Burn

By

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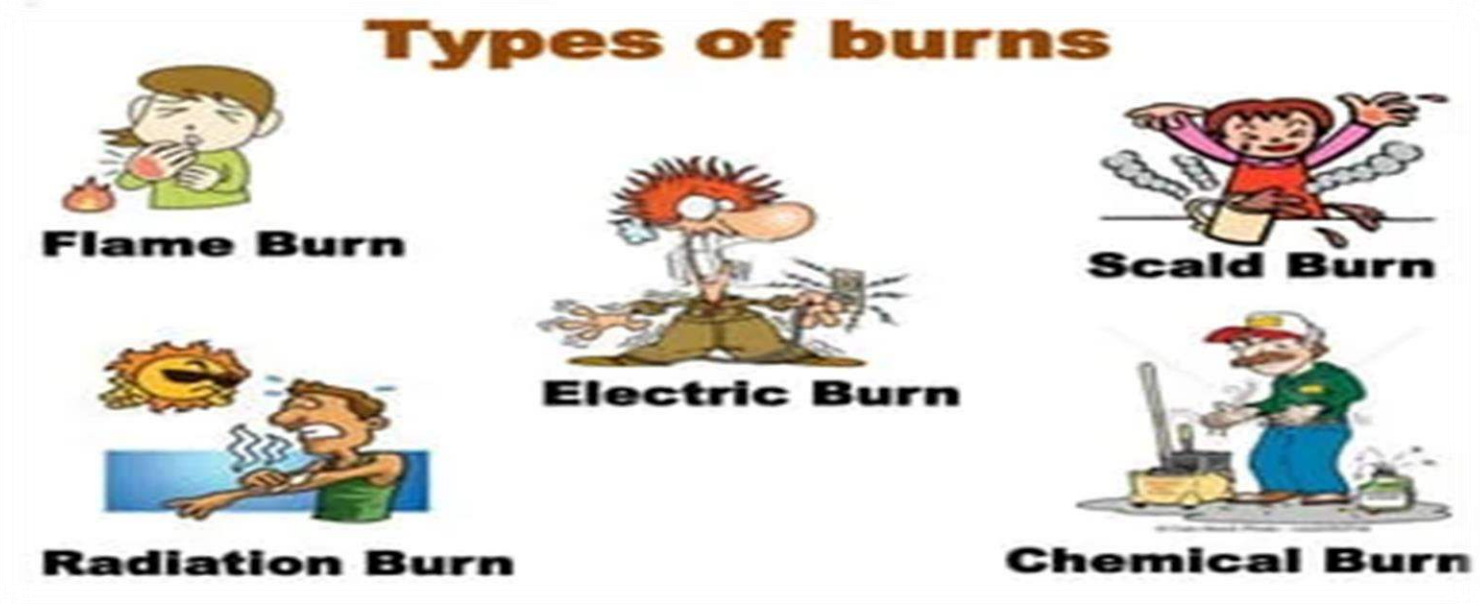
Burn is an injury to the skin or other organic tissue primarily caused by heat or due to radiation, radioactivity, electricity, friction or contact with chemicals.

Types of burns

• Thermal. • Chemical. • Electrical • Radiation

Thermal (heat) burns occur when some or all the cells in the skin or other tissues are destroyed by:

- hot liquids (scalds)
- hot solids (contact burns)
- flames (flame burns).



Assessing depth

FIRST-DEGREE BURNS

- Redness, tenderness, and pain are the hallmarks of this injury.
- Blistering does not occur,
- Healing takes place after several days without scarring



Second-degree burns

- These burns appear pink, moist, and soft and are exquisitely tender when touched by a gloved hand.



- They heal in approximately 2-3 weeks, usually without scarring

Third-degree burns

- Third-degree burns are full-thickness burns that destroy both epidermis and dermis
- may be white, brown, or black and look 'leathery'. They do not blister and have no sensation
- skin grafting always is necessary to resurface the injured area





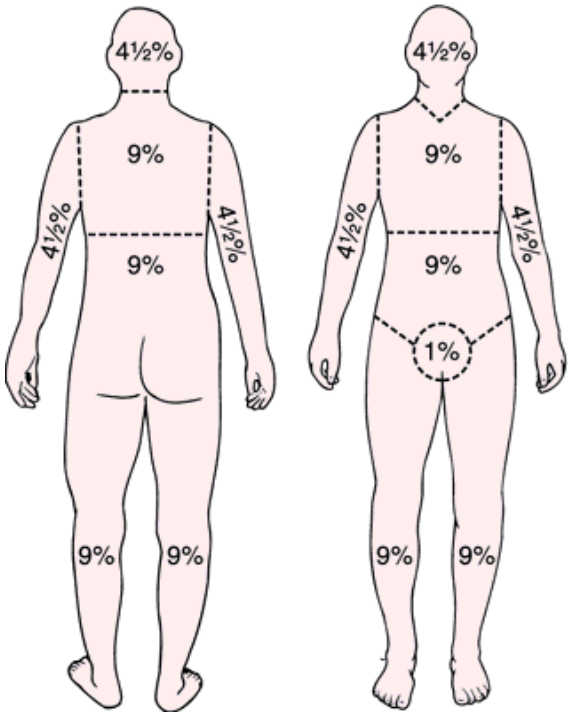
Fourth-degree burns

- cause full-thickness destruction of the skin and subcutaneous tissue,
- with involvement of the underlying fascia, muscle, bone, or other structures.
- These injuries require extensive debridement and complex reconstruction of specialized tissues and invariably result in prolonged disability



