Health Education Thames Valley

SUPRAVENTRICULAR TACHYCARDIA

MODULE: CARDIOLOGY

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 treat simple SVT.

INFORMATION FOR FACULTY

LEARNING OBJECTIVES

At the end of the session participants should:

1. Have a structured ABCD approach to the acutely ill child
2. Recognise symptoms and signs of SVT
3. Construct a differential diagnosis
4. Know when to call for help
5. Understand need for rapid IV or IO access
6. Know how to perform non-pharmacological methods of reversing SVT
7. Know how to safely administer incremental doses of adenosine
8. Be able to discuss further management strategies should SVT fail to reverse
9. Construct a plan for post-stabilisation management

Editor: Dr Andrew Darby Smith
Original Author: Dr R Furr (adapted from Bristol Key Competencies)

FACULTY INFORMATION

Infant presents in SVT (unmonitored). Participant should assess infant, apply monitoring and form a differential diagnosis – including SVT, sepsis, hypovolaemia, cardiac failure.

If requested, a bowl with large 'bubble wrap' packaging can represent ice blocks. If real ice/water to be used, use low-fidelity (e.g. doll or ALS mannequin) to immerse.
Do not allow high-fidelity mannequin to be immersed in water or ice.

There is no response to immersion, so participants should move onto adenosine in incremental doses. Rhythm only responds to THIRD dose of adenosine.

If participants resort to early use of defibrillator without sedation, stop scenario – 'pause and perfect'.

SCENE SETTING

Location: Children's Assessment Unit

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

EQUIPMENT AND CONSUMABLES

- Mannequin (infant)
- Monitoring
- Resuscitation trolley
- O_2 facemask
- Bag and mask
- IV cannula and sticker fixation
- 'Ice' (can use large bubble wrap as substitute) in bucket
- Dry towels x 2
- Simulated drugs
  - 0.9% saline
  - IV adenosine
- Drug chart
- Obs chart
- SORT Emergency drug chart (if requested – see appendix 5)

PERSONNEL-IN-SCENARIO

ST1-3 doctor
ST4-8 doctor
Paediatric/ED nurse
Parent

Consultant Paediatrician and Cardiologist available by phone

PARTICIPANT BRIEFING

Dr Flannigan, Dr Bedford & Dr Benson

West Park Healthcare Centre
Oxford
OX4 6BD
Tel: 01865 729549

Re: Ella Johnstone
8 months old
5kg

Dear Doctor

Many thanks for agreeing to see this lovely little girl with a one day history of poor feeding.

She was pale and irritable today and despite the lack of fever, I wondered whether she had an underlying infection.

Thank you for seeing and treating.

Yours sincerely

John Bedford

Dr J Bedford
MRCGP

FACULTY BRIEFING

IN-SCENARIO PERSONNEL BRIEFING (PARENT)

Ella is your 8-month-old daughter. She has been unwell since yesterday with poor feeding. She is irritable and difficult to settle. She looks pale to you.

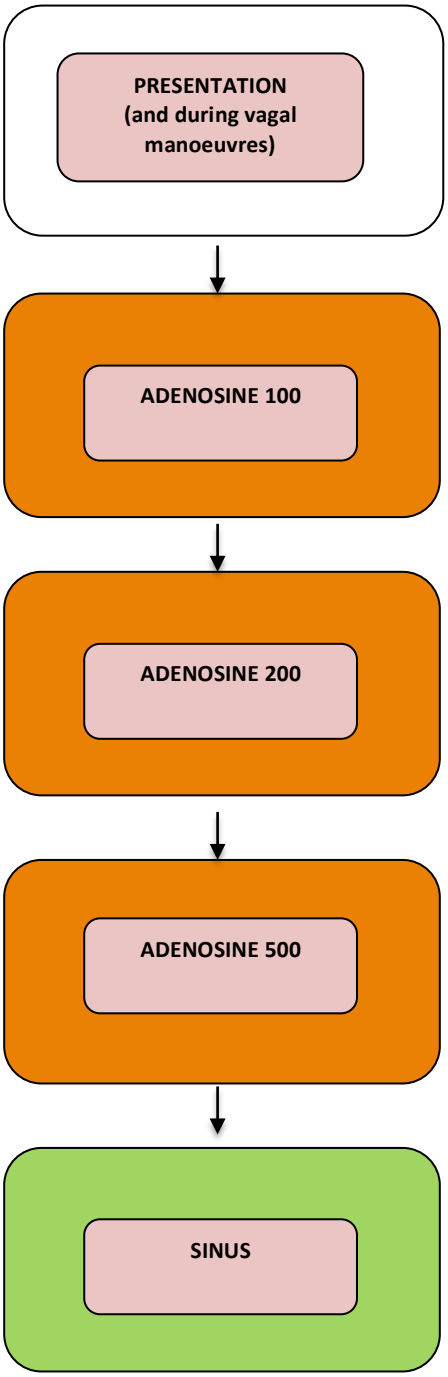
She was born two weeks early by emergency caesarean section because she was breech. She has been well since, and has had all her immunisations up to date. She is on no regular medications, and there is no family history of note.

