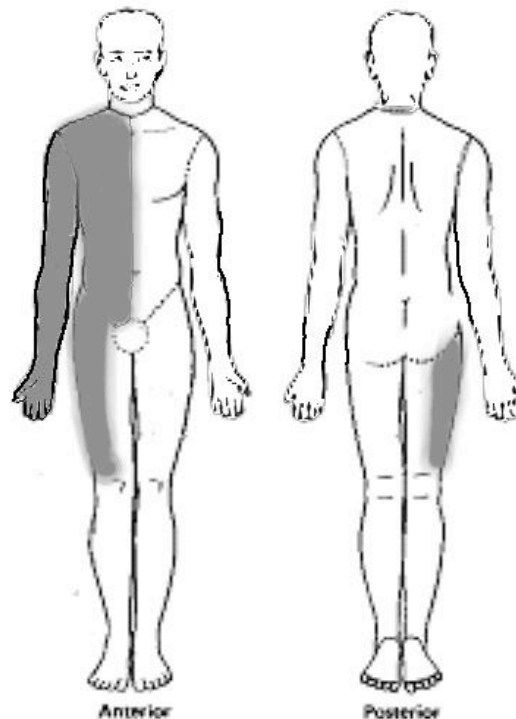


Regarding burns pt.

According to ATLS list 4 clinical indications of inhalation injury. 4 points

*Singeing eyebrows,  
Facial burns  
Carbon deposits/acute inflammation of oropharynx  
Carbonatious sputum  
HbCO > 10%  
H/O confinement in a burning environment  
Explosion with burns to head/torso*

25 year old man is brought in from his house with burns to the R side of his body. He fell asleep, drunk next to a gas fire. He appears to be average (70 kg) size and has no significant PMH  
Estimate the area of his burns and the fluid requirement for the first 12 hours. 3 points  
What fluid would you use? 1 point



18%,

$70 \times 4 \times 18 = 5040 \text{ ml}$  2520 ml in 8h + 630 in next 4h = 1968.75ml in first 12h

*Hartman's is the best choice*

How do you know whether the fluid management is adequate in this patient? 1 point

*Aim for minimum of 50ml/h of u.o. or 1ml/kg*

How would you differentiate between superficial and partial thickness burns in the acute stages? 1 point

*Formation of blisters, more sensitive to stimulation, if deep tend to be much darker in colour and blisters more likely to be burst*

Paracetamol overdose

Name 3 conditions which would increase pt risk in paracetamol OD and describe the mechanism responsible for that increase. 4 points

*Malnourishment*

*Anorexia Nervosa*

*Bulaemia*

*Cystic Fibrosis*

*HIV*

*Act by depleating glutathione stores*

List 3 drugs which would increase pt risk in paracetamol OD and describe the mechanism responsible for that increase. 4 points

*Phenytoin*

*Carbamezapine*

*Rifampicin*

*Phenobarbitone*

*isoniazid*

*? Alcohol*

*Act by stimulating the coenzyme p450 system*

Name 2 other factors which would put the pt at an increased risk of liver damage from paracetamol OD 2 points

*Late presentation > 8hours*

*Staggered overdose*

A 28 year old man is brought in from an RTA. His car rolled over an embankment and hit a tree with the driver side door. No one else was involved. The accident happened 6 hours ago in the middle of the night and the pt was unable to get out on his own. He has obvious deformity to his mid thigh, ABCs are stable and does not appear to have any other injuries. His Pulse is 130, BP 110/90, cap refill is up to 3 secs.



