

SEPSIS

MODULE: IMMUNOLOGY AND INFECTION

TARGET: ALL PAEDIATRIC TRAINEES; NURSING STAFF

BACKGROUND:

The Royal College of Paediatrics and Child Health (RCPCH) has set standards for training; by the completion of level one training, all trainees are expected to be able to recognise and manage severe sepsis.

INFORMATION FOR FACULTY

LEARNING OBJECTIVES

At the end of this session, participants should be able to:

1. Recognise symptoms and signs of septic shock
2. Appreciate need for appropriate fluid resuscitation and early antibiotics
3. Understand that profound shock may not respond to volume and may need early inotropic support and PICU assessment
4. Recognise if patient needs to be intubated early to allow definitive treatment to progress
5. Appreciate that sepsis may present with mixed septicaemic and meningitic picture

FACULTY INFORMATION

A 6-year-old boy is brought to the Emergency Department by his parents. He has had a cold for 3 days and was found in bed this morning very hot and confused.

This boy has fluid-resistant shock and though he will respond transiently to fluid boluses when administered, he will only stabilise once he has been commenced on peripheral inotropes.

EXPECTED ACTIONS

During this session, participants should:

Assess

- History: fever, anorexia, lethargy, abdominal pain, vomiting
- Examination: tachycardia, tachypnoea, prolonged cap refill, pyrexia, hypotension

Recognise

- Signs of shock (above) with metabolic acidosis

Diagnose

Differential diagnoses of shock include:

- Hypovolaemia (acute abdomen)
- Acute cardiac (failure, cardiomyopathy, arrhythmia)
- Distributive (anaphylaxis)
- Obstructive (tension pneumothorax, cardiac tamponade)
- Dissociative (carbon monoxide poisoning)

Investigate

- Cardiovascular monitoring
- Pulse oximetry
- Blood gas, lactate, glucose
- Partial septic screen (LP should not be performed in this under-resuscitated child)
- Lab investigations: FBC, U&Es, CRP, clotting, blood cultures, urine cultures, crossmatch)
- Chest X-ray

Treat

1. Apply oxygen
2. Gain IV/IO access
3. Reverse shock (2 x 20ml/kg 0.9% saline needed in this case)
4. Antibiotics (IV ceftriaxone)
5. Start peripheral inotrope (Dopamine)
6. Call for anaesthetic support to get child intubated and transferred to PICU
7. Further volume resuscitation
8. Consider adrenaline infusion
9. Appropriate monitoring of CVS, level of consciousness, glucose, potassium
10. Appropriately manage decreased level of consciousness
11. CT scan should not be undertaken unless patient is stabilised
12. Lumbar puncture is contraindicated due to shocked patient with decreased level of consciousness and potential for deranged clotting.

SCENE SETTING

Location: Emergency Department

Expected duration of scenario: 15 mins Expected duration of debriefing: 30 mins

EQUIPMENT AND CONSUMABLES

- Mannequin (child)
- Monitoring
- Resuscitation trolley
- O₂ facemask
- Bag and mask
- Laryngoscope
- ETT tube
- IV cannula and sticker fixation
- Simulated Drugs
 - 0.9% saline
 - Dopamine
 - Adrenaline
 - Ceftriaxone
 - Mannitol/hypertonic saline
 - Drugs for rapid sequence intubation
(ketamine, suxamethonium first choice)
- Drug chart
- Obs chart
- SORT Emergency drug chart (if requested – see appendix 4)

PERSONNEL-IN-SCENARIO

- ST1-3 trainee
- ST4-8 trainee
- Paediatric/ED nurse
- Anaesthetist
- Mother/father

PARTICIPANT BRIEFING

Ralph Mossop is a 6-year-old boy who was brought to the Emergency Department by his parents. He has had a cold for 3 days and was found in bed this morning very hot and confused.

The triage nurse is concerned about him and has asked you to review urgently.

FACULTY BRIEFING

'VOICE OF THE MANIKIN' BRIEFING

Initially moaning incomprehensibly, but then once in 'fluid-resistant shock' quiet and unresponsive.