IN-SCENARIO PERSONNEL BRIEFING (NURSE)

You triaged 8-month-old Ella and when doing her observations noted that she was pale and tachycardic, but afebrile. You have called the doctor to review her urgently.

You have not seen a child with SVT before. You can assist with whatever the participants ask for, but you have never seen a baby 'dunked' in ice so cannot lead on this. You have seen adults treated with adenosine, and you know that it requires a rapid push into a large vein of increasingly larger doses. If necessary, guide the participants on this.

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.

PRESENTATION

VITAL SIGNS					
Rhythm	SVT	**HR**	229/min	**BP**	60/42
Resp rate	42/min	**SaO_2**	92% (improve with facemask O_2)		
Temp	35.9	**AVPU**	V	**Pupils**	4 ERL
Other					
ASSESSMENT					
Pulses	Thready	**Cap refill**	3-4 sec	**Skin**	Cool
Airway	Normal	**Breathing**	Erratic	**Breath sounds**	Normal
Work of breathing	Intermittent grunting	**Recession**	Nil	**Neuro**	Irritable
Other	Liver edge 2cm below costal margin				
EXPECTED OUTCOMES					
Participants should:	• Apply facemask O_2 • Apply monitoring • Brief history (poor feeding, difficult to settle) • Examination: tachypnoea, tachycardia, prolonged cap refill, liver edge 2cm below costal margin • Recognise signs of shock with disproportionate tachycardia • Formulate differential diagnosis including SVT • Call for senior help • ECG: narrow-complex tachycardia without p waves • Ask for iced water, and elicit 'diving reflex'				
Facilitators should:	<u>Provide further information if requested:</u> Blood gas, emergency drug chart, sinus tachyarrhythmia guideline, ECG CR 3-4 seconds (deteriorates to 5-6 seconds immediately after ice) <u>Provide further equipment if requested:</u> 'Iced water' in bucket; 2 x dry towels <u>Progression:</u> - Remains in **'Presentation'** state despite vagal manoeuvres - When adenosine 100mcg/kg given go to **'Adenosine 100'.** - If fails to diagnose/manage SVT, use **'Pause and Perfect'** principle.				

ADENOSINE 100

VITAL SIGNS					
Rhythm	SVT	**HR**	229 – 186 – 233 (during adenosine push)		
Resp rate	38/min	**SaO_2**	98%	**BP**	56/42
Temp	35.9	**AVPU**	P	**Pupils**	4 ERL
Other					
ASSESSMENT					
Pulses	Thready	**Cap refill**	3-4 sec	**Skin**	Cool
Airway	Normal	**Breathing**	Erratic	**Breath sounds**	Normal
Work of breathing	Intermittent grunting	**Recession**	Nil	**Neuro**	Irritable
Other	Liver edge 2cm below costal margin				
EXPECTED OUTCOMES					
Participants should:	• Continue facemask O_2 • Give 100mcg/kg adenosine as rapid push into large vein • Reassess after 100mcg/kg adenosine given • Note failure to respond • Plan for 200 mcg/kg adenosine				
Facilitators should:	Provide further information if requested: Blood gas, emergency drug chart, sinus tachyarrhythmia guideline, ECG CR 3-4 seconds Progression: - When administering adenosine 200mcg/kg go to **'Adenosine 200'.** - If fails to manage SVT appropriately, use **'Pause and Perfect'** principle.				