Assessing extent of burns

ADULTS RULE OF 9'S:



INFANTS RULE OF 5'S

- head = 20 %
- each arm = 10 %
- each leg = 20 %
- front of trunk = 10 %
- back of trunk = 10 %

Major burns: resuscitation

Prehospital first aid measures

- Ensure rescuer safety first.
- Remove the patient from the burning environment. If clothes are smoldering, apply cold water and remove them, unless adherent.
- Treat airway obstruction
- Provide high flow O 2
- Cover burns in clean sheets
- Continue O 2 and apply a hard cervical collar if there is any possibility of spinal injury

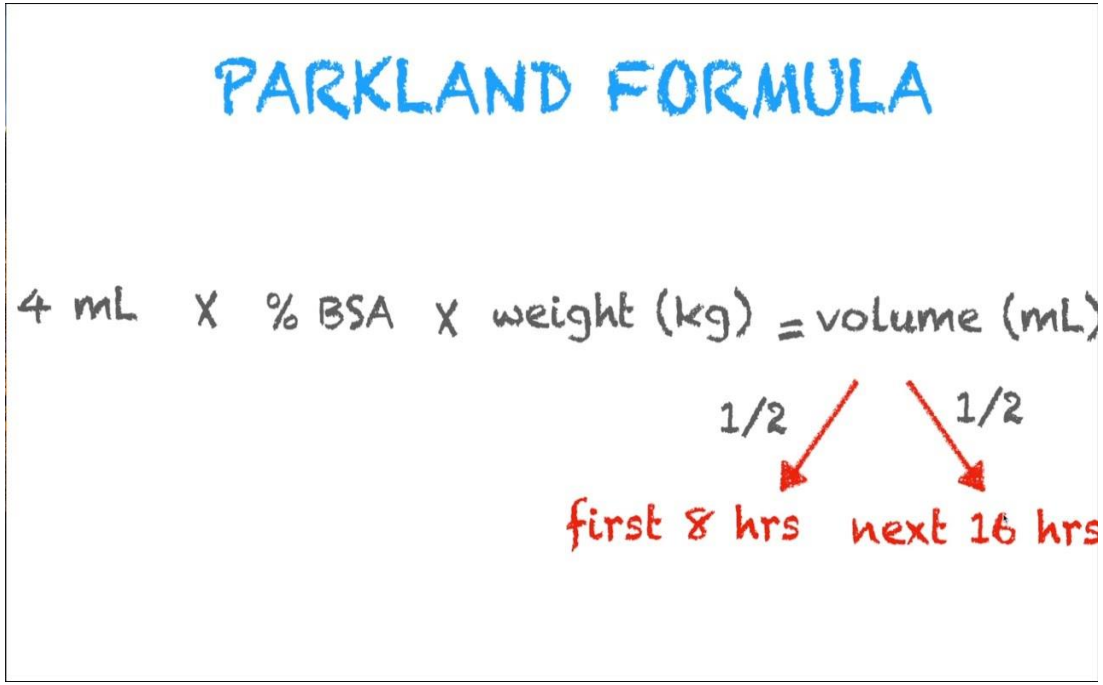


Analgesia

- Obtain IV access with two large peripheral cannula.
- Send blood: X-matching, FBC, , U&E, glucose, and coagulation.
- Provide analgesia (IV morphine titrated according to response).
- Provide an antiemetic .

Fluid resuscitation

- Give IV fluids. Start with isotonic crystalloid (eg 0.9 % saline) at 2–4mL of
- crystalloid per kg body weight per % body surface area burned, over the
- first 24hr following injury. Give half of this volume in the first 8hr.
- Check pulse, BP, and respiratory rate every 10–15min initially.
- •Insert a urinary catheter and test the urine



Burn Wound Management



- powder-free gloves because of the demonstrated toxicity of glove powders to tissue.
- Initial treatment of the burn wound involves cleansing the wound with saline
- Ruptured blisters are removed with scissors.
- After wound cleansing, cover with a topical antimicrobial dressing ,Topical antibiotics decrease microbial growth and reduce invasive infection.
- Systemic antibiotics may be indicated when cellulitis is evident in surrounding unburned tissue.


THANK
YOU!