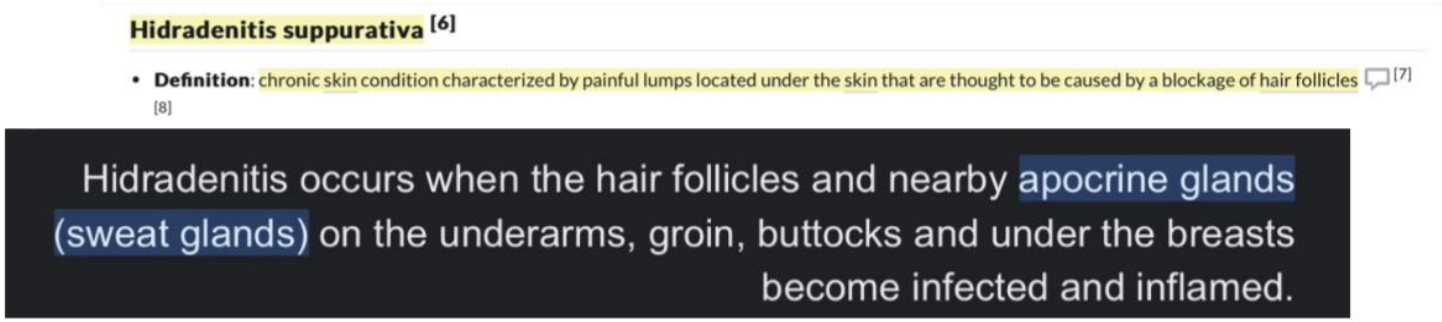
Clinical features [3][4]

- Local signs: erythema, edema, warmth, tenderness
  - Specific to erysipelas: raised, **sharply demarcated** lesion
  - Specific to cellulitis: **poorly defined** lesion with induration
- Cutaneous lymphatic edema (historically referred to as "peau d'orange")
- Common locations: **lower limbs**, face
- Possible additional features
  - **Lymphangitis**: red streaks radiating from the skin lesion and following the direction of the lymphatic vessels
  - Lymphadenitis: swollen, tender, regional lymph nodes
  - Bullae
  - Purulent exudate
- Systemic symptoms (in moderate/severe infections): fever, chills, confusion, nausea, headache, muscle and joint pain

104. Hydradenitis suppurative , all are true except:

A. potential for malignancy
B. infection in eccrine gland
C. mostly in axilla

Answer: B (in apocrine gland)



105. All are true regarding neurofibromatosis except:

A. autosomal recessive

B. >5 café au lait

Answer: A (AD)

Neurofibromatosis type I	AD, 100% penetrance. Mutation in *NF1* tumor suppressor gene on chromosome 17 (encodes neurofibromin, a negative RAS regulator).	Café-au-lait spots F, Intellectual disability, Cutaneous neurofibromas G, Lisch nodules (pigmented iris hamartomas H), Optic gliomas, Pheochromocytomas, Seizures/focal neurologic Signs (often from meningioma), bone lesions (eg, sphenoid dysplasia).	Also called von Recklinghausen disease. 17 letters in "von Recklinghausen." CICLOPSS.
Neurofibromatosis type II	AD. Mutation in *NF2* tumor suppressor gene (merlin) on chromosome 22.	Bilateral vestibular schwannomas, juvenile cataracts, meningiomas, ependymomas.	NF2 affects 2 ears, 2 eyes.

106. The best indication in burn pt that he's resuscitated is :

A. Urine output
B. Serial PCV
C. CVP

Answer: A (discussed before)

107. What is the surface area of a burn involving head of new born:

A. 9%
B. 17%
C. 13%
D. 11%
E. 19%

Answer: E

108. In patient with 40 % burn, do all except:

A. Dressing
B. IV colloid initial fluid management
C. IV saline initial fluid management

Answer: B (crystalloids not colloids)

1. Regarding the type of fluids to be given, because the capillaries are leaky initially, it is wise to give crystalloids, in the first 16-24 hours, and to give colloids thereafter.

109. Child presented with burn involving head and right upper limb % is:

A. 18%

B. 9%

C. 27%

D. 36%

Answer: C

☒ **There are three methods of TBSA estimation:**

1. **Rule of nines: the body is divided into 11 nines; Head &neck (9%), Upper limbs (9% each), Anterior trunk (18%), Posterior trunk (18%), Lower limbs (18% each) and the remaining 1% for the genitals.**
2. **Special accurate charts: are used for accurate estimation of the burn percentage, because**
   A. **The rule of nines is rough and not very accurate.**
   B. **And because the children have different body proportions compared with adults: for axample, the surface area of the head and neck of the neoborn is around (20%) and decreases with age, while the percentage of the surface area of the lower limbs of the neoborn is 14% and increases with age.**
3. **For small burns, the palm of the hand equals 1% of the body surface area.**

110. Child with cleft lip and palate:

A. close lip at 3 months, palate 6 months
B. close lip at 3 months, palate 18 months
C. close at same time at 15 months

Answer: B

TIMING OF SURGICAL REPAIR OF CLEFT PALATE

Speech therapists believe that, the earlier the cleft palate repair is, the better the outcome of speech would be, so they encourage early repair, but the facial surgeons think that early surgical repair would interfere with the facial bony growth leading to retardation of maxillary growth (dish face). So the compromise between these two opinions is to operate at 1 year of age.

Lip → 3 months
palate → 1 year

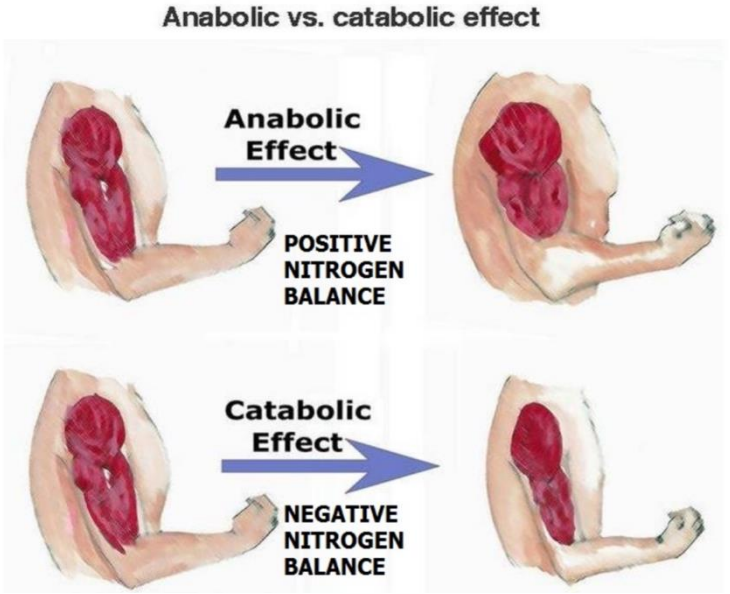
111. All occur in burn pt except:

A. Hyperkalemia
B. + nitrogen balance
C. Dehydration
D. Abn. Lipid metabolism
E. Increase in energy production

Answer: B

NITROGEN BALANCE

- This means that the intake of nitrogen into the body is greater than the loss of nitrogen from the body, so there is an increase in the total body pool of protein.
- A negative value can be associated with burns, fevers, wasting diseases and other serious injuries and during periods of fasting.
- This means that the amount of nitrogen excreted from the body is greater than the amount of nitrogen ingested.



