

Haemorrhagic Shock

Recognition and staged management of blood-loss shock at facilities without a blood bank. Priorities: stop the bleeding, restore just enough circulation, and move fast toward blood and surgery. Adapt to local policy.

1. RECOGNISE EARLY

- ☐ **Tachycardia over 100/min is the earliest reliable sign**
- ☐ **Cool hands, capillary refill over 2 s, anxiety or confusion**
- ☐ **Falling blood pressure is a LATE sign — do not wait for it**
Up to 30% of blood volume can be lost with a normal BP
- ☐ **Estimate hidden loss: femur fracture up to 1.5 L, pelvis over 2 L, haemothorax up to 3 L**
- ☐ **Search all five sites: chest, abdomen, pelvis, long bones, floor (external)**

2. STOP THE BLEEDING

- ☐ **Direct firm pressure with a gauze pad — hold at least 10 min**
- ☐ **Pack deep wounds tightly with gauze**
Push gauze onto the bleeding vessel, then pressure on top
- ☐ **Tourniquet for limb bleeding not controlled by pressure**
5-7 cm above the wound, tighten until bleeding stops, write the time on the patient
- ☐ **Bind suspected pelvic fracture with a folded sheet at the greater trochanters**
- ☐ **Splint femur fractures — splinting itself reduces blood loss**

3. RESTORE CIRCULATION

- ☐ **Two large-bore IV cannulas (16G); intraosseous after 2 failed attempts**
- ☐ **0.9% saline 250-500 mL boluses, reassess after each**
Children: 10 mL/kg boluses with reassessment
- ☐ **Target a palpable radial pulse, not a normal BP (permissive hypotension)**
Exception: head injury — keep systolic at or above 110 mmHg
- ☐ **Tranexamic acid 1 g IV over 10 min, then 1 g over 8 h**
Only within 3 h of injury; children 15 mg/kg (max 1 g)
- ☐ **Keep the patient warm — hypothermia worsens clotting**

4. DEFINITIVE CARE

- ☐ **Arrange blood transfusion or referral to a centre with blood early**
- ☐ **Repeat vitals every 5-10 min; document the trend**
- ☐ **Do not delay transfer for repeated fluid boluses**
- ☐ **Hand over with SBAR: injuries, vitals trend, fluids and drugs given, tourniquet time**