ADENOSINE 200

VITAL SIGNS					
Rhythm	SVT	**HR**	233 – 132 – 4 – 237 (during adenosine push)		
Resp rate	39/min	**SaO_2**	98%	**BP**	56/42
Temp	35.9	**AVPU**	P	**Pupils**	4 ERL
Other					
ASSESSMENT					
Pulses	Thready	**Cap refill**	3-4 sec	**Skin**	Cool
Airway	Normal	**Breathing**	Erratic	**Breath sounds**	Normal
Work of breathing	Intermittent grunting	**Recession**	Nil	**Neuro**	Irritable
Other					
EXPECTED OUTCOMES					
Participants should:	• Continue facemask O_2 • Give 200mcg/kg adenosine as rapid push into large vein • Reassess after 200mcg/kg adenosine given • Note failure to respond • Plan for 500 mcg/kg adenosine				
Facilitators should:	Provide further information if requested: Blood gas, emergency drug chart, sinus tachyarrhythmia guideline, ECG CR 3-4 seconds Progression: - When administering adenosine 500mcg/kg go to **'Adenosine 500'.** - If fails to manage SVT appropriately, use **'Pause and Perfect'** principle.				

ADENOSINE 500

VITAL SIGNS					
Rhythm	SVT	**HR**	237 – 154 – 11 – 174 (back into sinus)		
Resp rate	38/min	**SaO_2**	98%	**BP**	56/42
Temp	35.9	**AVPU**	P	**Pupils**	4 ERL
Other					
ASSESSMENT					
Pulses	Thready	**Cap refill**	3-4 sec	**Skin**	Cool
Airway	Normal	**Breathing**	Erratic	**Breath sounds**	Normal
Work of breathing	Intermittent grunting	**Recession**	Nil	**Neuro**	Irritable
Other					
EXPECTED OUTCOMES					
Participants should:	• Continue facemask O_2 • Give 500mcg/kg adenosine as rapid push into large vein • Reassess after 500mcg/kg adenosine given • Note response: back into sinus rhythm • Plan post-stabilisation management				
Facilitators should:	Provide further information if requested: Blood gas, emergency drug chart, sinus tachyarrhythmia guideline, ECG CR 3-4 seconds Progression: - After 500 mcg/kg given, go to **'sinus'**. - If fails to manage SVT appropriately, use **'Pause and Perfect'** principle.				

SINUS

VITAL SIGNS					
Rhythm	SR	**HR**	174		
Resp rate	36/min	**SaO_2**	98%	**BP**	80/42
Temp	35.9	**AVPU**	V	**Pupils**	4 ERL
Other					
ASSESSMENT					
Pulses	Normal	**Cap refill**	2-3 sec	**Skin**	Cool
Airway	Normal	**Breathing**	Erratic	**Breath sounds**	Normal
Work of breathing	Normal	**Recession**	Nil	**Neuro**	Settled
Other					
EXPECTED OUTCOMES					
Participants should:	• Continue facemask O_2 • Note response: back into sinus rhythm • Plan post-stabilisation management				
Facilitators should:	Provide further information if requested: Blood gas, emergency drug chart, sinus tachyarrhythmia guideline, ECG Pulse volume improved; baby more settled; cap refill improving				

APPENDIX 1 – BLOOD GAS – IN SVT

RADIOMETER ABL SIMULATION SERIES

ABL725 ICU 10 46 C0 20-12-2012
PATIENT REPORT Syringe - S 195uL Sample# 90396

Identifications

Patient ID	10183761
Patient First Name	Ella Johnstone
Patient Last Name	Johnstone
Date of Birth	04/04/2012
Sample type	Venous
Operator	Intensive Care

Blood Gas Values

pH	7.22		[7.340 - 7.450]
*p*CO²	6.4	kPa	[4.70 - 6.00]
*p*O²	7.4	kPa	[10.0 - 13.3]
*p*O²(A-a)e		kPa	