112. Surface area of a burn involving the head in a newborn :

A. 9%
B. 17%
C. 13%
D. 11%
E. 19%

Answer: E

113. Chemical burn best management:

A. identify the agent
B. neutralize the agent
C. irrigate with large amount of water·
D. give antibiotic

Answer: C

114. Regarding ulcer ,all except

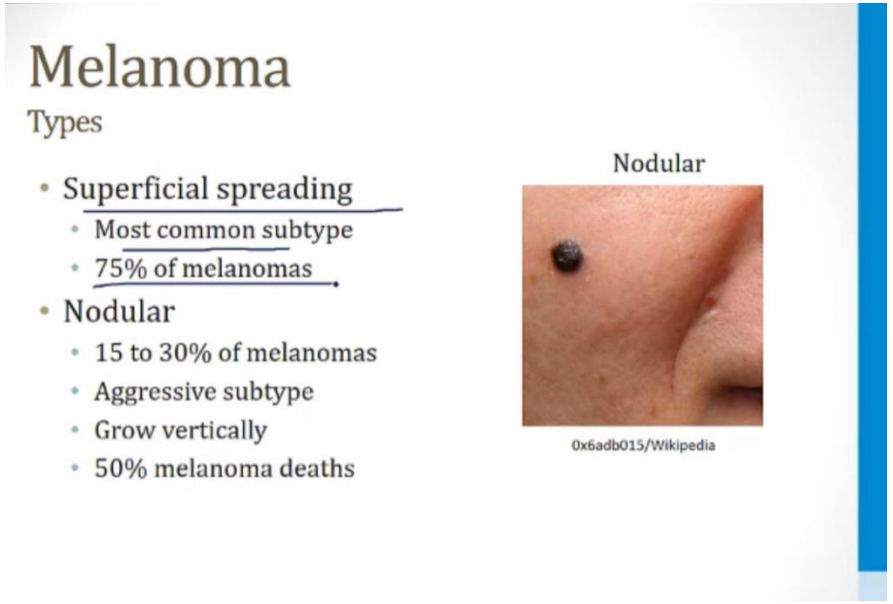
A. the base is what we feel
B. margin is skin adjacent
C. edge is attachment of the ulcer to skin
D. floor is what we see
E. best biopsy is from the content

Answer: E

115. Malignant melanoma most common is:

A. Superficial
B. Nodular

Answer: A



116. All cause delayed wound healing except:

A. decreased albumin
B. Cushing
C. decreased vitB12
D. Uremia
E. Hypothermia

Answer: C (vit C not B12)

A correct >> malnutrition

B correct >> high steroids

Factors contributing to impaired wound healing

A. Local factors (8)	B. Systemic factors (5)
❖ Arterial insufficiency } PVD ❖ Venus insufficiency ❖ Edema ❖ Infection ❖ Pressure ❖ Radiation ❖ Foreign material ❖ Necrotic tissue	❖ DM ❖ Malnutrition Protein calorie malnutrition or vitamin (C) def , zinc def ..etc ❖ Vitamin deficiency ❖ Chemotherapy bone marrow suppression > no inflammatory response ❖ Smoking causing peripheral vascular constriction ❖ Aging (?) ❖ Steroids exogenous or Cushing

117. Skin graft :

A. the thicker the best take
B. the thinner the faster healing
C. the thicker the easier the growth of hair follicles

Answer: B

118. About wound healing:

A. keloid and hypertrophic are similar
B. collagen III is most important
C. soluble factors
D. epithelialization occurs within 24 to 48 hours

Answer: D

B wrong >> collagen 1

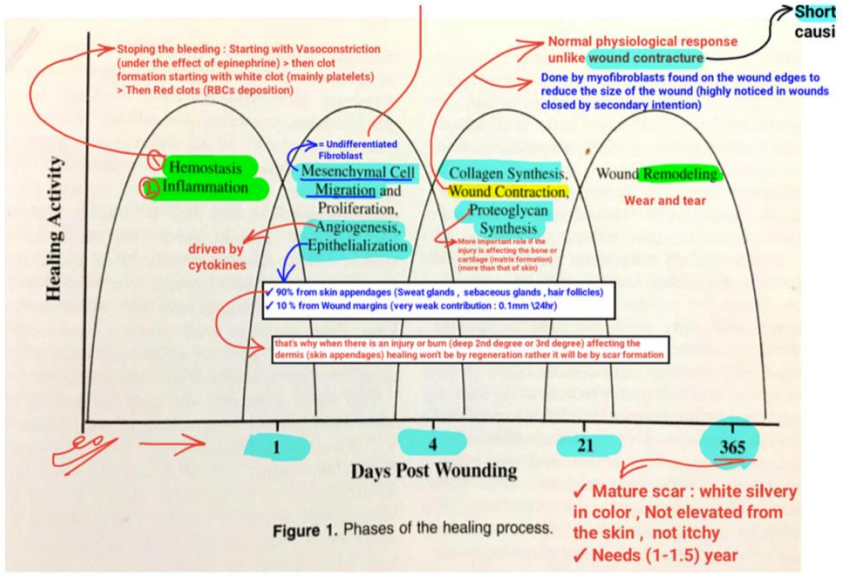


Figure 1. Phases of the healing process.

119. A patient with 40% burn and poor management, his death within 84 hours would most probably be due to:

A. hypokalemia and cardiac shock
B. Sepsis
C. cardiovascular collapse
D. renal failure

Answer: B

ESTIMATION OF THE PERCENTAGE OF BURN:

This determines the prognosis (mortality rate), and the systemic complications and the systemic management of the burn victim.

A. **The percentage of burn deretmines:**
B. The mortality rate (mortality rate increases as percentage increases).
C. Degree of hypovolemic shock (fluid deficit) and hence the fluid resuscitation.
D. Degree of malnutrition, Hypermetabolism, catabolism and protenn breakdown.
E. The propability of decreased immunity, sepsis, septic shock and their systemic complications as multi-organ failure increase with the increase in burn percentage.

120. BCC commonest site

A. Lower lip
B. Nose
C. Leg
D. Trunk
E. Forehead

Answer: B

Subtypes and variants

There are several types of basal cell carcinoma:

- **Nodular basal cell carcinoma**
  - Most common type of BCC
  - Lesions: pearly nodules with a rolled border and central depression
  - Most common site: face (esp. the nose)
- **Superficial basal cell carcinoma**
  - Lesions: flat, eczematous (scaly) plaque with a pearly border
  - Most common site: trunk

121. The best indicator of resuscitation in burn pt is:

A. urine output
B. serial PCV
C. CVP

Answer: A

122. In wound healing all true except:

A. Fibronectin acts as a scaffold
B. Monocytes are essential
C. In maturation phase collagen I and II become in 1: 1 ratio

Answer: C

Maturation	• Weeks to 1 year	• Fibroblasts	• **Scar forms** with the proliferation of fibroblasts and remodeling of connective tissue. • Removal of excess collagen • Macrophages release **matrix metalloproteinases** and collagenases (require zinc), which facilitate the final remodeling of type III collagen into type I collagen. • Collagen becomes more organized, returning strength to the region of injury. • Peak tensile strength (~ **80% of original strength**) is reached ~ **60 days after injury**. • Sweat and sebaceous glands do not regenerate.	• Matrix metalloproteinase

123. 38yr old pt 60 kg 50% TBS bum the best rate of fluid administration is:

A. 750ml/hr
B. 450
C. 1000
D. 600

Answer: A

4 x 50 x 60 = 12000 ml/day(24 hr)

Half in the first 8 hrs = 6000 (each hour = 750 ml / hr)

Next 16 hrs – 6000 (each hour = 375ml/hr)

* First 8hrs are more important/ or the question should mention ‘at the first 8hrs’.

