

SAQ 1 Answers

A rural GP has contacted your Emergency Department requesting management advice for a patient who has sustained flame burns to his legs. The GP estimates the burns are mixed partial and full thickness. The GP has faxed a BSA chart to you the areas of burn are shaded in grey.

a. Estimate the patient's BSA% of burn (1 Mark)

1 Mark for correct estimate

Using Rule of Nine's

- 18% for each leg + 1% for perineum
- Estimate ~37% (Accept 35-39%)

Using Lund & Browder Method

- Estimate 37.5%

b. List the 3 components required to calculate the estimated burns resuscitation fluid regime for this patient (3 Marks)

1 Mark for each of

- BSA %
- Body weight – actual or estimate
- Time of burn / Time since burn

Parkland's formula = $4\text{mls} \times \text{BSA}\% \times \text{Wt (kg)}$

Gives estimated fluid resuscitation required in the 1st 24 hours since the TIME OF BURN

c. You calculate the patient's estimated burns resuscitation volume to be 11840 mls crystalloid. The patient's burn occurred 1 hour ago. What regime would you give the GP to deliver this fluid volume? (4 Marks)

1 Mark for each of the underlined components:

- ½ Half of this volume to be given in the first 8 hours following time of burn = 5920 mls
- ½ Half of this volume to be given in the next 16 hours following time of burn = 5920 mls

Or

- ½ Half of this volume to be given in the next 7 hours = 5920 mls or ~846 mls/hr
- ½ Half of this volume to be given in the subsequent 16 hours following time of burn = 5920 mls or ~ 370 mls/hr

Estimate volume using Parklands based on an 80 kg patient = $37\% \times 80\text{kg} \times 4\text{ mls} = 11840\text{ mls}$

d. List 2 end points useful in assessing adequacy of burns fluid resuscitation (2 Marks)

1 Mark for:

- Urine output 0.5-1 ml/kg/hr

1 Mark for any of:

- Lactate clearance
- Improving pH
- CVP measurement

Facem trial written Set 3

*Answers taken from Life in the Fast Lane Trauma Tribulation 032
(<http://lifeinthefastlane.com/trauma-tribulation-032/>) and ANZBA EMSB Manual*