Oximetry Values

*c*tHb	12.0	g/dL	[12.0 - 16.0]
sO²		%	[95.0 - 98.0]
*F*O²Hb		%	[94.0 - 99.0]
FC OHb		%	[-]
*F*HHb		%	[-]
*F*metHb		%	[0.2 - 0.6]
Hct*c*		*%*	

Electrolyte Values

cK+	3.7	mmo1/L	[3.0 - 5.0]
cNa+	136	mmo1/L	[136 - 146]
*c*Ca²+	1.1	mmoq/L	[1.15 - 1.29]
*c*C1-	103	mmo1/L	[98 - 106]

Metabolite Values

*c*Glu	6.4	mmo1/L	[3.5 - 10.0]
*c*Lac	4.3	mmo1/L	[0.5 - 1.6]

Oxygen Status

*c*tO²c		vol%
*p*50c		kPa

Acid Base Status

*c*Base(Ecf)c	-8.2	mmo1/L
*c*HCO³-(P,st)c	15.4	mmo1/L

APPENDIX 2 – BLOOD GAS – IN SINUS RHYTHM (SLIGHT IMPROVEMENT)

RADIOMETER ABL SIMULATION SERIES

ABL725 ICU 11 01 C0 20-12-2012
PATIENT REPORT Syringe - S 195uL Sample# 90396

Identifications

Patient ID	10183761
Patient First Name	Ella Johnstone
Patient Last Name	Johnstone
Date of Birth	04/04/2012
Sample type	Venous
Operator	Intensive Care

Blood Gas Values

pH	7.24		[7.340 - 7.450]
*p*CO²	5.8	kPa	[4.70 - 6.00]
*p*O²	7.4	kPa	[10.0 - 13.3]
*p*O²(A-a)e		kPa	

Oximetry Values

*c*tHb	12.0	g/dL	[12.0 - 16.0]
sO²		%	[95.0 - 98.0]
*F*O²Hb		%	[94.0 - 99.0]
FC OHb		%	[-]
*F*HHb		%	[-]
*F*metHb		%	[0.2 - 0.6]
Hct*c*		*%*	

Electrolyte Values

cK+	3.7	mmo1/L	[3.0 - 5.0]
cNa+	136	mmo1/L	[136 - 146]
*c*Ca²+	1.1	mmoq/L	[1.15 - 1.29]
*c*C1-	105	mmo1/L	[98 - 106]

Metabolite Values

*c*Glu	6.6	mmo1/L	[3.5 - 10.0]
*c*Lac	2.7	mmo1/L	[0.5 - 1.6]