124. UV light and skin CA , except:

A. Bcc more than scc
B. More in Europeans than Mediterranean
C. immunosuppression is a RF
D. UV band b is responsible for most cancers
E. UV band cis responsible for clinically significant Ca

Answer: E UV-C doesn’t reach the Earth — so it doesn’t cause skin cancer.

125. Expanded mesh grafts have advantages over sheet grafts in all except:

A. allow epithelium growth
B. over irregular surfaces
C. earlier in healing
D. better for donor healing

Answer: D

- **Subtype: mesh graft**
  - Graft can be stretched 3–6 times its original size by grid-like incisions.
  - Suitable for large skin defects

125 cont..

Meshing STSG

Use: scalpel, meshing machine (3:1 – 9:1)

Advantage

- Expand tissue
- Drain wound exudate , prevent hematoma & seroma
- Increase graft survival
- Thinner graft → higher take rate

Disadvantage

- Increase wound contraction
- Decrease cosmetic

What is the advantage of meshing a graft?

The mesh incisions allow the graft to be expanded to cover large defects, provide a route for drainage of blood or serum from under the graft, and increase the flexibility of the graft so that it can conform to uneven recipient beds.

nih.gov
... ‹ https://pubmed.ncbi.nlm.nih.gov

Mesh skin grafting - PubMed

البحث عن: What is the advantage of meshing a graft?

What are the disadvantages of meshed graft?

A disadvantage to meshed skin grafts is that the risk of permanent scarring is greater with these types of grafts. This is because it uses less skin than a sheet graft. The larger the mesh, the higher the risk of scarring.

126. The following statements regarding acute burns are true EXCEPT:

A. Bronchopneumonia is the leading cause of death
B. Electric burns need more fluids than other types of burns.
C. Bacterial endocarditis is on increase due to the use of invasive techniques.
D. Escharotomy should be performed in deep circumferential burn of extremities within 6-8 hrs post burn.
E. Intestinal feeding should be delayed till 5th day post burn.

Answer: E

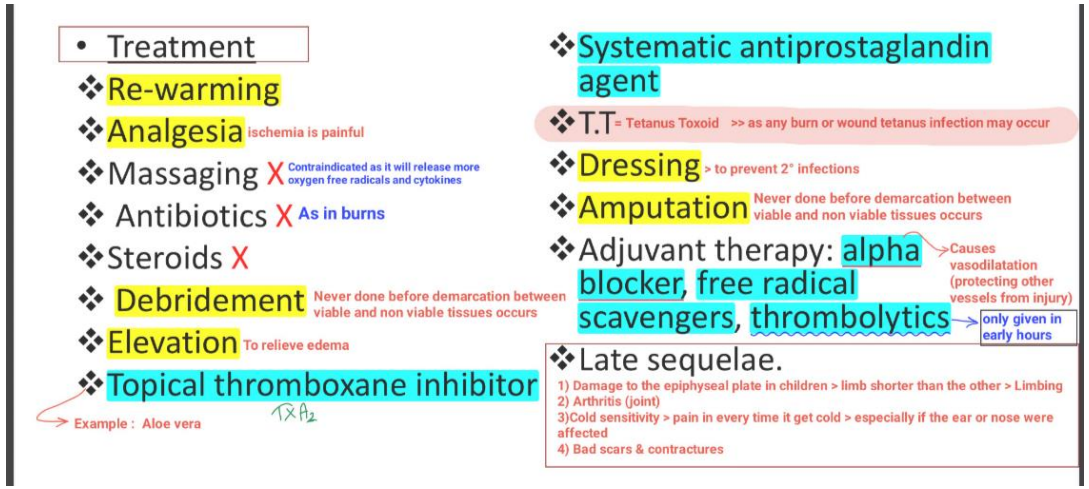
- **Nutritional support**
  - Enteral feeding via a nasogastric or nasoduodenal feeding tube is preferred over parenteral.
  - Early initiation of nutritional support helps to control the hypermetabolic response.

B is correct>> To wash out the myoglobin from the kidneys to prevent AKI.

127. The following statements regarding management of frost bite are true EXCEPT:

A. Rewarming in a moving water bath heated to 40oC.
B. Avoid friction.
C. Keep the injured part elevated and at room temperature.
D. Prophylactic antibiotics.
E. Tetanus prophylaxis based on patient's immunization history.

Answer: D



128. The following statements regarding pressure ulcers are true, EXCEPT:

A. If tissue pressure is greater than 32mm Hg circulation decreases leading to ischemia.
B. Muscle necrosis appears earlier than skin necrosis due to higher metabolic-demands.
C. All pressure ulcers are colonized with bacteria.
D. Skin graft is the best method for pressure ulcer closure.
E. Nutritional support is mandatory for patients with pressure ulcers.

Answer: D

Skin grafts: used in superficial ulceration with a success rate of 30% due to the presence of unhealthy underlying tissue
Flapps: local tissue flap, fascio-cutaneous, or myocutaneous.

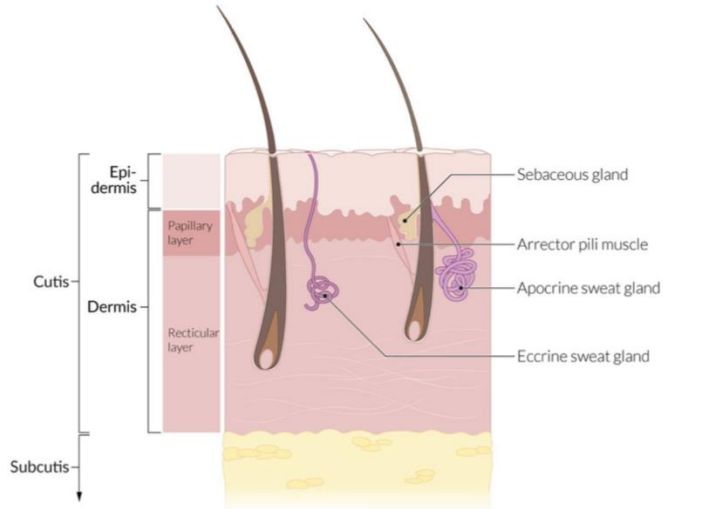
129. Regarding the dermis, one of the following is TRUE:

A. It develops from the ectoderm.
B. It is largely a single layer of dense regularly arranged connective tissueconnective tissue.
C. It contains accessory structures, such as sweat glands, hair follicle andsebaceous glands.
D. Its superficial layer is formed by a stratified squamous epithelium.
E. Underneath, it is supported by epidermis.

