Pre-Hospital and Disaster Questions

Fellowship Group 2017\_2

**Question 1**

 You are the retrieval consultant attending a multi vehicle accident on a busy highway. Two 4-wheel drive vehicles have collided with a chemical tanker which has spilled its contents onto the road. There is a fire officer in attendance who has taken responsibility for the site command and control. There are 5 casualties, four of which have self extracated and are on the roadside and 1 who is trapped within a vehicle. The fire officer is waiting to give you a METHANE report to update you on the current situation

1. With regards management of mass casualty situations what are the 7 “key elements of a disaster response” ? (7 marks)
* .
* .
* .
* .
* .
* .
* .
* Outline the meaning of the disaster communication acronym METHANE (7 marks)
* M­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* E\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* T\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* H\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* A\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* E\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* What are the two types of triage that occur in a mass casualty situation, and what does the result of each triage determine? (4)

|  |  |
| --- | --- |
| * Triage Type
 | * Determines what?
 |
|  |  |
|  |  |

* Your initial survey of the scene reveals that all but one of the patients are walking wounded. The last patient is trapped in a vehicle by his legs. He is screaming in pain with an obvious severe pelvic crush injury. BP 60/30, P160, Sats 80%, RR 46 with reduced AE right chest. It is estimated that it will take 20minutes to free him safely. List the immediate management steps you will take. You have access to an arm/torso but not to the airway.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Question 2**

A 46 year old man has fallen from a horse in a rural area of the Northern Territory. He has obvious lower limb and pelvic injuries and pain in his right chest.

You have been tasked as the prehospital doctor to retrieve this patient to the nearest trauma centre. There is a local GP at the site.

Observations

P110

BP 100/60

Sats 91% 15L NRB

RR 30

GCS 15

1. List the FIVE factors that require consideration when deciding whether to opt for helicopter versus fixed wing retrieval vs road transport (5)

* .
* .
* .
* .
* .

After consideration of all of the necessary factors it has been decided that helicopter transfer is the safest and best option

2. List the factors, specific to helicopter transfer, that will potentially impact the management of and outcome for your patient. Give an example with each (5)

* .
* .
* .
* .
* .

You have made contact with the GP on site who has basic resus skills and basic GP practice equipment (no specialty trauma equipment) and simple drugs.

3. List the advice you would provide him with to management the patient until the team arrives. (7)

* .
* .
* .
* .
* .
* .
* .

**Question 3**

You are the consultant in charge at a tertiary centre. A 4 week old infant has be brought in with a history intermittent cyanosis and respiratory distress. You suspect that they have Tetralogy of Fallot on the basis of a bedside echo by an adult cardiologist. You have fully examined the child and found no alternative cause. The nearest centre with paediatric cardiology services is 2000km away. The child is currently very stable, feeding and is undistressed. The last episode was 6 hours ago.

Observations

P140

BP 60/40

Sats 99%

RR 40

Temp 36.9

1. What modality of transport will you use to transfer this infant to the accepting centre? (1)

2. Complete the table below, comparing fixed wing with rotary transport (8)

|  |  |  |
| --- | --- | --- |
|  | Pros | Cons |
| Fixed Wing Aircraft | * .
* .
 | * .
* .
 |
| Rotary Aircraft | * .
* .
 | * .
* .
 |

3. What preparations will you make, as the sending hospital, for transfer of this infant to the receiving centre? (6)

* .
* .
* .
* .
* .
* .

Question 4

You are the consultant in charge in a large tertiary hospital when you receive formal notification of a disaster in the local area. A lorry has collided into a Christmas market 10km away. There are at least 10 people deceased on scene, 6 seriously injured and multiple 10s of walking wounded.

1. What is the definition of a disaster (1)

2. What colour code is this particular disaster labelled with? (1)

3. How will you prepare your ED for the surge in ED presentations as a result of this disaster. (7)

* .
* .
* .
* .
* .
* .
* .

4. As the disaster progresses you now have 6 intubated patients and no free bays. A 19 year old man arrives via ambulance after blunt force trauma. He has been in traumatic arrest for 20 minutes. He has had 3 units of O negative and 1L NaCl, is intubated and ventilated. What are your 2 immediate stepwise actions? (3)

* .
* .
* .