IN-SCENARIO PERSONNEL BRIEFING (MOTHER/FATHER)

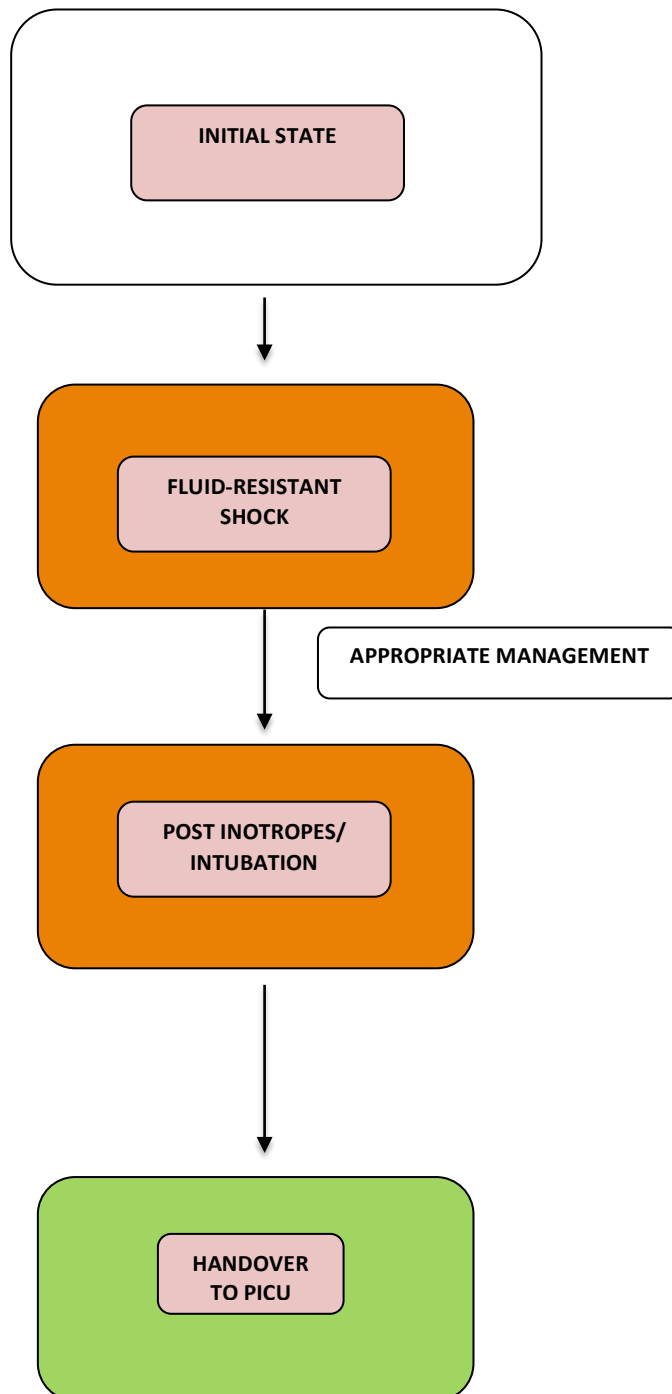
Ralph is your 6-year-old son. He is normally fit and well, with no significant medical history, no regular medications, and no allergies. He has two older sisters who are currently at school.

Ralph has had a cold for 3 days, as have most of the family. However, Ralph has been more unwell than his sisters, and he was found in bed this morning very hot and confused.

IN-SCENARIO PERSONNEL BRIEFING (NURSE)

You triaged Ralph and did baseline observations. You were worried about his tachycardia and decreased level of consciousness, so you called the doctor to review urgently.

You may need to guide participants to appreciate ongoing shock despite fluid resuscitation.

CONDUCT OF SCENARIO

'Pause and Perfect' principle – to be used at any time during the scenario if lack of progress or significantly inappropriate management:

Pause scenario and review lack of patient improvement, discussing possible causes and solutions.
Then restart scenario and allow participant to manage patient.

INITIAL STATE

VITAL SIGNS					
Rhythm	ST	HR	140	BP	80/40
Resp rate	35	SaO ₂	90%	ETCO ₂	
Temp	39.5 °C	AVPU	P (GCS 12)	Pupils	4 ERL
Other					
ASSESSMENT					
Pulses	Weak	Cap refill	5 sec	Skin	Warm; no rash
Airway	Normal	Breathing	Shallow	Breath sounds	Normal
Work of breathing	Grunting	Recession	Nil	Neuro	Moaning
Other	Wt = 20kg				
EXPECTED OUTCOMES					
Participants should:	Brief history Examination (expose patient) Establish monitoring Recognise 'warm shock' Investigations: Blood gas (include lactate/glucose), partial septic screen Early management: <ul style="list-style-type: none"> • Facemask O₂ • IV/IO access • Fluid resuscitation up to 40ml/kg • Antibiotics (IV ceftriaxone) 				
Facilitators should:	<u>Provide further information if requested:</u> Emergency drug chart; blood gas; guideline for management of severe sepsis Capillary refill 5 seconds Peripheries warm; no rash GCS 12; moaning <u>Progression:</u> - Initial improvement in parameters (less tachycardic; CR 3-4 sec; better BP) - Then deteriorates again requiring further fluid (beyond 40ml/kg)				

