**ANSWERS – PREHOSP AND RETRIEVAL**

**Q1**

**a) Outline your instructions for patient management prior to retrieval team arrival (6 marks)**

1 Mark for any of:

A Manage patient supine or left lateral position; prevent movement

Support A; if ETT required, use saline to inflate cuff

Analgesia such as Paracetamol 1g PO QID; Morphine 2.5mg IV titrated

Anti-emetics such as Ondansetron 4mg IV

B 100% Oxygen by NRB

C Volume resuscitate with NS 0.9% IV titrated to SBP, perfusion, mentation, UO

Insert IDC

D Correct hypothermia with passive/active warming

No marks for Trendelenburg position as increases risk of cerebral gas embolization.

**b) Describe the important steps in the retrieval of this patient (10 marks)**

Issues - need to avoid altitude / maintain temp / maintain oxygenation / support circulation

Retrieval Coordination- Liaison with hyperbaric physician and GP for immediate patient management

Transport Platform- Recognise patient issues regarding air transport, current patient condition, launch time, distance away, access, range, pressurization

Crew + skill sets- Capacity to manage DCI and complications of mid-transport

Equipment needed- Complete range of airway management equipment, predicted oxygen consumption, cardiac monitor and other, infusion pumps, defibrillator, predicted drugs required

Ref:

ACEM protocol for retrieval

Question / answer model taken from ACEM Fellowship Exam 2013.1 SAQ Question 8

Cameron, Textbook of Adult Emergency Medicine Ch 26.2

Q2. **When preparing a patient for retrieval, what are the general principles to be applied? (15 marks)**

1 mark for any of

AIRWAY

1. Assess airway stability for all patients and risk of deterioration

2. Assess airway in the event of emergent intubation; if ETT in place, note grade and intubation difficulties

3. Ensure ETT secure

4. NGT/OGT

5. Confirm ETT + NGT/OGT location with CXR

6. Anti-emetic if conscious

BREATHING

1. Assess respirations, oxygenation + ventilation

2. Check oxygen delivery + device + tank

3. Review vbg/abg + CXR

4. Secure ICCs; consider finger thoracostomies in chest trauma

CIRCULATION

1. Control haemorrhage eg pressure, splints, tourniquets, txa

2. x2 IVC; Secure all lines; transduce all lines

3. Prepare fluid, blood, drug infusions

4. Consider IDC

DOCUMENTATION/DRUGS/DISABILITY

1. Patient charts, bedside tests, pathology, imaging

2. Limitation of treatment orders

3. Adequate analgesia, sedation, paralysis

4. Spinal precautions if requireddfs

EQUIPMENT/EXPOSURE

1. No equipment left behind

2. Maintain body temperature

FAMILY

1. Aware/ contact details

GENERAL

1.

HOSPITAL

1. Communication with receiving hospital regarding ongoing management required, particularly if heroic eg MTP, OT, ANGIO, IR.

Ref:

Cameron, Textbook of Adult Emergency Medicine Box 26.2.1

<https://nswhems.files.wordpress.com/2015/12/predeparture-checks.pdf>

**Q3.**

**a. When factors should you consider when deciding what mode of transport to use in the retrieval of a patient? (5 marks)**

1 mark for any of

Pressurisation

Urgency

Space required

Distance

Access to site

Weather

Time of day

Transport team eg fatigue, staff required

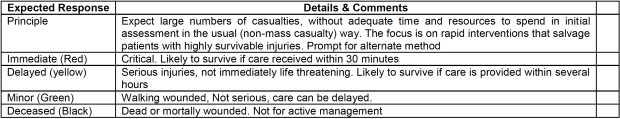
Ref:

ACEM statement

**b. Regarding modes of transport, fill in the table.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **ROAD** | **ROTARY WING** | **FIXED WING** |
| **LAUNCH TIME** | **5min** | **5-10min** | **30-60min** |
| **OTHER TRANSPORT NEEDED** | **No** | **+/-** | **Y** |
| **RANGE** | **0-100km** | **50-300km** | **200-2000km** |
| **NOISE** | **Min** | **Y** | **Mod** |
| **VIBRATIONS** | **Min-mod** | **Y** | **Mod** |
| **ACCELERATION** | **Y** | **Min** | **Y** |
| **PRESSURISATION** | **NA** | **N** | **Y** |

**Q4.**

**a.** 

**b. What are your immediate actions to prepare for the expected influx of patients? (6 marks)**

MIMMS DISASTER RESPONSE ELEMENTS

ACTIVATE DISASTER PLAN- eg pre-hospital, in emergency as below, inpatient- mobilise staff, theatres, cancel electives, discharge patients, alert services

COMMAND + CONTROL eg on field controller; in hospital DMS + DON; in ED DEM + NUM

SAFETY- Evacuate unsafe areas; establish safe work zone; assess safety of patients + staff; assess safety of entry points; security presence; media presence

TRIAGE- Allocate locations eg normal patients, walking wounded, ambulance; sieve + save;

TEAMS- Organise teams eg triage, resus, majors, minors, existing patients, inpatient teams to assist clearing ED

TREATMENT- Organise drugs/equipment required/disaster equipment

TRANSPORT-

Q5. When preparing for a surge secondary to a disaster, what information do you want to know?

(7 marks)

METHANE

Major incident

Exact location

Type of injuries

Hazards on scene

Access to site

Number of casualties

EMS needed or present already