

Sepsis

0 mins

5 mins

15 mins

60 mins

Recognition (see PIER Sepsis Screening Tool)
 Suspected infection
 Temperature <36°C or > 38.5°C
 Tachycardia / Tachypnoea
 Altered neurological status
 Poor peripheral perfusion
 Lactate >2
 Low DIASTOLIC pressure and/or
 Systolic hypotension (*late sign*)

Resuscitation
 High flow O₂
 Intravenous/Intraosseous access x 2
5 to 20ml/kg isotonic fluid bolus titrated to effect
 Ceftriaxone 80mg/kg [Max 4g] (neonate/immunocompromised see microguide)

Investigations
 Bloods: Venous gas (including glucose & lactate), cultures, FBC, U&E, LFT, Coagulation, CRP, Group & Save, assess ECG rhythm

Evaluate fluid resuscitation – Are there signs of...
 No response to fluid
 Worsening HR/RR
 Worsening perfusion
 Hepatomegaly
 Crackles on auscultation
 Rising lactate after fluid

NO

YES

Is there resolution of shock?
 Appropriate HR/RR for age
 Good peripheral perfusion
 Palpable peripheral pulses
 BP in range for age
 Serum lactate ≤ 2 mmol/L

FLUID REFRACTORY SHOCK
 Call SORT for advice
 Start peripheral adrenaline at 0.1 microg/kg/min

YES

NO

Admit to ward
 HDU level care

Repeat Titrated Fluid Bolus
 Consider early call to SORT for inotropes
 Max additional of 40ml/kg

Is there resolution of shock?
 Appropriate HR/RR for age
 Good peripheral perfusion
 Palpable peripheral pulses BP in range for age
 Serum lactate ≤ 2 mmol/L

YES

NO

Admit to ward
 HDU level care

Prepare for Intubation & Ventilation
 Ensure peripheral adrenaline infusion running pre-induction
 Ketamine induction (start with 1mg/kg) & Rocuronium
 Rescue dose adrenaline (0.5 to 1ml rescue diluted adrenaline made up as per SORT drug calculator) and titrated to BP/pulse volume
 Use cuffed oral ET tube of appropriate size
 Use SORT emergency induction of anaesthesia guideline
PREPARE FOR DETERIORATION

Attempt central venous access

Warm Shock

Cold Shock

Noradrenaline
 0.1 microg/kg/min
 Max. 1 microg/kg/min

Adrenaline
 0.1 microg/kg/min
 Max. 1 microg/kg/min

Add either Noradrenaline or Adrenaline if still hypotensive: Ensure SORT update

Inotrope Resistant Shock
 Consider Hydrocortisone:
 2.5mg/kg neonates & 1mg/kg child [max 100mg]
Discuss with SORT

Age	HR High	RR High	SBP/DBP Low
Term to 1 month	>160	>50	<70 <30
1 month to 1 year	>150	>45	<90 <35
1-4 years	>140	>40	<100 <45
5-12 years	>120	>25	<105 <50
> 13 years	>100	>20	<115 <60

COLD SHOCK	WARM SHOCK
CRT > 3 seconds	CRT < 3 seconds or normal
Weak Peripheral Pulses (low cardiac output)	Bounding Peripheral Pulses (high cardiac output)
Cold extremities	Warm around the edge
Narrow Pulse Pressure	Wide Pulse Pressure