Answer: C

A wrong >> from mesoderm
B wrong >> more than one layer
D wrong>> fine loose connective tissue (collagen)
E wrong >> supported by subcutaneous tissue

Dermis



Dermis

Derived from mesoderm; contains blood vessels and provides structural integrity to the skin

- **Papillary dermis**
  - Consists of fine, loosely arranged collagen fibers
  - Supplies the epidermis with nutrients
  - Plays an important role in temperature regulation
  - Forms dermal ridges, which connect **dermal papillae** (extension of the papillary dermis into the epidermis) to epidermal downgrowths known as epidermal ridges or rete ridges
  - Contains **Meissner corpuscles** (for fine-touch and two-point discrimination) and free nerve endings
  - Contains immune cells (mast cells and macrophages)
- **Reticular dermis**
  - Consists of thick, densely packed fibers (e.g., reticular, elastic, and collagenous) that provide structure and support to the skin and its components
  - Contains **Ruffini corpuscles** (mechanoreceptors): responsible for mechanical pressure and the sensation of distortion
  - Contains sweat glands, sebaceous glands, and the roots of hair follicles
  - **Langer lines**
    - Topographic lines that correlate with the natural orientation of the reticular fibers of the reticular dermis
    - Important for wound healing and guiding surgical incisions

130. Deficiency of which of the following vitamins influence wound healing?

A. Vitamin A
B. Vitamin B6
C. Vitamin B12
D. Vitamin C
E. Vitamin D

Answer: D (and zinc)

131. In high voltage electrical burns to an extremity, which is true?

A. IV fluid calculations same as thermal burns
B. Antibiotic prophylaxis is required.
C. More than 10000 volts
D. Evaluation for fracture of the extremities is indicated
E. More chances of large skin burns

Answer: D

The severity of burn depends also on the voltage, so it is more serious with high voltage current. (high voltage is defined as that more than 1000 volts).

Effect of electrical burns on tissues.

❖ ***Nervous tissue*** حفظ زي اسماء

- CNS: Brain injury
- PNS: peripheral nerve injury

❖ ***Muscular tissue***

- CARDIAC: Arrhythmias
- SKELETAL: 1-Myoglobinemia, myoglobinuria, AKI
  2-Compartment syndrome.
  3-Bone fractures

❖ ***Skin***

- -Deceiving
- -Cannot apply Parkland's formula = surface area of burn × weight (kg) 4% ×

132: Following excision of a squamous cell carcinoma from the scalp, there was a 5x5 cm residual defect with exposed cranium, the best way to cover this defect is:

A. Full-thickness skin graft
B. Local flap
C. Delayed primary closure.
D. Split-thickness skin graft
E. Healing by secondary intention

Answer: B

Why flap ?

1. In the head, for better Aesthetic
2. There is muscle defect, so you need a myocutaneous flap.
3. you need the hair to grow, better hair growth in flap.
4. small defect → flap.
⋮

133. Compared with split-thickness skin graft, full-thickness skin grafts have all of thefollowing, EXCEPT:

A. Less wound contraction
B. More durable
C. Better final sensation
D. Better sebaceous gland’s function
E. More successful take.

Answer: E

134. The best management of 3x3 cm hemangioma on the cheek of 8-month-old infant is:

A. Expectant observation
B. Systemic steroid therapy.
C. Embolization
D. LASER
E. Surgical excision

Answer: A

135: A 50 kg adult man with scald burn of both lower limbs, should receive in first 8h:

A. 1800 ringer lactate
B. 2700 ringer lactate
C. 3600 ringer lactate
D. 1350 ringer lactate
E. 7200 ringer lactate

Answer: C

4 x 50 x (18+18)= 7200 (whole 24hr)

Half in the First 8hr (3600)

136. Order of regain of sensory function:

A. Temperature, pain, light touch.
B. light touch, pain, temperature.
C. pain, light touch temperature.
D. pain, temperature, light touch.

Answer: C

Sensory recovery to skin grafts follows a random pattern of reinnervation in which perception of pain returns first, followed by the sense of touch and then temperature.

137. Flaps compare to grafts in all of the following except:

A. used over joints.
B. Closure of donor area by primary intention.
C. Better vascularity.
D. better sensation.
E. more likely to take successfully

Answer: B (main issue about flaps)

138. Wrong about fluids in burns:

A. UOP in children should be maintained at 1-2 mL/kg/hr
B. Colloids are given later
C. High hemoglobin indicates fluid overload

Answer: C (more fluids less hemoglobin)

- Urine output is the most sensitive indicator of tissue perfusion.

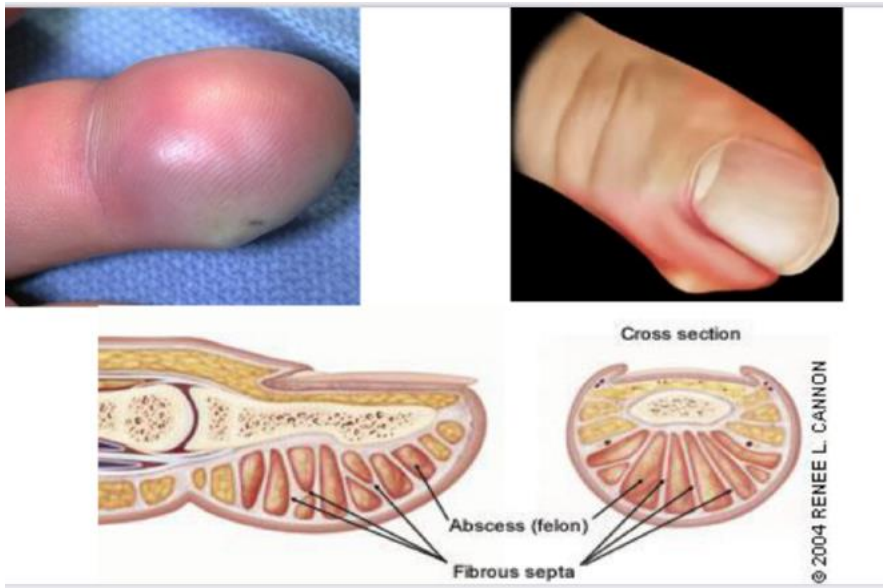
- In adults it should be 0.5-1 ml / kg / hour, In children it should be 1-2 ml / kg / hour.

- Higher urine output may indicate over-resuscitation that leads to harmful tissue edema.

