Plastic - Burns

1) The most common type of burn that affects children is:
Ans:- Scald burns

2) The tissue with the highest conductivity is:
Ans:- Nervous tissue

3) The bulk of injury in electric burns affects:
Ans:- Muscles

4) The least tissue to conduct electricity is:
Ans:- Bone (Especially cortical bone)

5) Which organ is susceptible to injury in electric burns:
Ans:- Kidneys

prevented by hydration and alkalinization of injury

6) How do we know first vs second?
First: Pain, erythema
Second: Pain, erythema, exudative weeping, blisters, blanching

7) Will this “X” degree burn scar ?
First and second doesn’t leave a scar (REGENERATION) (2nd is AKA PARTIAL THICKNESS BURN)
Third will leave a scar (FIBROSIS) (AKA FULL THICKNESS BURN)

8) How long does it take to heal
First: Days
Second: Weeks
Third: Months

9) What is the benefit of knowing the degree of the burn? which management
To determine the local outcome (Fibrosis/contracture or not) and management (Needs skin graft or not)

10) What is the benefit of knowing the percentage of the burn?
It determines the prognosis (mortality rate), and the systemic complications and
the systemic management of the burn victim.

11) What are the signs of second degree burn?
Redness, blisters, hotness, blanching, weeping, pain

12) Question about rule of nines
Patient has both lower limbs burnt and weighs 70 kilograms, how much fluids do we give him?

13) What are the benefits of special charts (Lund and browder charts)
It is more accurate
Takes age into consideration

14) Areas of escharotomy

(Done in the first hours to relieve pressure, ectomy when pt stabilized):

Hands, limbs, chest (breathing protection), abdomen, neck (airway protection)

15) Which of the following Statements is correct about Compartment Syndrome:
A) Pressure intra-compartment should be more than venous pressure.
B) Pressure intra-compartment should be more than capillary pressure. *
C) Pressure intra-compartment should be more than arterial pressure.

16) At what burn percentage in children do we have to give fluids?
10-15%

17) Parkland's formula is used in all of these types of burn except:
Ans: Electric burns (Skin is deceiving, we cannot calculate percentage)

18) When do we give colloids?
Ans: After the first 24 hours

19) Type of fluid used in parkland's formula is:
Ans: Crystalloids (LR)

20) Reasons for not using antibiotics prophylactically
Ans: Increased bacterial resistance, increased fungal infections, no evidence of decreasing sepsis

NOTES:

- *The older the child gets:*
  Head decreases in it's surface area
  Lower limbs increase in their surface area
- High voltage electric burn is at voltage >1000volt

OSCE STATIONS (Doctor gave so many questions, we list them all here, in your station it won't have ALL of them)

1) High voltage electric burn patient presents to you in emergency room: you suspect (COMPARTMENT SYNDROME), answer the following questions:
Q1) What are the clinical pictures that you look for in patient with electrical burn?
A) Head injury, peripheral nerve damage
B) Check for arrythmias, Myoglobinemia, myoglobinuria and AKI (Rhabdomyolysis picture)
C) Compartment syndrome (presents as severe undue pain, paresthesia and numbness)
D) Bone fractures due to severe muscle contractions

Q2) How to manage this patient?
Pressure should be releived by fasciotomy within 6 hours to avoid permanent muscle ischemic necrosis.

Q3) What is the pressure that you need to measure to diagnose it?
>32mmHg intra-compartment pressure (>capillary pressure)

Q4) What is the sequalae of electric burn on skeletal muscles?
It'll cause Myoglobinuria, myoglobinuria and AKI (Rhabdomyolysis), also compartment syndrome and bone fractures.

Q5) What is the sign of acute kidney injury after electrical burn?
Red urine!
Q6) What are steps to management of red urine?
Good hydration, alkalization of urine.

Q7) What does red urine indicate?
Myoglobinuria due to rhabdomyolysis

2)

Q1) What is the degree?
3rd degree

Q2) What is the sign that its 3rd degree?
Thrombosed dermal vessels

Q3) This patient complains of pain, numbness and paresthesia due to his eschar, what is the surgery?
Escharotomy, (then when stable escharectomy)

Q4) In what regions do we do perform this surgery? mentioned above

Good Luck!