FLUID-RESISTANT SHOCK

VITAL SIGNS					
Rhythm	ST	HR	140	BP	80/35
Resp rate	35	SaO ₂	93%	ETCO ₂	
Temp	39.5 °C	AVPU	U (GCS 8)	Pupils	4 ERL
Other					
ASSESSMENT					
Pulses	Weak	Cap refill	5 sec	Skin	Warm; no rash
Airway	Normal	Breathing	Shallow	Breath sounds	Normal
Work of breathing	Grunting	Recession	Nil	Neuro	Unresponsive
Other					
EXPECTED OUTCOMES					
Participants should:	Reassess patient and identify patient still shocked despite 40ml/kg Commence inotropes – dopamine +/- adrenaline Call for anaesthetic/ICU help to intubate and place central/arterial lines				
Facilitators should:	<u>Provide further information if requested:</u> Emergency drug chart; blood gas; guideline for management of severe sepsis Capillary refill 5 seconds Peripheries warm; no rash GCS 8; unresponsive <u>Progression:</u> - If inotropes started appropriately then patient improves. Progress to 'Post Inotropes/Intubation' - If suboptimal therapy, 'Pause and Perfect' before restarting scenario with inotropes/intubation.				

POST-INOTROPE/INTUBATION

VITAL SIGNS					
Rhythm	SR	HR	110	BP	110/50
Resp rate	Bagged	SaO ₂	97%	ETCO ₂	5.2
Temp	38.5 °C	AVPU	U (GCS 8)	Pupils	3 ERL
Other					
ASSESSMENT					
Pulses	Weak	Cap refill	3-4 sec	Skin	Cool
Airway	Normal	Breathing	Bagged	Breath sounds	Normal
Work of breathing	N/A	Recession	N/A	Neuro	Unresponsive
Other					
EXPECTED OUTCOMES					
Participants should:	Plan for definitive treatment and admission to PICU Handover to PICU staff				
Facilitators should:	<p><u>Provide further information if requested:</u> Emergency drug chart; blood gas; guideline for management of severe sepsis Capillary refill 3-4 seconds</p> <p><u>Progression:</u> - If inotropes started appropriately then patient improves. Progress to 'Post Inotropes/Intubation'</p> <p>- If suboptimal therapy, 'Pause and Perfect' before restarting scenario with inotropes/intubation.</p>				

APPENDIX 1 – BLOOD GAS – SEPTIC SHOCK

RADIOMETER ABL SIMULATION SERIES

ABL725 ICU 09 41 CO 09-01-2013
 PATIENT REPORT Syringe - S 195uL Sample# 90396

Identifications

Patient ID 10183758
 Patient First Name Ralph
 Patient Last Name Mossop
 Date of Birth 05/01/2007
 Sample type Venous
 Operator Intensive Care

Blood Gas Values

pH	7.19		[7.340 - 7.450]
pCO ²	7.9	kPa	[4.70 - 6.00]
pO ²	5.08	kPa	[10.0 - 13.3]
pO ² (A-a)e		kPa	

Oximetry Values

ctHb	12.4	g/dL	[12.0 - 16.0]
sO ²		%	[95.0 - 98.0]
FO ² Hb		%	[94.0 - 99.0]
FC OHb		%	[- -]
FHb		%	[- -]
FmethHb		%	[0.2 - 0.6]
Hctc		%	

Electrolyte Values

cK ⁺	4.4	mmo1/L	[3.0 - 5.0]
cNa ⁺	137	mmo1/L	[136 - 146]
cCa ²⁺	1.1	mmoq/L	[1.15 - 1.29]
cCl ⁻	97	mmo1/L	[98 - 106]

Metabolite Values

cGlu	10.1	mmo1/L	[3.5 - 10.0]
cLac	6.7	mmo1/L	[0.5 - 1.6]

Oxygen Status

ctO ² c		vol%
p50c		kPa

Acid Base Status

cBase(Ecf)c	-9.9	mmo1/L
cHCO ³⁻ (P,st)c	16.6	mmo1/L

APPENDIX 2 – BLOOD GAS – FLUID RESISTANT SHOCK
RADIOMETER ABL SIMULATION SERIES

 ABL725 ICU 09 41 C0 09-01-2013
 PATIENT REPORT Syringe - S 195uL Sample# 90396

Identifications

Patient ID	10183758
Patient First Name	Ralph
Patient Last Name	Mossop
Date of Birth	05/01/2007
Sample type	Venous
Operator	Intensive Care

Blood Gas Values

pH	7.16		[7.340 - 7.450]
pCO ²	7.2	kPa	[4.70 - 6.00]
pO ²	7.3	kPa	[10.0 - 13.3]
pO ² (A-a)e		kPa	

Oximetry Values

ctHb	9.1	g/dL	[12.0 - 16.0]
sO ²		%	[95.0 - 98.0]
FO ² Hb		%	[94.0 - 99.0]
FC OHb		%	[-]
FHHb		%	[-]
FmethHb		%	[0.2 - 0.6]
Hctc		%	