139. A patient with an abscess in the pulp of his thumb, best next step:

A. Incision
B. Observation
C. Antibiotics

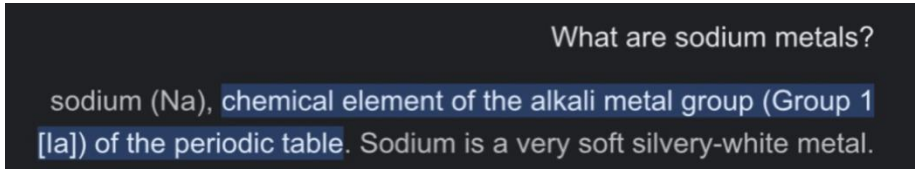
Answer: A

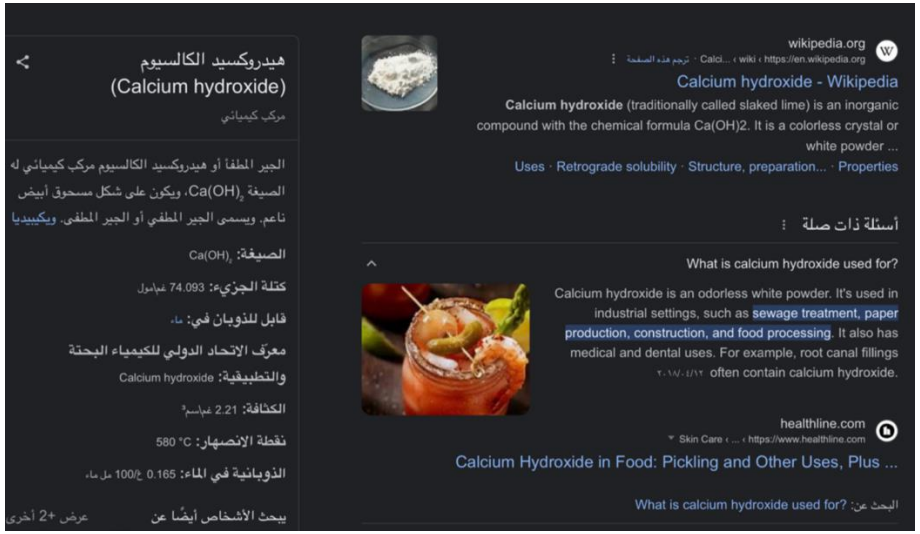


140. All need good irrigation except :

A. sodium metal
B. KOH
C. calcium hydroxide .
D. chromium acid

Answer: A Sodium metal reacts violently with water, producing heat and hydrogen — irrigation could cause burns or explosions.





141. About skin , what is correct:

A. skin appendages are mesodermal in origin
B. epidermis is 20% of skin
C. collagen cross-linkage provides tensile strength

Answer: C

142. About inhalational injury, false:

A. best way to diagnose is flexible fiberoptic laryngoscopes

B. in CO poisoning pulse oximeter is not reliable

C. Answer: A

Pulse oximetry is an unreliable method for spotting people suffering with carbon monoxide poisoning and it should not be used for this purpose, according to a systematic review and meta-analysis presented today (Tuesday, Oct. 18) at the European Emergency Medicine Congress.

٢٠٢٢/١٠/١٨

Inhalation injury

- **Definition**: damage to the respiratory tract that occurs due to the inhalation of hot smoke and/or noxious gases
- **Etiology**: inhalation of hot smoke, particles (< 1 µm diameter in size), and/or irritant/noxious gases (e.g., ammonia, chlorine)
- **Diagnostics**
  - Inhalation injury should be suspected when any of the following are present:
    - History of being in a **confined space**
    - Facial burns, singed eyebrows and/or nose hair, evidence of soot on the face or in the airway
    - Stridor, dysphonia
    - Extensive burns
  - In suspected inhalation injury, the following tests should be performed:
    - Bedside respiratory function tests to rule out airway obstruction
    - Chest x-ray to rule out ARDS
    - Carboxyhemoglobin levels
    - End-tidal CO_2 ($ETCO_2$), serum lactate
    - Flexible fiberoptic laryngoscopy: may show laryngeal edema
    - Flexible fiberoptic bronchoscopy: may show mucosal erythema and edema, blistering, ulceration, and/or soot deposition
- **Treatment**: intubation and high-flow oxygen therapy
- **Complications**
  - Airway obstruction due to laryngeal edema
  - Tracheobronchitis
  - Pneumonitis
  - ARDS
  - Arsenic poisoning
  - Carbon monoxide poisoning
  - Cyanide poisoning
- **Prognosis**: Resolution often occurs spontaneously within 2–3 days.

not a first line

143. Electrical burn, wrong:a

A. injury result from thermal and non thermal injury
B. high voltage is above 1000 V
C. elevated cr, CPK indicate massive injury > rhabdomylosis and AKI
D. PET can be used as a quick measure to accurately estimate tissue injury
E. myoglobinuria result in kidney injury

Answer: D

144. All true about use of escherectomy and early graft of burn, except:

A. increase incidence of sepsis
B. Decrease hospital stay
C. Decrease negative nitrogen balance
D. Less contracture

Answer: A

145. All help to prevent enlargement of zone of ischemia except:

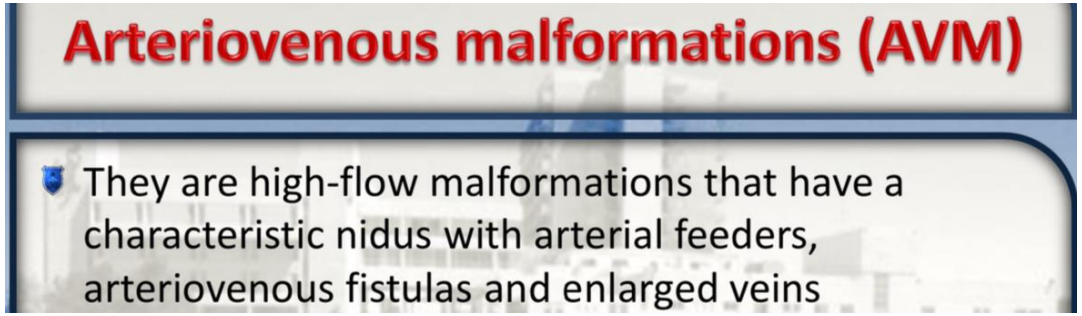
A. good fluid resuscitation
B. Urine output maintained above .5 ml/kg/hr
C. Leg dependency to improve blood supply

Answer: C (mentioned previously)

146. Vascular malformation, false:

A. AVM are low flow lesions
B. capillary malformation result in seizure in brain.

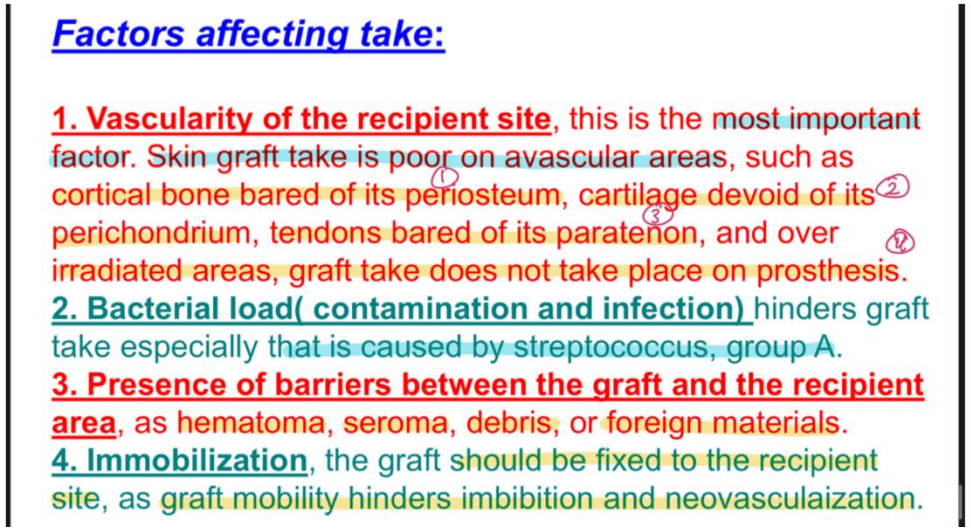
Answer: A (high not low flow)



147. The most common cause of poor graft take:

A. Vascular degeneration
B. Infection
C. Hematoma formation
D. Sheering forces

Answer: A



Factors affecting take:

1. Vascularity of the recipient site, this is the most important factor. Skin graft take is poor on avascular areas, such as cortical bone bared of its periosteum, cartilage devoid of its perichondrium, tendons bared of its paratenon, and over irradiated areas, graft take does not take place on prosthesis.
2. Bacterial load(contamination and infection) hinders graft take especially that is caused by streptococcus, group A.
3. Presence of barriers between the graft and the recipient area, as hematoma, seroma, debris, or foreign materials.
4. Immobilization, the graft should be fixed to the recipient site, as graft mobility hinders imbibition and neovasculaization.

