

Initial management of haemorrhagic shock in the trauma patient

STEP 1: STOP THE BLEEDING. If you know where it is.

AIRWAY and BREATHING: get 100% oxygen into them

CIRCULATION: control bleeding from external wounds by direct pressure
may want to get them in a pelvic compression sling if the pelvis is fractured

DISABILITY: look for spinal trauma; could this be spinal shock?

EXPOSURE: look for sources of bleeding elsewhere; try to keep them warm as you do this

GASTRIC DECOMPRESSION:

- most important in children, who get gastric dilation for some reason.
- In adult trauma, the stomach also dilates. You need to prevent aspiration.

URINARY CATHETER:

- Assesses for genitourinary trauma (hematuria)
- Monitors the perfusion of the kidneys, thus monitoring response to fluids

VASCULAR ACCESS

- 2 x 16 gauge cannulas
- Rate of flow through a tube is proportional to the forth power of the radius, and inversely proportional to its length
- Best spots are the cubital veins
- All else fails: saphenous cutdown, intraosseous or central venous access

INITIAL FLUID THERAPY

- Warm saline, 2 litres, or 20ml/kg for kids
- Initially, as fast as it will go
- The response to this challenge will determine the next steps.

The 3 for 1 rule:

For every 1 litre of blood lost, replace 3 litres of crystalloid

The above is a vague estimate.

HOWEVER, if the patient fails to respond to an estimated volume, you need to reassess the situation to figure out what the other causes of shock might be

In penetrating trauma with haemorrhage, you may want to delay giving tons of crystalloid until the bleeding is controlled.

This is because aggressive volume replacement can make the bleeding worse.