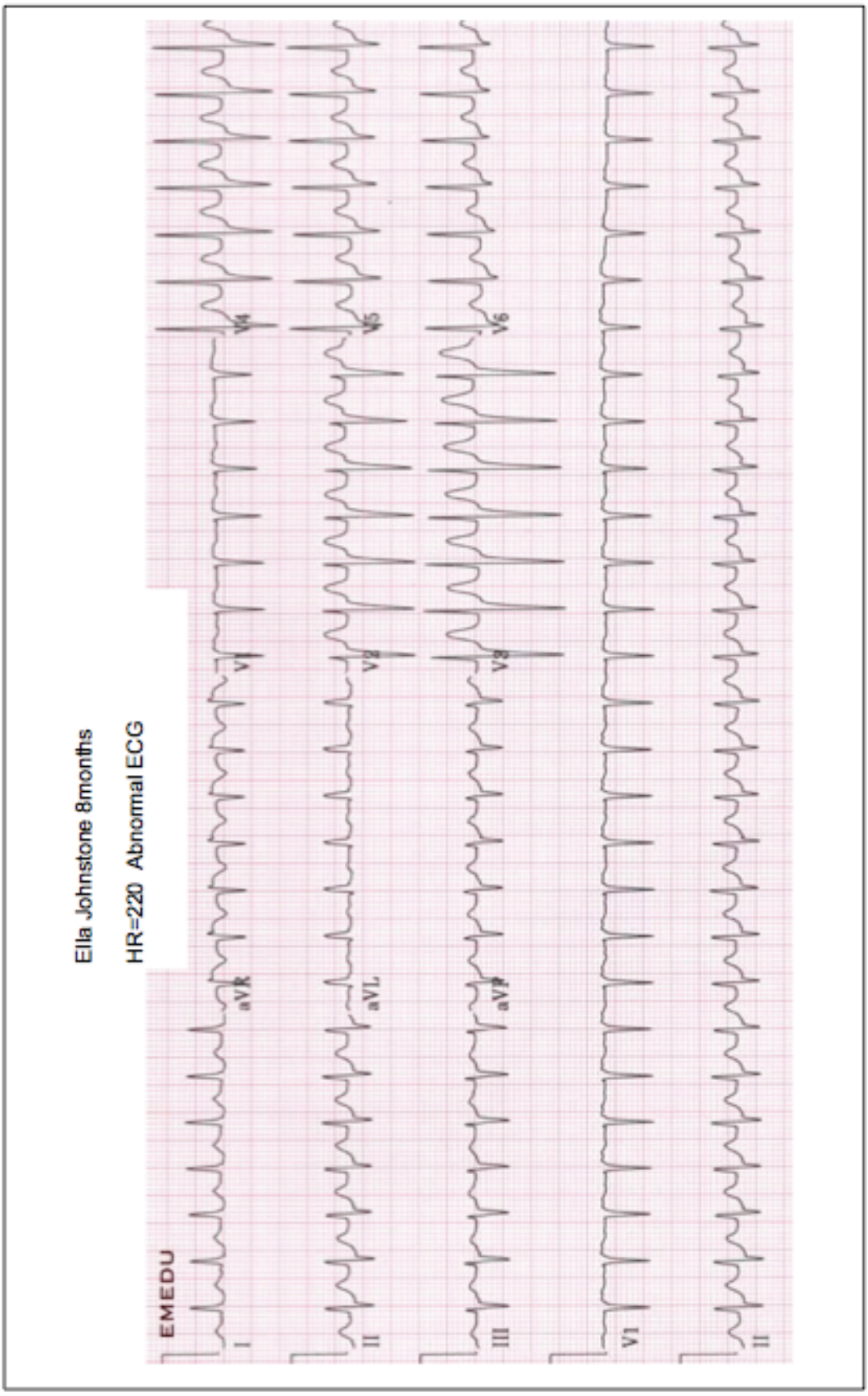
Oxygen Status

*c*tO²c		vol%
*p*50c		kPa

Acid Base Status

*c*Base(Ecf)c	-7.6	mmo1/L
*c*HCO³-(P,st)c	16.4	mmo1/L

APPENDIX 3 – ECG AT PRESENTATION



APPENDIX 4 – ECG AFTER ADENOSINE 500

APPENDIX 5 – EMERGENCY DRUG CALCULATOR

Date Dec 20, 2012

Southampton Oxford Retrieval Team

DRUG CALCULATOR

WEIGHT 5 Kg

Enter weight and click calculate

Calculate | Print

Emergency

Adrenaline 1:10,000	0.5 ml	(0.1 ml/kg)
Atropine 600mcg/ml	0.17 ml	(20mcg/kg, min 100mcg)
Atropine 100mcg/ml	1 ml	(20mcg/kg min 100mcg)
Sodium Bicarbonate 8.4%	5 ml	(1 ml/kg)
Calcium Gluconate 10%	2.5 ml	(0.5 ml/kg)

Cardiac

Cardioversion (sync)	5 Joules	(1J/kg) (use 2J/kg if fails)
Shockable rhythm (async)	20 Joules	(4J/kg)
Adenosine	500 mcg	(100 mcg/kg)
Amiodarone Load	25 mg	(5 mg/kg over 30 minutes to 4hrs)

Neuro

Lorazepam	0.5 mg	(0.1 mg/kg)
Midazolam Buccal	0.5 mg	(0.1 mg/kg)
Phenytoin	100 mg	(20 mg/kg over 20 minutes)
Phenobarbitone	100 mg	(20 mg/kg)
Paraldehyde PR	2 ml	(0.4 ml/kg, mix 1:1 with oil)
3% Saline	15 ml	(3ml/kg)
Mannitol 10%	25 ml	(5ml/kg, eqivalent to 0.5g/kg)