His CXr and C spine are clear, what does the hip X-ray show? 1 point  
 What 3 nerves are likely to be damaged with this injury and how could you test for it in A&E? 3 points

*Medial dislocation L hip or L acetabular fracture with hip dislocation*  
*Sciatic nerve- ask pt to dorsiflex foot ,check sensation on the lateral aspect below the knee*

*Superior gluteal- hip abduction*

*Inferior gluteal- hip extension= check tensing of gluteus maximus*

Name 5 other injuries and nerves which are associated these injuries. 5 points

*Axillary Nerve- Shoulder dislocation*

*Radial nerve- distal 1/3 of humerus #*

*Median nerve- fracture dislocations of mid carpal/wrist*

*Ulnar nerve- median epicondyle fracture*

*Common perineal nerve – fracture Fibular neck*

The pt is suddenly becoming more SOB and confused. You notice a few purple spots on his face and upper trunk similar to the one on the lip here



What is the likely cause for his sudden deterioration? 1 point

*Fat embolus*

## Salicylate poisoning

At what dose/plasma concentration is salicylate poisoning thought to be mild? 1 point

List 2 symptoms of mild salicylate poisoning. 2 points

*<150 mg/kg or 300-600 mg/l (250-400 in elderly or children- extra mark)*

*lethargy  
tinnitus  
nausea  
vomiting  
dizziness*

At what dose/plasma concentration is salicylate poisoning severe? 1 point

List 3 signs/symptoms of severe salicylate poisoning -3 points

*>500mg/kg or >800mg/l (>700 in elderly or children- extra mark)*

*Metabolic acidosis  
Coma  
Hypotension  
Convulsions  
Renal Failure*

A 23 year old girl gets admitted after taking 50x 300mg aspirin tablets 45 min ago. She weighs 50 kg. What would be the initial treatment? 2 points

*Give activated charcoal 50g orally, consider multiple doses  
Start bicarbonate infusion- 1l of 1.26% NaHCO<sub>3</sub> over 3 hours*

Her levels come back at 900mg/l, other biochem as follows:

Na 137

K 4.6

Cr 150

Ur 9.4

Venous pH 7.15

What treatment will she require? 1 point

*Haemodialysis*

**Table 3** Toxicokinetics, clinical features, and recommended management of salicylate poisoning

Severity	Dose ingested	Salicylate concentration	Clinical features	Recommended management
Mild	>150 mg/kg	Adults 300–600 mg/l	Lethargy	MDAC until salicylate concentration peaks Oral or IV fluids
		Children/elderly people 200–450 mg/l	Nausea Vomiting Tinnitus Dizziness	
Moderate	>250 mg/kg	Adults 600–800 mg/l	Tachypnoea	MDAC IV fluids Urinary alkalinisation
		Children/elderly people 450–700 mg/l	Hyperpyrexia Sweating Dehydration Ataxia	
Severe	>500 mg/kg	Adults >800 mg/l	Hypotension	MDAC IV fluids Haemodialysis
		Children/elderly people >700 mg/l	Metabolic acidosis Renal failure Coma Convulsions	

## Regarding Trauma

Which 3 parameters go into calculating the Revised Trauma Score and what is the normal value and at what level should you take the pt to trauma centre and alert trauma team? 4 points

*Systolic BP, GCS, Respiratory Rate*

*12 is normal, alert if <11*

A 32 year old, 33 weeks pregnant woman is brought in from a simple RTC. She was driving at 20 mph and hit a stationary car in front. She was wearing a seat belt and did not suffer any direct injuries and was mobilising on scene. Now all she is complaining of is some lower abdominal pain. What would be your main concern regarding this pain and how would you investigate it? 2 points

*Placental abruption, CTG for 4 hours at least*

*Only ½ point for USS- it only picks up up to 50%*

Her vital signs are

BP- 130/85, pulse 110, RR 18, Sats 99% on air

While you are waiting you get her usual blood tests back.

Hb- 10.4, WCC- 17, plat- 350

What treatment is required so far and why. 2 points

*analgesia- all parameters are within normal range for pt in 3<sup>rd</sup> trimester*

The patient is concerned about the baby. How could you reassure her about its health.

2 points

*Any 2 of the following*

*Ask about the foetal movements*

*Currently no signs of any significant problems and mechanism of injury not serious*

*Perform a dopler/USS of the foetal heart*

*Perform CTG*