148. Regarding total body water content, true:

A. Decrease steadily with age
B. More in females and obese
C. Less water content with increased muscle bulk
D. Wide physiological variation in water content in the single person

Answer: A

B wrong (female + obese >> more fat)

C wrong (more muscle more water)

D wrong

149. TNF-a, all are true except:

A. It acts as an anticoagulant when present inside the circulation
B. Acts as angiogenic factor during wound healing
C. Secreted by inflammatory cells and cancer cells
D. Release is stimulated by IL 1

Answer: A (it stimulates coagulation)

Tissue necrosis factor-α (TNF-α) and complement component 3 (C3) are two well-known pro-inflammatory molecules. When TNF-α is upregulated, it contributes to changes in coagulation and causes C3 induction. They both interact with receptors on platelets and erythrocytes (RBCs).

Cachectin (tumor necrosis factor; formerly tumor necrosis factor-alpha)	• Activated macrophages	• **Pyrogenic** • **Cytotoxic** and inhibits carcinogenesis of certain tumors [22][23] • Mediates septic shock by activating the endothelium, which causes vascular leakage and recruitment of white blood cells • Cause of malignant **cachexia** • **Maintenance of granulomas** (critical defense against mycobacterial infections) [24][25][26]	• **TNF inhibitors** such as infliximab are used in the treatment of refractory chronic inflammatory systemic diseases (e.g., Crohn disease).

Table 1. CYTOKINE INVOLVEMENT IN WOUND HEALING FUNCTIONS

Healing Function	Cytokines Involved
Inflammatory Cell Migration	PDGF TGF-β TNF-α
Fibroblast Migration	PDGF TGF-β EGF
Fibroblast Proliferation	PDGF TGF-β EGF IGF TNF-α IL-1
Angiogenesis	bFGF (FGF2) aFGF (FGF1) TGF-β TGF-α EGF TNF-α VEGF IL-8 PD-ECGF
Epithelialization	EGF TGF-α KGF (FGF7) bFGF (FGF2) IGF HB-EGF
Collagen Synthesis	PDGF TGF-β bFGF (FGF2) EGF

PDGF = platelet-derived growth factor; TGF-β = transforming growth factor-β; TNF-α = tumor necrosis factor-α; EGF = epidermal growth factor; IGF = insulin-like growth factor; IL-1 = interleukin-1; bFGF = basic fibroblast growth factor; aFGF = acidic fibroblast growth factor; TGF-α = transforming growth factor-α; VEGF = vascular endothelial growth factor; IL-8 = interleukin-8; PD-ECGF = platelet-derived-endothelial cell growth factor; KGF = keratinocyte growth factor; and HB-EGF = heparin binding epidermal growth factor.

150. All are important initial management in a patient with flame burn to restore the borderline area of ischemia except:

A. Keep urine output above 2cc/kg/hr“
B. Put the legs in dependent position
C. You need good fluid replacement to maintain perfusion
D. Good oxygenation should be provided to the patient

Answer: B

Dependent positioning (legs down) increases venous pressure and edema.

But at the same time A is not fully correct because

>2 is over resuscitation which we should avoid

In the context of **initial management of a flame burn** to restore the **borderline area of ischemia**, the correct answer to the question is indeed:

Answer: B – Put the legs in dependent position

Explanation:

Correct Measures (A, C, D):

- **A. Keep urine output >2cc/kg/hr**
→ Ensures adequate perfusion and fluid resuscitation; especially important in pediatric burns.
- **C. Good fluid replacement**
→ Crucial in the first 24 hours to prevent burn shock and preserve tissue perfusion.
- **D. Good oxygenation**
→ Vital for cellular recovery and preventing hypoxia in ischemic tissue.

Why B is Incorrect:

- **Dependent positioning (legs down) increases venous pressure and edema**, worsening perfusion in already compromised burned tissue.
- In burn care, especially for limbs, the affected part should be **elevated** to:
  - Reduce **edema**
  - Improve **arterial perfusion**
  - Prevent **compartment syndrome**

151: Compartment syndrome pressure to do fasciotomy:

A. 5
B. 10
C. 15
D. 40
E. 60

Answer: D (closest to 32mmHg)

152. Cleft palate, wrong:

A. Swallowing is normal
B. Hearing loss due to infections
C. Delayed repair leads to facial deformity
D. due to failure of fusion of palatine shelves

Answer: C (early repair lead to facial deformity)

153. About skin, true:

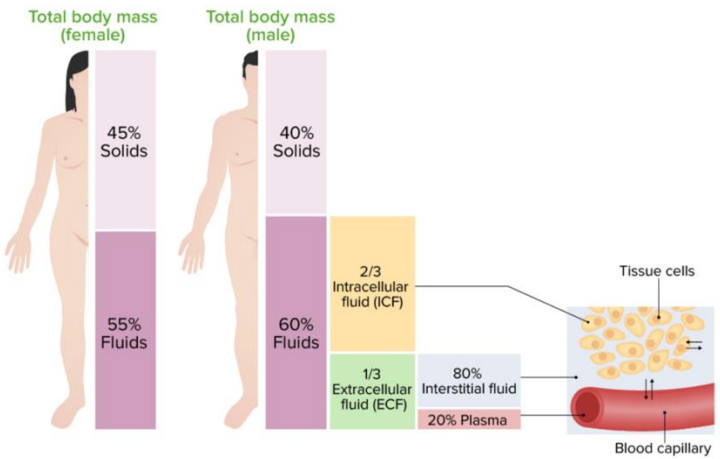
A. Collagen imparts tensile strength
B. Epidermis is vascular
C. Skin appendages are mesodermal
D. Epidermis is more than 20%

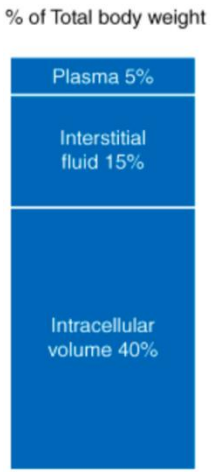
Answer: A

154. Which is true about fluids:

A. fourth of extracellular fluids is plasma
B. extracellular fluids 40% of body weight

Answer: A





Volume of TBW	Male (70 kg)	Female (60 kg)
Extracellular volume	14,000 mL	10,000 mL
Plasma	3500 mL	2500 mL
Interstitial	10,500 mL	7500 mL
Intracellular volume	28,000 mL	20,000 mL
	42,000 mL	30,000 mL