Respiratory

Magnesium Sulphate	200 mg	(40 mg/kg over 20 minutes)
Salbutamol load	75 mcg	(15 mcg/kg over 10 minutes)
Hydrocortisone	20 mg	(4 mg/kg , max 100mg)
Aminophylline load	25 mg	(5 mg/kg over 20 minutes)
Adrenaline 1:1000 Nebulised	2.5 ml	(0.5 ml/kg, max 5 mls) Make up to 5 ml with saline

Anaesthesia

Ketamine		10 mg	(2mg/kg)
Thiopentone	5 to	25 mg	(1-5mg/kg)
Fentanyl	10 to	25 mcg	(2-5mcg/kg)
Morphine		0.5 mg	(0.1 mg/kg)
Rocuronium		5 mg	(1mg/kg)
Atracurium		2.5 mg	(0.5mg/kg)
Vecuronium		0.5 mg	(0.1mg/kg)
Suxamethonium		7.5 mg	(1.5mg/kg)

Anaphylaxis

Adrenaline IM	0.15 ml of 1:1000

Infusions

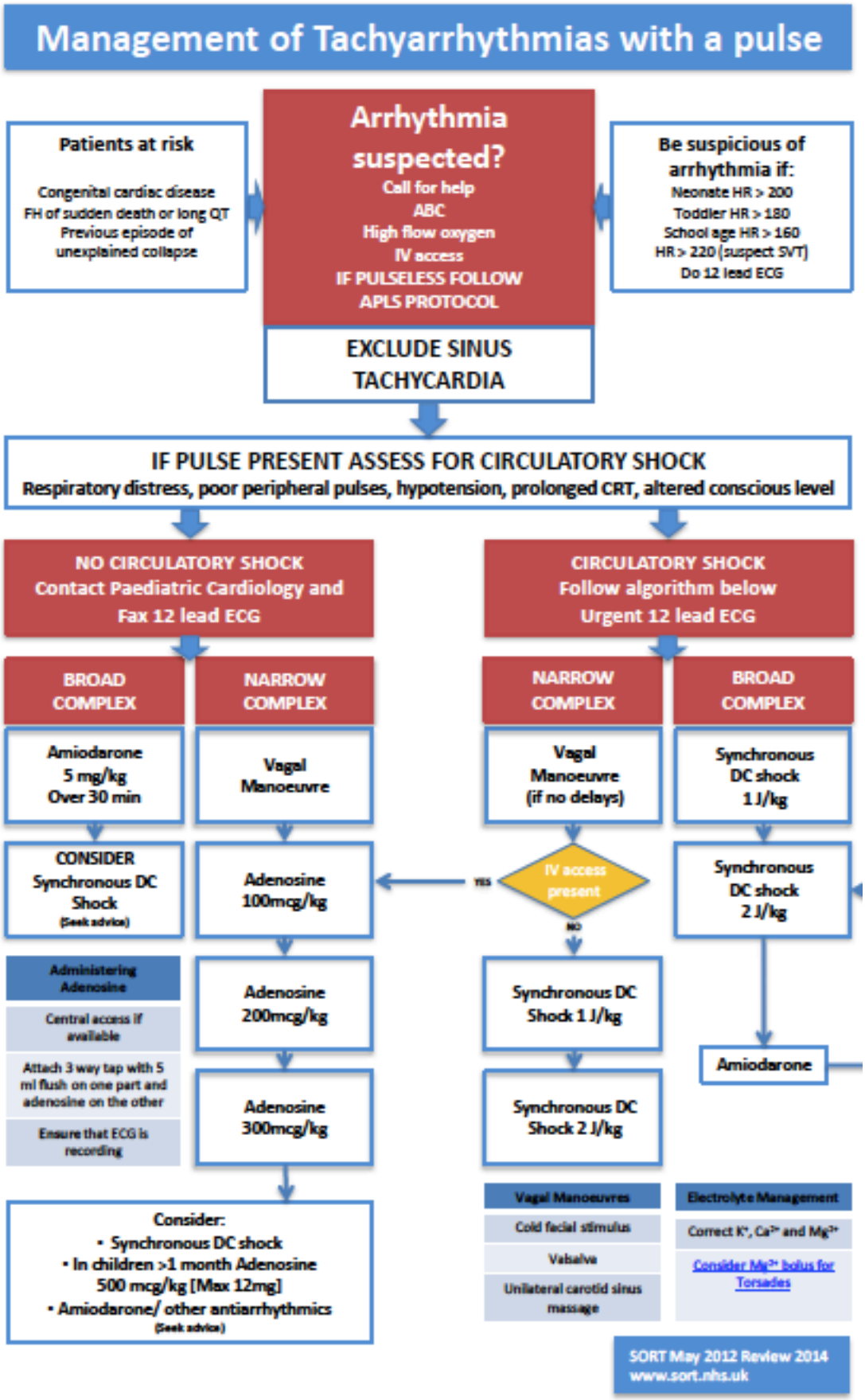
Calculations based on Southampton PICU infusions guidelines (2011)

