

# Early Trauma Care



**Make early contact with ARV for advice from the major trauma services and to initiate retrieval.**

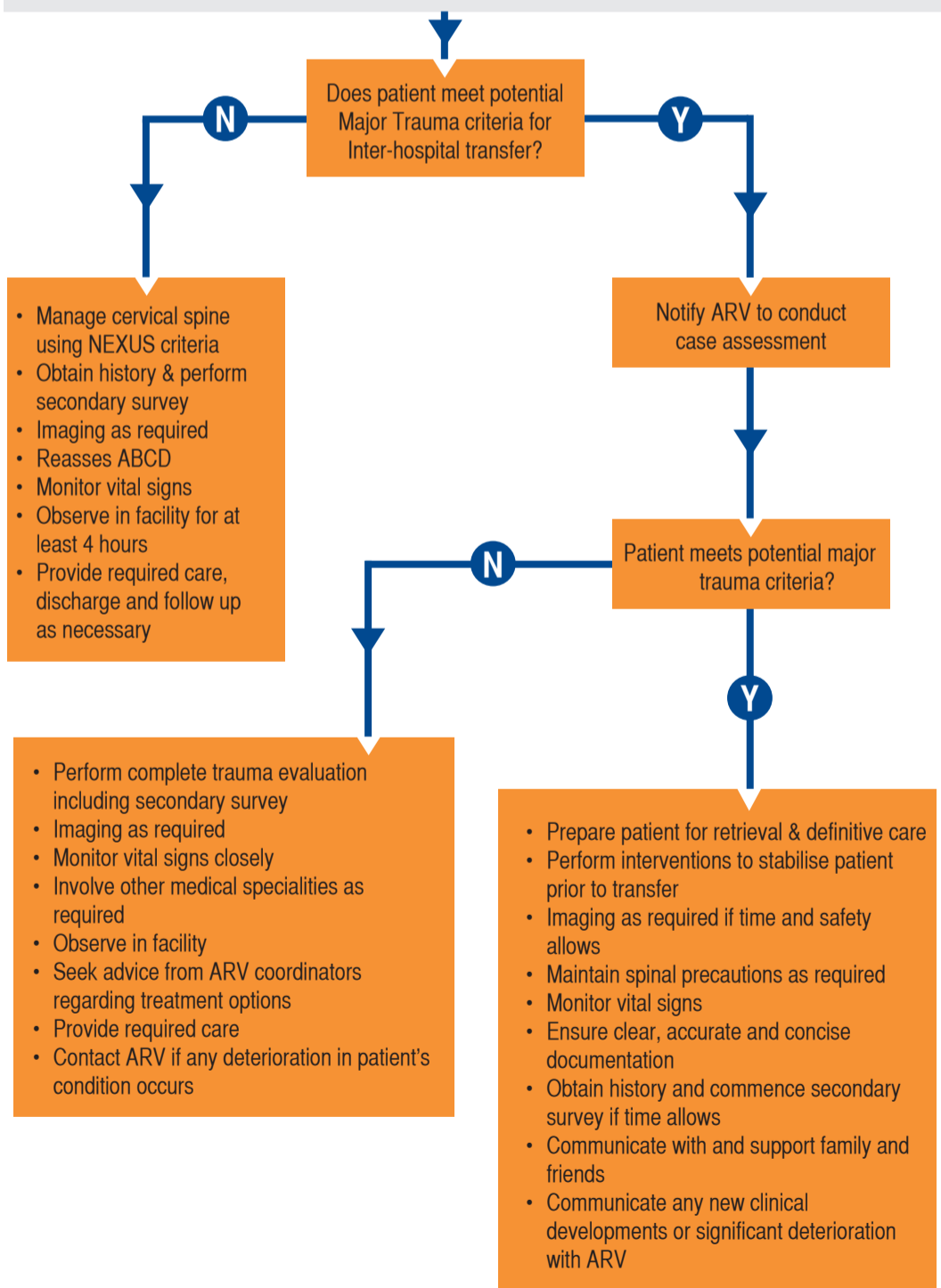
- The primary survey is designed to detect and treat actual or imminent life threats.
- Avoidance of hypovolaemia in trauma is a cornerstone of management.
- Trauma patients are at risk from complications due to hypothermia.

