23.3.1 SHOCK

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DESCRIPTION

Shock is defined as a state where perfusion is inadequate to meet the metabolic needs at a cellular level. There are various forms of shock each requiring their own specific treatment.

LoE:IVb[iii]

GENERAL MEASURES

The therapeutic aim for all types of shock is to restore perfusion and maintain an adequate blood pressure, e.g. Mean Arterial Pressure (MAP) >65mmHg.

Management includes fluid therapy and administration of vasoactive medication that may vary depending on the type of shock (See section 20.11: Shock):
For hypovolaemic shock: see section 20.11.1: Hypovolaemic shock.
For distributive shock: see section 20.11.2: Distributive shock.
For anaphylactic shock: see section 20.7: Anaphylaxis/ anaphylactic shock.
For neurogenic shock: see section 20.11.2.1: Neurogenic shock.
For septic shock: see section 20.11.2.2: Septic shock and section 23.10: Sepsis in ICU.
For cardiogenic shock: see section 20.11.3: Cardiogenic shock.
For obstructive shock: see section 20.12.4: Obstructive shock.

MEDICINE TREATMENT

Fluid therapy

Balanced salt solutions are the preferred resuscitation fluids for shock.
Adequacy of fluid resuscitation should be guided by measures of fluid responsiveness.

LoE:IIIb[iv]

CAUTION
Avoid colloids for shock resuscitation in patients with sepsis and acute kidney injury.

LoE:IIIb[v]

Vasoactive therapy

Vasoactive therapy is indicated in a shocked patient that fails to respond to fluid therapy.

- Adrenaline, IV, 0.01-1.0 mcg/kg/min as a continuous infusion.
  - Aim to achieve a target MAP >65mmHg within 30 minutes.
  - *LoE:IVb*[vi]

If shock is suspected to be cardiogenic in origin:

- Dobutamine, IV, 5-20 mcg/kg/min as a continuous infusion.

LoE:IVb[vii]

FLUID THERAPY FOR SHOCK

DESCRIPTION

» Balanced salt solutions are the preferred resuscitation fluids for shock.
» Adequacy of fluid resuscitation should be guided by measures of fluid responsiveness.

LoE:IIIb[viii]

CAUTION
Avoid colloids for shock resuscitation in patients with sepsis and acute kidney injury.

LoE:IIIb[ix]

VASOACTIVE MEDICINES FOR SHOCK

DESCRIPTION

Vasoactive therapy is indicated in a shocked patient that fails to respond to fluid therapy.

MEDICINE TREATMENT

- Adrenaline, IV, 0.01-1.0 mcg/kg/min as a continuous infusion.
  - Aim to achieve a target MAP >65mmHg within 30 minutes.

LoE:IVb[x]

<u>If shock is suspected to be cardiogenic in origin:</u>

- Dobutamine, IV, 5-20 mcg/kg/min as a continuous infusion.

LoE:IVb[xi]