155. Tip of thumb, 1 cm amputation, no bone is exposed, best management:

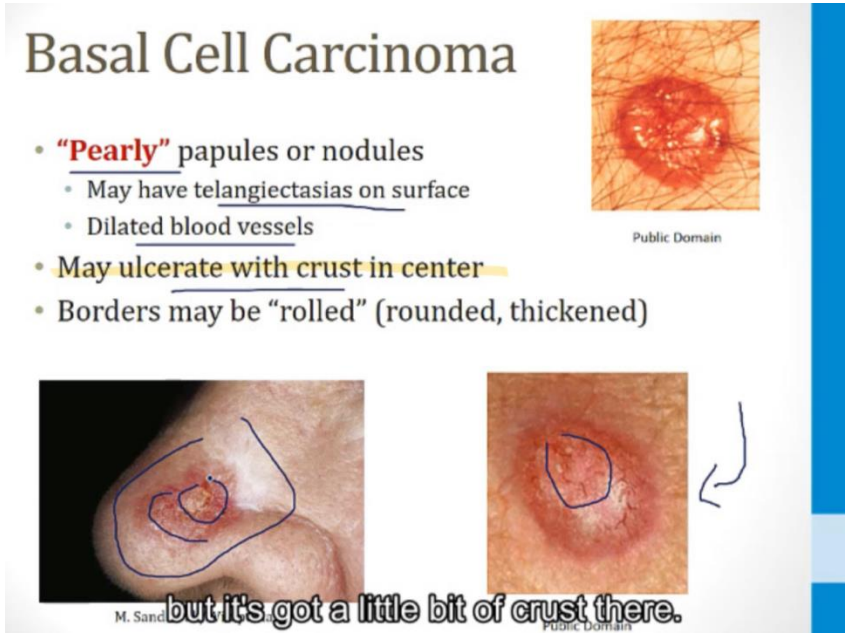
A. Full thickness graft
B. Partial thickness graft
C. cross finger flap
D. cross abdomen flap

Answer: A (small area with import function >> FTSG)

156. Farmer with upper lip mass, pearly with central ulcer:

A. BCC
B. Sec
C. Melanoma

Answer: A



157.Melanoma, pt had undergone excision, why do we need to follow him up:

A. for local recurrence
B. for lymph node mets
C. for systemic mets
D. Intransient metastasis

Answer: D

5. **The most common sites** of recurrence are the skin, subcutaneous tissues, distant lymph nodes, and then other sites (lung, liver, brain, bone, gastrointestinal tract).

158. Which one of the following cases will cause the most increase in basal metabolicneeds:

A. 50% bum patient
B. Major trauma patient.
C. narcotizing pancreatitis

Answer: A

159. All are true regarding skin tumors except

A. Morphea type basal cell carcinoma low recurrence
B. Nodular basal cell carcinoma is the most common
C. Lentigo maligna is found on head and neck
D. nodular melanoma is the most aggressive one

Answer: A

160. Which one of the following is not a contraindication to enteral feeding:

A. Severe diarrhea resistant to medical therapy.
B. 180 cm

Answer: B

161. A patient presented to the ER with human bite in the ear 5 em in length. Minimal tissue loss. What's the best management:

A. Delayed closure with a graft.
B. Immediate grafting.
C. primary closure.
D. Delayed primary closure
E. Secondary.

Answer: D (contaminated)

162. 3rd degree burn and 3rd space loss» one is false:

A. Cause edema in places other than burn
B. increased hb means fluid overload

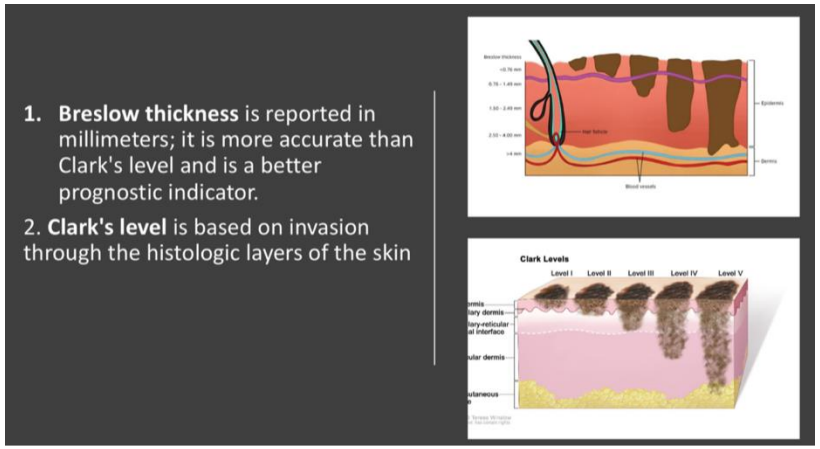
Answer: B

163. Melanoma prognostic factor:

A. Depth

B. Size

Answer: A



The **most important prognostic factor in melanoma** is:

→ Depth (specifically Breslow thickness), not size

Key Prognostic Factors in Melanoma:

1. **Breslow thickness (depth in mm)**
   - Strongest predictor of survival and metastasis risk
   - Measured from the top of the granular layer of the epidermis to the deepest tumor cell
2. **Ulceration** – worsens prognosis
3. **Mitotic rate** – higher rate = more aggressive
4. **Lymph node involvement**
5. **Presence of distant metastasis**
6. **Clark level** (older system, based on anatomic layer) – less commonly used now

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Why Not Size?

- **Size (diameter)** is used for **diagnosis** (e.g., in the ABCDE criteria), but **not a reliable prognostic marker**.
- A small lesion can still be deep (and dangerous), while a large but superficial lesion may have a better outcome.

164. The presence of which of the following histologic markers is most likely to confirm the diagnosis of infantile hemangioma:

A. VEGF
B. FGFR-3
C. GLUT-1
D. TNF-1
E. TGF-B

Answer: C

165. Transurethral catheter is contraindicated in all of the following conditions except:

A. Blood in the scrotum
B. Non palpable or overriding prostate
C. Blood at the urethral meatus
D. Pelvic fracture
E. Elderly patient

Answer: D

166. Which of the following is true about gas gangrene:

A. It is associated with crepitation
B. The presence of cellulitis virtually excludes its presence.
C. It is caused by gram-positive bacteria Clostridium difficile.
D. Antibiotics alone are sufficient to treat the infection.
E. In traumatic gas gangrene, compound fractures must be closed as soon as possible.

Answer: A

167. cleft palate, which is wrong:

A. hearing loss due to recurrent ear infections
B. palatal muscles are wrongly inserted
C. early repair is associated with facial growth problem
D. Nasogastric tube is necessary for feeding
E. caused by failure of palatal process meet at the midline

Answer: D

168. One of the following heals by regeneration:

A. Skeletal muscles.
B. Liver
C. Cardiac muscle
D. Full thickness skin loss
E. Second degree burns

Answer: E

169. During primary survey in a bleeding patient, all of the following can be done to control the bleeding Except:

A. Reduction of fractured bones.
B. Splinting of pelvic fractures.
C. Applying direct manual pressure.
D. Using hemostats & pneumatic devices
E. Tourniquets should Not be used.

Answer: D

170. All of the following are approaches for damage control resuscitation EXCEPT:

A. Aggressive resuscitation with crystalloids.
B. Permissive hypotension.
C. Giving the patient sufficient blood components.
D. Prevent acidosis , hypothermia, coagulopathy.
E. Control of hemorrhoids & shock.

Answer: A

171: when to assess graft take:

A. 1 day
B. 3 days
C. 5 days
D. 1 week
E. 2 weeks

Answer: B

Stage	Event
Imbibition	Day 0-3. The graft receives nutrients from the plasma through direct contact
Revascularization	Day 3-7. Exact mechanism is unknown. Graft and donor site regenerate or generate new blood vessels, which anastomose and allow blood flow to begin.
Regeneration	Dermal appendages and sweat glands regenerate. Reinnervation begins and the graft takes on recipient site sweating pattern.
Reinnervation	Graft takes on nerve pattern of recipient site. Although STSG are reinnervated faster, FTSG have a better final result.

