Burn

Dr.Fatema Tasnim
Assistant Professor
Department of Surgery

Types of Burn

- Thermal injury - Scald(spillage of hot liquids)
  - -Flame burns
  - -Flash burns due to exposure of natural gas,alcohol
  - -contact burns (contact with hot metal,object)
- Electrical burn
- Chemical burn-Alkali,Acid
- Cold injury-Frost bite
- Ionising radiation
- Sun burns

Classification of burn

- Depending on severity

1.First Degree -

- Epidermis looks red,painful,no blister.
- Heals rapidly in 5-7 days by epithelialisation without scarring.
- It shows capillary filing.

Second Degree Burn

- The affected area is mottled,red,painful with blisters,heals by epithelialisation in 14-21 days.
- superficial second degree burns helas causing pigmentation
- Deep second degree burn heals by causing scarring,pigmentation.sensation is present but no blanching.

Third Degree burn

- The affected area is charred,parchment like painless,insensitive with thrombosis of superficial vessels.it requires grafting.
- Charred,denatured,insensitive contracted full thickness burn is called eschar.

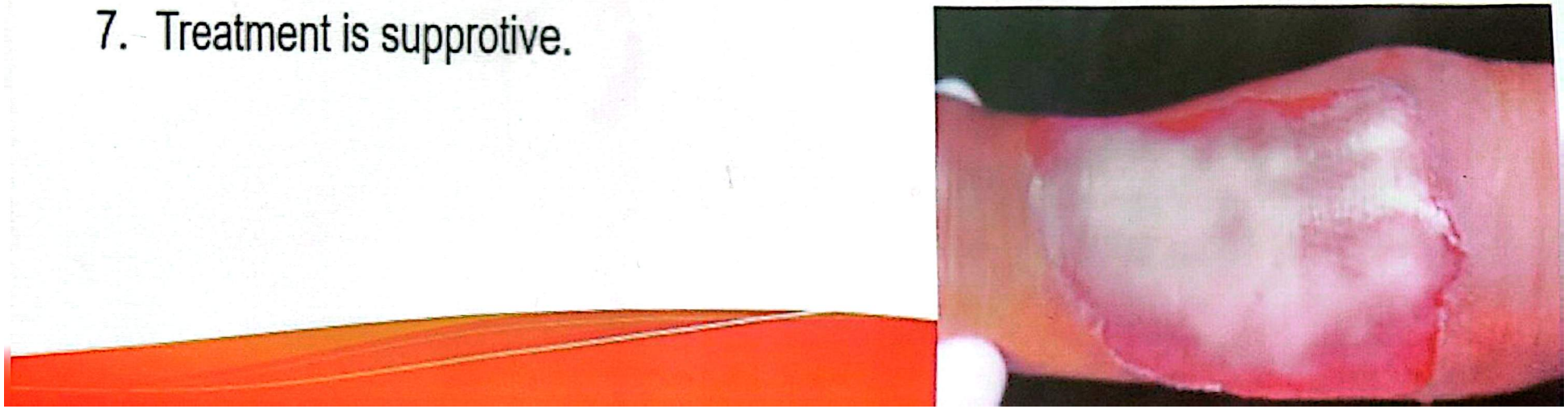
Fourth Degree Burn

involves underlying tissues-muscles,bones.

Depending of thickness of skin involved

- Superficial partial thickness-

1. Clinical features are Blistering & loss of epidermis.
2. The underlying dermis is pink,moist & will exudate fluid upto 36 hours.
3. Capillary return is clearly visible when blanched.
4. There is little or no fixed capillary staining.
5. pinprick sensation is normal.
6. superficial partial thickness burns heal without scarring in 2 weeks.
7. Treatment is supprotive.