Dopamine (central)	75 mg in 50ml of 0.9% Saline or 5% Glucose	1 ml / hr =	5 mcg/kg/min
Dopamine (peripheral)	7.5 mg in 50ml of 0.9% Saline or 5% Glucose	1 ml / hr =	0.5 mcg/kg/min
Adrenaline	1.5 mg in 50ml of 0.9% Saline or 5% Glucose	1 ml / hr =	0.1 mcg/kg/min
Noradrenaline	1.5 mg in 50ml of 0.9% Saline or 5% Glucose	1 ml / hr =	0.1 mcg/kg/min
Milrinone	10 mg in 50ml of 0.9% Saline or 5% Glucose	0.75 ml / hr =	0.5 mcg/kg/min
Dinoprostone (Prostin E2)	50 mcg in 50ml of 0.9% Saline or 5% Glucose	1.5 ml / hr =	5 ng/kg/min
Morphine	5 mg in 50ml of 0.9% Saline or 5% Glucose	1 ml / hr =	20 mcg/kg/hr
Midazolam	5 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	1.5 ml / hr =	1 mcg/kg/min
Aminophylline	250 mg in 250ml of 0.9% Saline or 5% Glucose	5 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 6 – GUIDELINE FOR TACHYARRHYTHMIAS



DEBRIEFING

POINTS FOR FURTHER DISCUSSION

A. VAGAL MANOUVERS
For each of these, continuous ECG monitoring must be in place (ideally with a 'record' or 'print' facility).

1. Diving reflex
   - Must have continuous ECG monitoring throughout
   - Wrap baby in towel/sheet leaving just face exposed, and immerse face in iced water for up to 5 seconds.
   - Facial immersion only – not whole body!
   - IV access is advisable prior to 'dunking'
   - Babies often look worse immediately afterwards, even if in sinus rhythm!
   - Have dry towels available, as clothing/towels often become wet during procedure, and babies can become hypothermic very quickly

2. Valsava manoeuvre
   - Older children can blow into a 10ml syringe to increase vagal tone

3. One-sided carotid massage (less frequently used)
   - Must not do bilateral carotid massage
   - Locate the carotid pulse near the angle of the jaw using the flat side of two fingers, and press firmly against the carotid artery towards the cervical vertebrae
   - Massage the area using either a circular or vertical motion until the heartrate starts to slow, or for a maximum of 1 minute
   - The maximum number of attempts using carotid sinus massage is three – using the same side only

4. Ocular pressure – NEVER use in paediatrics (risk of damage)

B. ADENOSINE

Need to give into a large vein as a fast push with large flush. Incremental doses minimum 2 min apart.

C. DC SHOCK

Only to be used if patient sedated/anaesthetised, or if profound shock present.
Always use SYNCHRONISED DC shock at 1 J/kg (increased to 2J/kg if necessary)

SVT - HANDOUT

INFORMATION FOR PARTICIPANTS

KEY POINTS

A. VAGAL MANOUVERS
For each of these, continuous ECG monitoring must be in place (ideally with a 'record' or 'print' facility).