Electrolyte Values

cK+	4.1	mmo1/L	[3.0 - 5.0]
cNa+	139	mmo1/L	[136 - 146]
cCa ²⁺	1.0	mmoq/L	[1.15 - 1.29]
cCl-	101	mmo1/L	[98 - 106]

Metabolite Values

cGlu	9.6	mmo1/L	[3.5 - 10.0]
cLac	7.1	mmo1/L	[0.5 - 1.6]

Oxygen Status

ctO ² c		vol%
p50c		kPa

Acid Base Status

cBase(Ecf)c	-13.1	mmo1/L
cHCO ³⁻ (P,st)c	14.3	mmo1/L

APPENDIX 3 – BLOOD GAS – INTUBATED
RADIOMETER ABL SIMULATION SERIES

ABL725 ICU 09 41 CO 09-01-2013
 PATIENT REPORT Syringe - S 195uL Sample# 90396

Identifications

Patient ID	10183758
Patient First Name	Ralph
Patient Last Name	Mossop
Date of Birth	05/01/2007
Sample type	Venous
Operator	Intensive Care

Blood Gas Values

pH	7.26		[7.340 - 7.450]
<i>p</i> CO ²	5.5	kPa	[4.70 - 6.00]
<i>p</i> O ²	8.2	kPa	[10.0 - 13.3]
<i>p</i> O ² (A-a)e		kPa	

Oximetry Values

ctHb	9.0	g/dL	[12.0 - 16.0]
sO ²		%	[95.0 - 98.0]
F ^O 2Hb		%	[94.0 - 99.0]
F ^C OHb		%	[- -]
FHHb		%	[- -]
FmethHb		%	[0.2 - 0.6]
Hctc		%	

Electrolyte Values

cK+	4.1	mmo1/L	[3.0 - 5.0]
cNa+	140	mmo1/L	[136 - 146]
cCa ²⁺	1.0	mmoq/L	[1.15 - 1.29]
cCl-	104	mmo1/L	[98 - 106]

Metabolite Values

cGlu	8.8	mmo1/L	[3.5 - 10.0]
cLac	4.2	mmo1/L	[0.5 - 1.6]

Oxygen Status

ctO ² c		vol%
<i>p</i> 50c		kPa

Acid Base Status

cBase(Ecf)c	-8.9	mmo1/L
cHCO ²⁻ (P,st)c	16.6	mmo1/L

APPENDIX 4 – EMERGENCY DRUG CHART

Date Jan 9, 2013

Southampton
Oxford
Retrieval
Team

DRUG CALCULATOR

WEIGHT Kg

Enter weight and click calculate

Calculate

Print

Emergency

Adrenaline 1:10,000	2 ml (0.1 ml/kg)
Atropine 600mcg/ml	0.67 ml (20mcg/kg, min 100mcg)
Atropine 100mcg/ml	4 ml (20mcg/kg min 100mcg)
Sodium Bicarbonate 8.4%	20 ml (1 ml/kg)
Calcium Gluconate 10%	10 ml (0.5 ml/kg)

Respiratory

Magnesium Sulphate	800 mg (40 mg/kg over 20 minutes)
Salbutamol load	250 mcg (15 mcg/kg over 10 minutes)
Hydrocortisone	80 mg (4 mg/kg, max 100mg)
Aminophylline load	100 mg (5 mg/kg over 20 minutes)
Adrenaline 1:1000 Nebulised	5 ml (0.5 ml/kg, max 5 mls) Make up to 5 ml with saline

Cardiac

Cardioversion (sync)	20 Joules (1J/kg) (use 2J/kg if fails)
Shockable rhythm (async)	80 Joules (4J/kg)
Adenosine	2000 mcg (100 mcg/kg)
Amlodarone Load	100 mg (5 mg/kg over 30 minutes to 4hrs)

Anaesthesia

Ketamine	40 mg (2mg/kg)
Thiopentone	20 to 100 mg (1-5mg/kg)
Fentanyl	40 to 100 mcg (2-5mcg/kg)
Morphine	2 mg (0.1 mg/kg)
Rocuronium	20 mg (1mg/kg)
Atracurium	10 mg (0.5mg/kg)
Vecuronium	2 mg (0.1mg/kg)
Suxamethonium	30 mg (1.5mg/kg)

Neuro

Lorazepam	2 mg (0.1 mg/kg)
Midazolam Buccal	2 mg (0.1 mg/kg)
Phenytoin	400 mg (20 mg/kg over 20 minutes)
Phenobarbitone	400 mg (20 mg/kg)
Paraldehyde PR	8 ml (0.4 ml/kg, mix 1:1 with oil)
3% Saline	60 ml (3ml/kg)
Mannitol 10%	100 ml (5ml/kg, equivalent to 0.5g/kg)