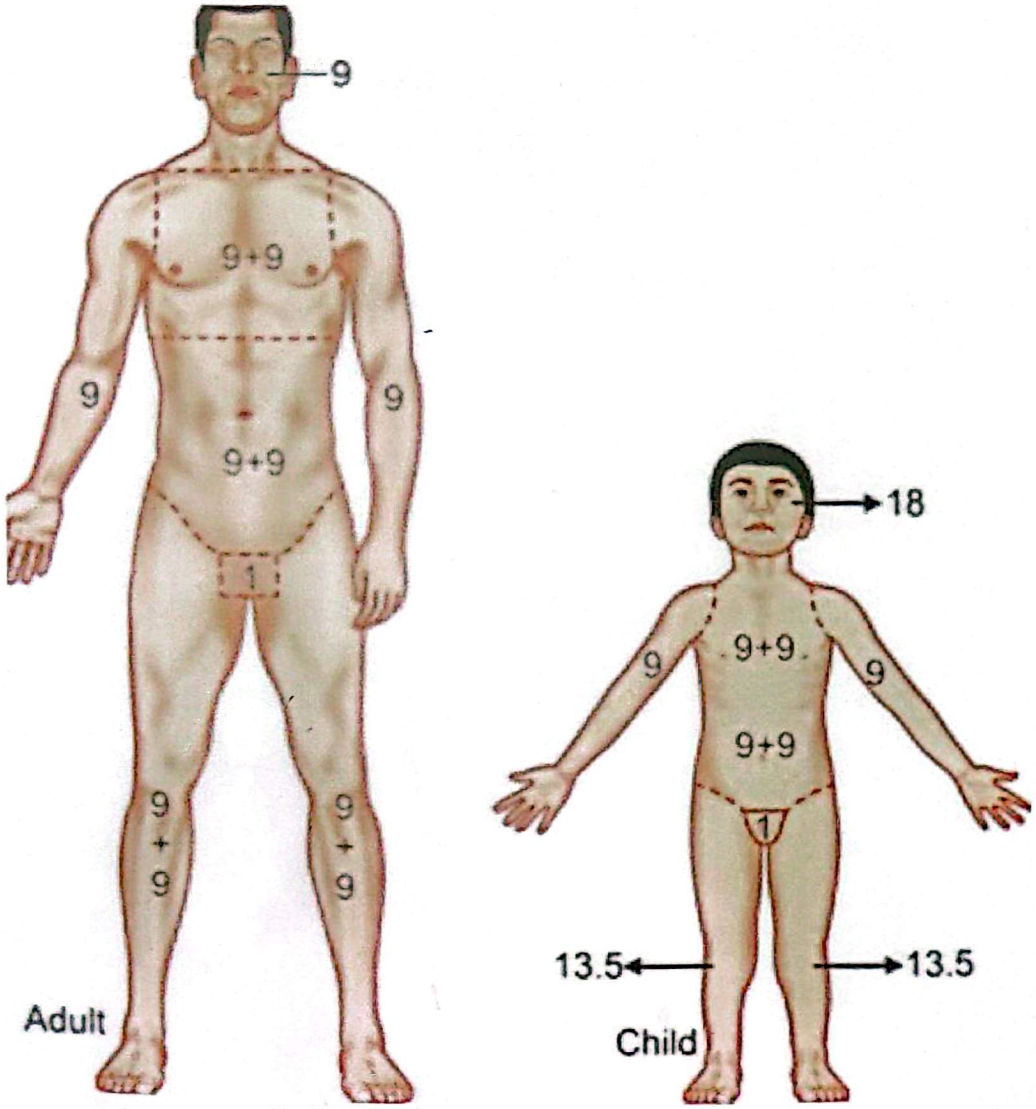
Deep Partial thickness burn

1. These burns involve damage to the deeper parts of the reticular dermis.
2. Clinically dermis is usually lost.
3. The exposed demis is not as moist as that in superficial burn.
4. There is abundant fixed capillary straining especially if examined after 48 hours.
5. The color does not blanch with pressure under examiner's fingers.
6. Sensation is reduced,the patient unable to distinguish sharp from blunt pressure when examined with a needle.
7. Deep dermal burns take 3 weeks or more to heal without surgery which leads to hypertrophic scarring.

Full Thickness Burn

- The whole of dermis is destroyed.
- Clinically,they have a hard,leathery feel.
- The appearance can vary from that similar to the patient's normal skin to charred black depending on the intesity of the heat.
- There is no capillary return.
- Often thrombosed vessels can be seen under the skin.
- These burns are completely anesthetic-a needle can be stuck deep into the dermis without any pain or bleeding.

Assessment of the burn wound



Wallace's Rule of nine

Immediate care of the burn patient

- Prehospital care-

1. Ensure rescuer safety
2. Stop the burning process
3. Check for other injuries.
4. Cool the burn wound
5. Give oxygen
6. Elevate
7. Anagesia

Hospital care

The principle of managing acute burn injury follow the advanced trauma life support (ATLS) principles as per major trauma

A-Airway control

B-Breathing & Ventilation

C-Circulation

D-Disability

E -Exposure with environmental control

F-Fluid Resuscitation

- Assess the percentage ,Degree,type of burn
- Keep the patient in a clean environment.
- Sedation and proper analgesia