

Southern Illinois Regional EMS System

DD-1 HYPOVOLEMIC HEMORRHAGIC SHOCK

BLS

Definition:

- Cellular hypoxia due to a sustained perfusion deficit, caused by internal/external bleeding or volume loss.
 - Signs / Symptoms:
 - Tachycardia
 - Unless elderly or on beta blockers or digitalis.
 - Tachypnea
 - Mental status changes
 - Ranging from anxiety to loss of consciousness.
 - Cool, moist, and pale skin
 - Narrowing pulse pressure
 - Hypotension

Management:

- Patient Assessment and Initial Care protocol
- Consider spinal immobilization
- Oxygen therapy as appropriate
 - 1-6 LPM by cannula: minimal distress.
 - 12-15 LPM by NRB mask: moderate/severe distress with signs of hypoxia.
 - 15 LPM by BVM: inadequate rate/effort, severe distress, unstable.
 - Maintain SpO₂ > 94%
- Control bleeding
 - Direct pressure
 - Pressure dressings
 - If bleed is suspected to be arterial in nature, on an extremity, and cannot be controlled with pressure:
 - Apply a tourniquet
- Treat any additional injuries or conditions per appropriate protocol.
- Contact Medical Control

ILS/ALS

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- Direct pressure
- Pressure dressings
- If bleed is suspected to be arterial in nature, on an extremity, and cannot be controlled with pressure:
 - Apply a tourniquet
- If bleeding is in an area that cannot have a tourniquet applied and cannot be controlled by pressure:
 - Wound packing and consider hemostatic agent
- Initiate vascular access (2 IV/IO sites preferred)
 - Administer fluids in 200 mL increments to sustain SBP at 90 mm/Hg.
- Treat any additional injuries or conditions per appropriate protocol.
- Contact Medical Control and receiving hospital.

ALS:

- If no response to IV fluids, Medical Control physician may consider:
 - **Dopamine** at **10 mcg/kg/min**.
 - Titrate to desired response (SBP 90-100 mm/Hg), not to exceed 20 mcg/kg/min.