172: regarding trimodal death distribution, all of the following are true EXCEPT;

A. Early deaths frequently occur after reaching the hospital.
B. Early deaths usually occur within seconds to minutes of the injury.
C. Immediate deaths occur at the scene of the injury.
D. Prevention of immediate deaths requires a multidisciplinary approach.
E. Late death is primarily due to sepsis and multiple organ failure.

Answer: B

173. Wrong about escharatomy:

A. It’s done for the management of second degree burns.
B. Eschar is eventually removed by bacteria.
C. It is done even when the distal pulses are felt.
D. It is done to release the pressure on the limbs, neck, & chest wall.
E. It is indicated when ischemia is suspected.

Answer: A

174. Which of the following is true about burns:

A. Burn percentage in burn victims doesn’t determine the fibrosis & post-injury contractures.
B. Fluid resuscitation in electrical burns depends on parklands formula.
C. First degree burns are included in the calculation of parklands formula.
D. First degree burns can’t transform into second degree burns.
E. The head and neck constitute 9% of TBSA in children .

Answer: A

175. Which of the following is correct regarding the management of crushed wounds:

A. Primary closure.
B. Delayed closure by a skin graft.
C. Secondary closure
D. Closure by skin graft.
E. Cleaning the wound & delayed primary closure.

Answer: E

176. Which of the following are places where pressure sores rarely occur?

A. Sacrum
B. Elbow
C. Heel
D. Forehead
E. Trochanter

Answer: D

177. Regarding electrical burns, which one of the following is considered as high voltage?

A. 500
B. 5000
C. 1000
D. 220
E. 110

Answer: C

178. Regarding crushed wound. Which of the following is contraindicated in management:

A. Primary closure to wound.
B. Irrigation with normal saline.
C. Delay closure to wound.
D. Debridement

Answer: A

179. Patient with lower leg wound over the tibia , what is the best intervention?

A. Flap
B. Full thickness skin graft
C. Split thickness skin graft
D. Direct closure

Answer: A

180. Burn degree can determine all of the following except?

A. Mortality rate
B. Hospital stays
C. Time to heal
D. Mode of healing
E. Joint contracture

Answer: A

181: long term management of frostbite:

A. Daily topical steroids
B. Systemic corticosteroid
C. Hyperbaric oxygen
D. Physiotherapy & rehabilitation
E. Cold compressors

Answer: D

182. Which of the following is the treatment of choice in felon?

A. Incision and drainage
B. Antibiotics
C. Observe
D. Excision of fingertip

Answer: A

183. Which of the following patients doesn’t need admission to burn unit?

A. Adult with 10% 2nd degree burn on the back
B. Adult that had a 2% burn in the perineum
C. Man with 1% burn and inhalational injury
D. Adult with 4% full thickness burn of the palm
E. Suspected child abuse

Answer: A

184. Dog bite wound, which is wrong?

A. Irrigation
B. Tetanus vaccine
C. Primary closure
D. Use of antibiotics

Answer: C

185. One of the following heals by regeneration:

A. Skin
B. Liver
C. Split thickness skin graft
D. Full thickness skin graft
E. bone

Answer: C

186. Wrong about early escharatomy:

A. Less sepsis
B. Less hospital stays
C. Better cosmetics
D. More catabolism
E. Early mobilization

Answer: D

187. True about cleft palate:

A. Hearing loss is congenital
B. Repair is by 3 months
C. Early repair associated with poor speech
D. Nasogastric tube rarely indicated
E. Cause difficulty in swallowing

Answer: D

188. Squamous cell carcinoma, what is the test that is diagnostic?

A. Tissue biopsy
B. Fine needle aspiration cytology
C. US
D. PET scan

Answer: A

189. Patient with full thickness 5cm burn on back of the hand , best option:

A. FTSG
B. STSG
C. Flap
D. Healing by regeneration

Answer: A

190. Severely burned patient , analgesia is given:

A. Oral
B. IM
C. IV
D. Subcutaneous
E. Intrathecal

Answer: C

191. Which one of the following is not done to save zone of injury in upper limb burn?

A. Give prophylactic antibiotics
B. Correct anemia
C. Elevate the limb
D. Adequate nutrition
E. Fluid resuscitation

Answer: A

192. Compartment syndrome... Fasciotomy

193. Best way to dx osteomyelitis in pressure ulcer? Bone biopsy

194. % in burn affects all except? Wound healing time

195. Wrong about thermal burn: Smoke inhalation injury best diagnosed with CXR and ABGs

196. 24-48 hrs in wound healing? Neutrophils

197. What triggers re-epithelialization? Loss of contact inhibition

198. Wrong about Escharotomy for Compartment Syndrome: not usually done when distalpulses are felt.

199. Most common type of facial cleft : cleft lip & palate together

200. All are true about cleft palate except : late surgical correction leads to facial growth deformities

201. Compartment syndrome is defined when intercompartmental pressure is above :40mmhg

202. False: nevus of Jadassohn has no malignant potential

203. Woman with melanoma, which indicates prognosis: Depth of invasion

204. Inhalational injury, all are associated except: a need prophylactic antibiotic

205. Sarcoma with highest lymph node metastases: malignant fibrous histiocytoma

206. All are true in regards to PNS except: Hair has minimal role in pathogenesis

207. A patient presented with a 50 % bum with inhalational injury, all are correct therapeutic interventions except: Giving prophylactic antibiotics.

208. All are true except: A patient presenting with a burn due to an alkaline substance should be treated by topical weak acids

209. Which one of the following is pre malignant: sebaceous nevus of jadassohn

210. What's the meaning of half strength formulary: 50% formula with 50% water

211. Which one of the following is NOT a constituent of ringer lactate: Magnesium 5 mg

212. Management of fluids in a burn patient. USE PARKLAND FORMULA. DO NOT ADD 1stDEGREE BURNS TO THE FORMULA : 3600 ml in the first 6 hours

213. Which of the following is wrong regarding pressure sores: Using a wound swap for culture.

214. Which one of the following is wrong regarding felon (paronychia) : It’s treated by antibiotics

215. About graft: meshed is less intake than non- meshed

216. Wound healing wrong: good healing 40% of original strength

217. 3rd degree burn wrong : blanchable

218. True about cleft palate: Secretory otitis media is managed by medical Treatment.

219. One of the following can heal by regeneration: Partial thickness skin loss.

220. Asymptomatic child presenting with 5cm raised purple lesion on the trunkappeared at the 3-4 week, management? Observation.

221. Full thickness compared to partial, wrong? More wound contracture

222. Wound contracture is caused by? Myofibroblast

223. Not seen in electrical burn? Skin involvement

224. Percentage of burn doesn't determine? Joint contracture/fibrosis

225. Best resuscitation parameter in a burn patient? Urine output

226. Crushed wound… not to do? Repetitive irrigation with something

227. Cleft palate compared to cleft lip… which is wrong? We don't know

228. Wrong about burn? Adults admitted when the percentage is 10%

229. Trauma patient with GCS of 8, best next step? Secure airways

230. Not indicated in the primary survey? Esophageal injury

THE END