## Early Activation

- Gather vital information
- Activate Trauma Team
- Designate roles
- Set up to receive patient
- Ensure safety using PPE

## Primary Survey

| AIRWAY / C-SPINE  | BREATHING  | CIRCULATION   | DISABILITY  | EXPOSURE / ENVIRONMENT  | ADJUNCTS  |
|---|--|---|---|---|---|
| <ul style="list-style-type: none"> <li>• Assess airway stability &amp; protect as needed</li> <li>• Be prepared for a difficult intubation</li> <li>• Maintain full spinal precautions</li> </ul> | <ul style="list-style-type: none"> <li>• Identify and treat life threats</li> <li>• Assess RR, work of breathing, SpO<sub>2</sub> &amp; symmetry</li> <li>• Oxygen therapy to maintain SpO<sub>2</sub> 94-98%</li> <li>• ETCO<sub>2</sub> monitoring if intubated, maintain 35-45mmHg</li> </ul> | <ul style="list-style-type: none"> <li>• Identify &amp; control source of haemorrhage</li> <li>• Insert x 2 large bore IV cannulas</li> <li>• IO access if required</li> <li>• Assess HR/BP/Cap refill</li> <li>• Commence fluid resuscitation for hypovolaemia at 20ml/kg crystalloid</li> </ul> | <ul style="list-style-type: none"> <li>• Assess consciousness level - AVPU</li> <li>• Check pupils</li> <li>• Test BSL</li> </ul> | <ul style="list-style-type: none"> <li>• Fully expose and inspect patient</li> <li>• Prevent heat loss</li> <li>• Log roll</li> </ul> | <ul style="list-style-type: none"> <li>• FAST scan</li> <li>• Analgesia</li> <li>• X rays: Chest, Pelvis</li> <li>• Bloods: FBE, X-match, U&amp;E, Lactate, ABG</li> <li>• 12 lead ECG</li> <li>• Orogastric tube if intubated</li> <li>• AMPLE mnemonic</li> </ul> |



## Key Points

### Primary survey

- A systematic approach using ABCDE should be used to treat actual or imminent life threats and prevent complications from these.
- Deterioration in a patient's clinical condition can be swift and this will be evident in their vital signs and level of consciousness.
- If in doubt, repeat ABCDE.

### Fluid resuscitation

- A balanced approach to fluid resuscitation in trauma leads to preservation of vital organ function until bleeding can be controlled.

- *Crystalloid fluids:* Initial treatment of hypovolaemia with Normal Saline is recommended, up to 20-30ml/kg.
- *Blood products:* if minimal response to crystalloid, blood products should be given at a 1:1:1 ratio if available.

### Prevent heat loss

- Early recognition of hypothermia and aggressive management can help to avoid potentially lethal complications.
- Use warmed IV fluids; cover the patient with warm blankets as well as keeping the room warm, use a forced air warming machine if available.

## Life Threats

### Exsanguinating external haemorrhage

- Obvious large-volume external blood loss must be managed as an immediate priority in the pre-hospital environment and on arrival to the ED.
- The use of tourniquets, haemostatic dressings as well as direct pressure should be implemented to control bleeding until urgent surgery can be arranged.

### Airway obstruction

- If there is potential that the patient's airway may deteriorate, early intubation should be considered.

- Always have emergency airway equipment available.

### Chest Injuries

- The chest should be auscultated, fully exposed and inspected for any wounds, bruising or deformity.
- If any life threats are detected they should be managed in the primary survey before moving on.

### Life Threats

- » Tension / open pneumothorax
- » Massive haemothorax
- » Cardiac Tamponade