Anaphylaxis

Adrenaline IM	0.3 ml of 1:1000
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Infusions

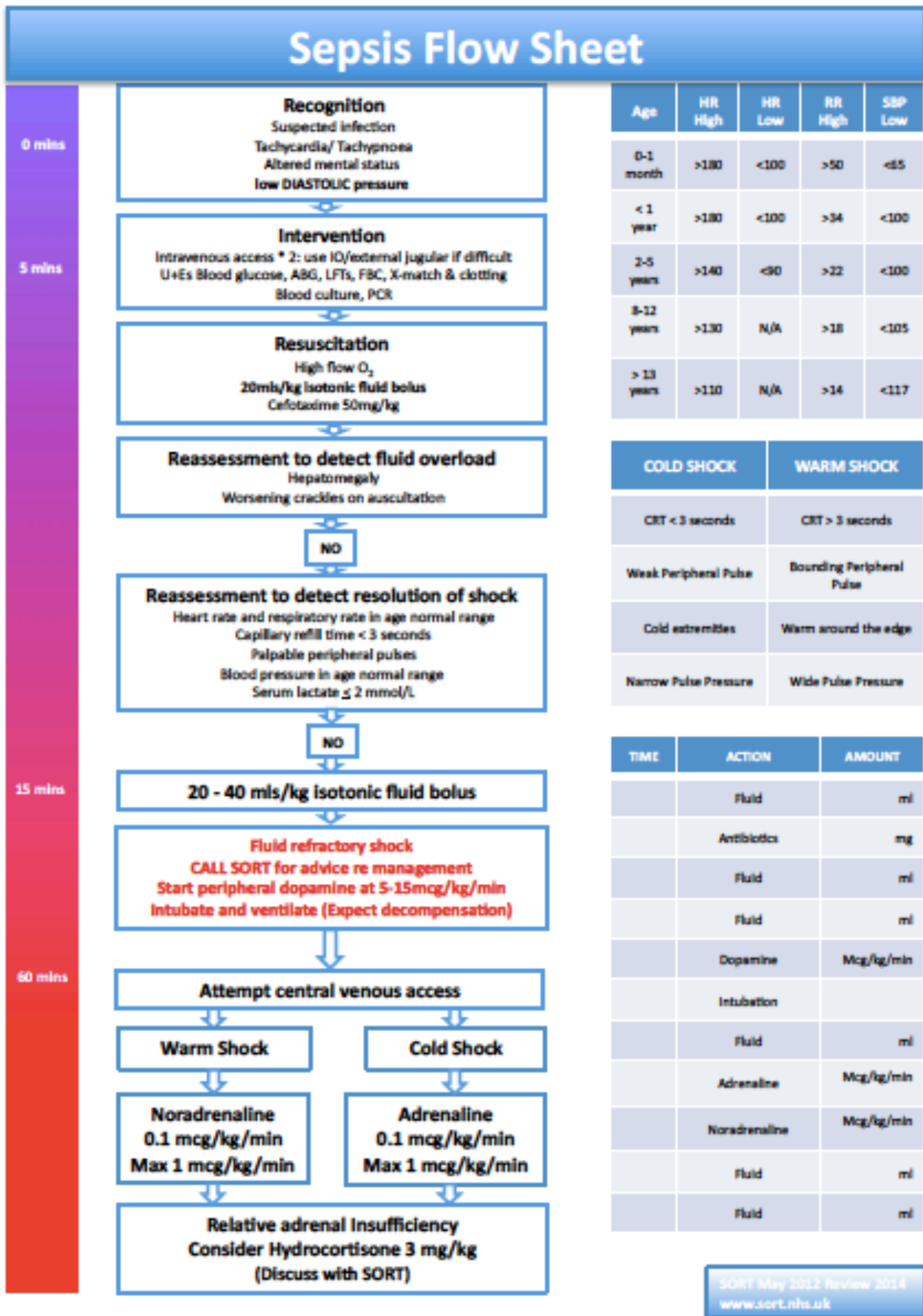
Calculations based on Southampton PICU infusions guidelines (2011)

Dopamine (central)	200 mg in 50ml of 0.9% Saline or 5% Glucose	3 ml / hr =	10 mcg/kg/min
Dopamine (peripheral)	20 mg in 50ml of 0.9% Saline or 5% Glucose	3 ml / hr =	1 mcg/kg/min
Adrenaline	4 mg in 50ml of 0.9% Saline or 5% Glucose	1.5 ml / hr =	0.1 mcg/kg/min
Noradrenaline	4 mg in 50ml of 0.9% Saline or 5% Glucose	1.5 ml / hr =	0.1 mcg/kg/min
Milrinone	10 mg in 50ml of 0.9% Saline or 5% Glucose	3 ml / hr =	0.5 mcg/kg/min
Dinoprostone (Prostin E2)	0 mcg in 50ml of 0.9% Saline or 5% Glucose	0 ml / hr =	0 ng/kg/min
Morphine	20 mg in 50ml of 0.9% Saline or 5% Glucose	1 ml / hr =	20 mcg/kg/hr
Midazolam	20 mg in 50ml of 0.9% Saline or 5% Glucose	1 ml / hr =	20 mcg/kg/hr
Salbutamol	10 mg in 50ml of 0.9% Saline or 5% Glucose	6 ml / hr =	1 mcg/kg/min
Aminophylline	250 mg in 250ml of 0.9% Saline or 5% Glucose	20 ml / hr =	1 mg/kg/hr

It is the prescribers responsibility to ensure the correct dose is prescribed

Compiled by Tom Bennett - May 2012

APPENDIX 5 – SORT SEPSIS FLOW-CHART



DEBRIEFING

POINTS FOR FURTHER DISCUSSION

GOAL OF FIRST HOUR OF RESUSCITATION – to restore:

1. Normal heart rate and respiratory rate for age (may not be possible with pneumonia)
2. Capillary Refill Time <3s
3. Palpable peripheral pulses
4. Normal blood pressure for age
5. Serum lactate <2

ACTIONS:

1. Maintain patent **airway** (intubate if necessary)
2. High-flow **O₂**
3. Secure 2x **venous access** quickly. Use IO if IV cannulation unsuccessful.
4. Immediate **20ml/kg fluid bolus**
5. **Reassess**
 - improvement of shock?
 - evidence of fluid overload?
6. **Multiple fluid boluses** may be necessary. Large fluid deficits often exist and initial fluid volumes of 40-60ml/kg are quite usual.
7. **Repeated reassessment.** If fluid overload start inotropes rather than more fluids
8. **IV antibiotics**
 - IV cefotaxime if <3 months of age
 - IV ceftriaxone if >3 months and not receiving calcium-containing infusions
9. **Start peripheral dopamine** if after 15 minutes of aggressive fluid resuscitation (40-60ml/kg) there is evidence of end-organ dysfunction
10. **Correct hypoglycaemia**
 - 5mls/kg 10% dextrose
11. **Correct hypocalcaemia**
 - 0.5mls/kg 10% calcium gluconate
12. **Correct hypomagnesaemia**
 - 0.5ml/kg 20% magnesium sulphate. Can cause hypotension so give over 30 min.
13. **Correct coagulopathy**
 - 10-20ml/kg FFP if PT/APTT deranged
 - 5-10ml/kg cryoprecipitate if PT/APTT deranged and low fibrinogen (suggests DIC)
 - 10-20ml/kg platelets only if platelets <20 x 10³/mm³
 - Do not bolus these blood products as can cause profound hypotension due to vasoactive kinins and high citrate levels
14. **Intubate early**

INTUBATION:**Indications include:**

- 60+ml/kg fluid resuscitation in the first hour without reversal of shock
- Worsening tachypnoea or oxygen requirement
- Depressed level of consciousness
- Unsafe airway (poor airway reflexes)

Intubation drugs

- Ketamine and suxamethonium are drugs of choice
- Avoid inhalation anaesthetics, thiopentone, propofol and benzodiazepines – these present a significant risk of cardiovascular depression

COMMON ERRORSFailure to establish vascular access

Do not persist in peripheral access

Use an interosseus needle for rapid, easy, central access

Inadequate fluid resuscitation

Give 20 mls/kg and reassess

Severely shocked patients often require 100-200 mls/kg

Initial response to fluid resuscitation can falsely reassure

Failure to recognise volume overload

Increasing work of breathing with worsening oxygenation following fluid administration is suggestive of volume overload.

Hepatomegaly is highly suggestive of volume overload. If unsure, apply gentle pressure over the liver (transiently increasing right atrial filling) and watch the HR and BP response.

Delay in intubation

Children in comparison to adults delay a drop in blood pressure by vasoconstriction and elevation of heart rate. Once hypotension occurs there is usually a rapid progression to cardiovascular collapse.

A planned intubation is required *early*. (see above)

Indicators of severe disease, regardless of “how good they look”

Low neutrophils

Low platelets

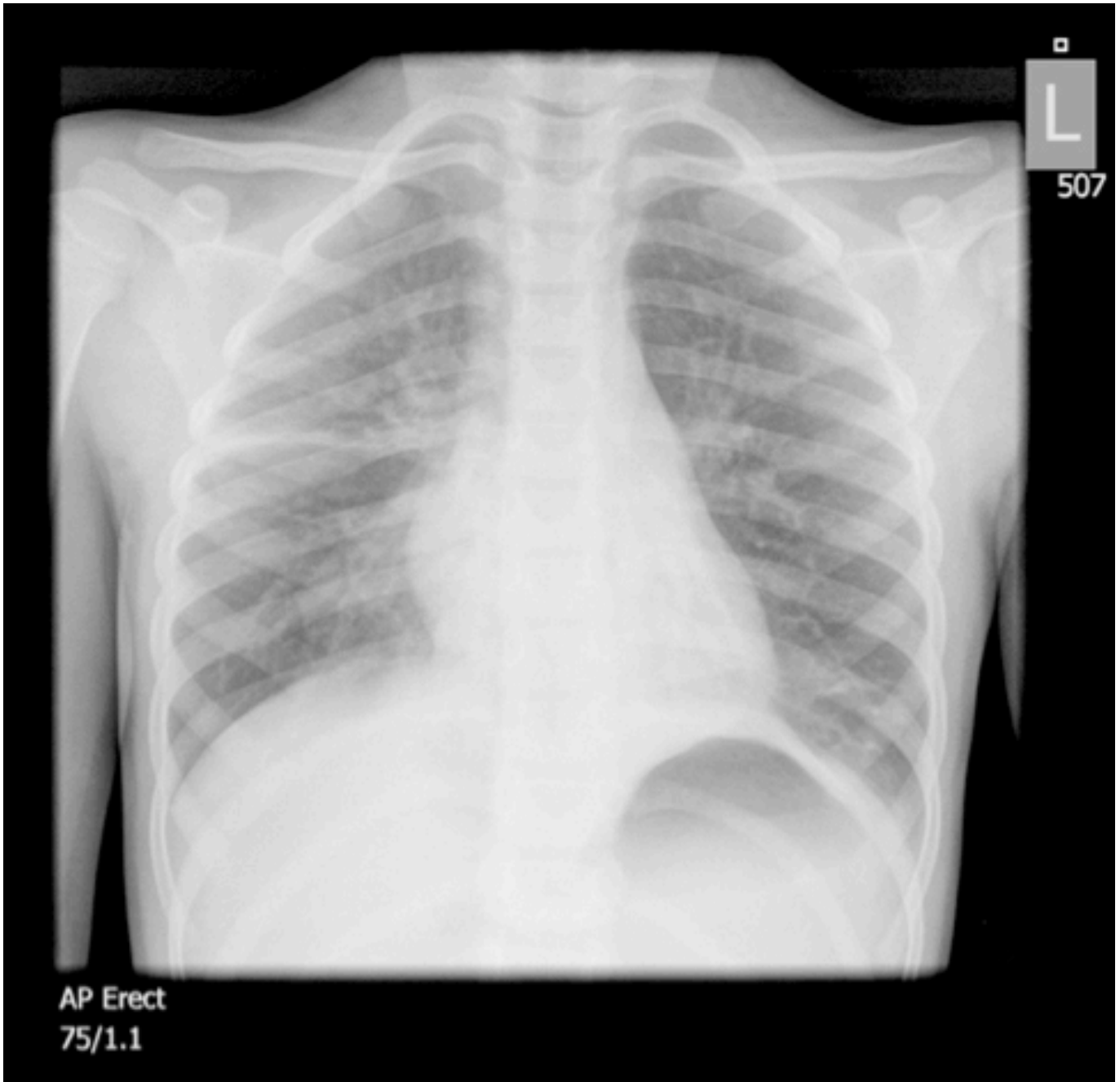
Rapid onset

Rapidly spreading rash

High volume requirement

DEBRIEFING RESOURCES

1. SORT guideline for management and retrieval of child with severe sepsis
<http://www.sort.nhs.uk/Media/Guidelines/Guidelinesfortheretrievalandmanagementofseveresepsisandsepticshockininfantsandchildren.pdf>
2. CXR showing evidence of fluid overload (and indication to start inotropes in this case)



SEPSIS - HANDOUT

INFORMATION FOR PARTICIPANTS

KEY POINTS

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Low platelets

Rapid onset

Rapidly spreading rash

High volume requirement

FURTHER RESOURCES

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RELEVANT AREAS OF THE CURRICULUM

Level One

L1_GEN_STA_02	Effective responses to challenge, complexity and stress in paediatrics
L1_GEN_STA_03	Advanced neonatal and paediatric life support skills
L1_GEN_STA_05	Effective skills in paediatric assessment
L1_GEN_STA_06	Skills in formulating an appropriate differential diagnosis in paediatrics
L1_GEN_STA_07	Effective initial management of ill-health and clinical conditions in paediatrics seeking additional advice and opinion as appropriate
L1_GEN_STA_09	Safe practical skills in paediatrics
L1_GEN_STA_15	Knowledge of common and serious paediatric conditions and their management
L1_GEN_STA_29	Effective communication and interpersonal skills with colleagues
L1_GEN_STA_30	Professional respect for the contribution of colleagues in a range of roles in paediatric practice
L1_GEN_STA_32	Effective handover, referral and discharge procedures in paediatrics
L1_GEN_STA_34	Ethical personal and professional practice in providing safe clinical care
L1_GEN_STA_35	Reliability and responsibility in ensuring their accessibility to colleagues and patients and their families
PAED_L1_IMM_U_ACU_SEPS_01	Understand the pathophysiology of septic shock and its complications
PAED_L1_IMM_U_ACU_SEPS_02	Know local and nationally agreed guidelines for the management of septic shock including meningococcal disease
PAED_L1_IMM_U_ACU_SEPS_03	Be aware of the differential diagnosis of septic shock
PAED_L1_IMM_U_ACU_SEPS_04	Be able to recognise the early features of septic shock
PAED_L1_IMM_U_ACU_SEPS_05	Be able to lead the team when initiating resuscitation and treatment
PAED_L1_IMM_U_ACU_SEPS_06	Be able to liaise with anaesthetic and PICU staff

Level Two (as above plus):

L2_GEN_STA_02	Increasing credibility and independence in response to challenge and stress in paediatrics
L2_GEN_STA_03	Leadership skills in advanced neonatal and paediatric life support
L2_GEN_STA_04	Responsibility for conducting effective paediatric assessments and interpreting findings appropriately
L2_GEN_STA_06	Improving skills in formulating an appropriate differential diagnosis in paediatrics
L3_GEN_STA_07	Leadership skills in the management of common and complex conditions in general paediatrics and paediatric subspecialties seeking additional advice and opinion as appropriate

L2_GEN_STA_09	Effective skills in performing and supervising practical procedures in paediatrics ensuring patient safety
L2_GEN_STA_15	Extended knowledge of common and serious paediatric conditions and their management
L2_GEN_STA_29	Skill in ensuring effective relationships between colleagues
L2_GEN_STA_32	Effective skills in ensuring handover, referral and discharge procedures in paediatrics
L2_GEN_STA_34	Sound ethical, personal and professional practice in providing safe clinical care
L2_GEN_STA_35	Continued responsibility and accessibility to colleagues, patients and their families
PAED_L2_IMM_U_ACU_SEPS_01	Be able to initiate and lead immediate management of early and advanced features of septic shock
PAED_L2_IMM_U_ACU_SEPS_02	Be able to liaise effectively with anaesthetic and PICU staff and manage patient until transfer team takes over

Level Three (as above plus):

L3_GEN_STA_02	Responsibility for an effective response to complex challenges and stress in paediatrics
L2_GEN_STA_03	Leadership skills in advanced neonatal and paediatric life support
L3_GEN_STA_06	Effective skills in making safe decisions about the most likely diagnoses in paediatrics
L3_GEN_STA_09	Expertise in a range of practical procedures in paediatrics specific to general and sub-specialist training
L3_GEN_STA_15	Detailed knowledge of common and serious paediatric conditions and their management in General Paediatrics or in a paediatric sub-specialty
L3_GEN_STA_29	Positive and constructive relationships form a wide range of professional contexts
L3_GEN_STA_32	Effective leadership skills in the organisation of paediatric team-working and effective handover
L3_GEN_STA_34	Exemplary professional conduct so as to act as a role model to others in providing safe clinical care
L3_GEN_STA_35	Responsibility for ensuring their own reliability and accessibility and that of others in their team

PARTICIPANT REFLECTION

What have you learned from this experience? (Please try and list 3 things)

How will your practice now change?

What other actions will you now take to meet any identified learning needs?

PARTICIPANT FEEDBACK

Date of training session:.....
 ...

Profession and grade:.....

What role(s) did you play in the scenario? (Please tick)

Primary/Initial Participant	<input type="checkbox"/>
Secondary Participant (e.g. 'Call for Help' responder)	<input type="checkbox"/>
Other health care professional (e.g. nurse/ODP)	<input type="checkbox"/>
Other role (please specify):	<input type="checkbox"/>
Observer	<input type="checkbox"/>

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
I found this scenario useful					
I understand more about the scenario subject					
I have more confidence to deal with this scenario					
The material covered was relevant to me					

Please write down one thing you have learned today, and that you will use in your clinical practice.

How could this scenario be improved for future participants? This is especially important if you have ticked anything in the disagree/strongly disagree box.

FACULTY DEBRIEF – TO BE COMPLETED BY FACULTY TEAM

What went particularly well during this scenario?

What did not go well, or as well as planned?

Why didn't it go well?

How could the scenario be improved for future participants?