1. Diving reflex
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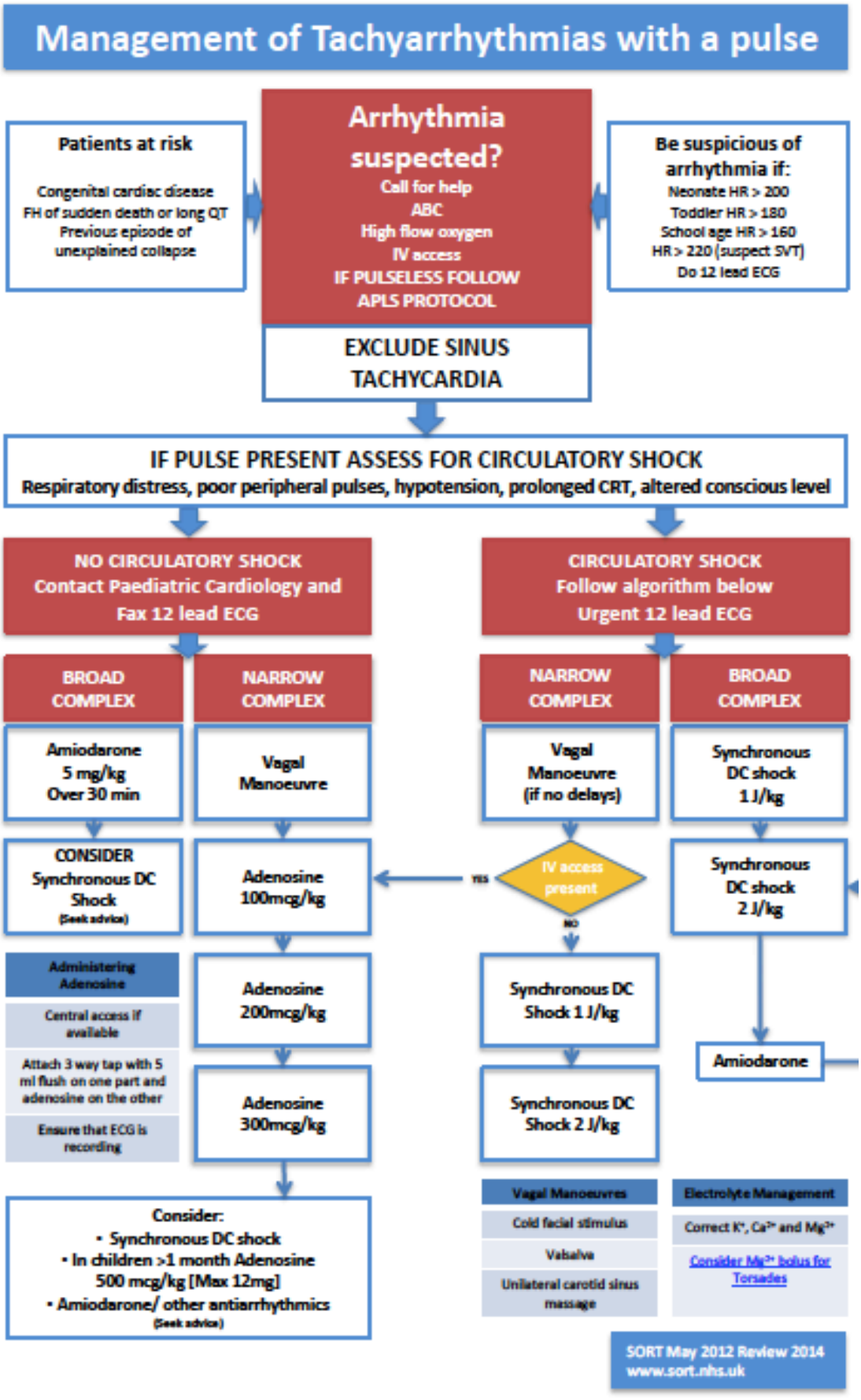
Only to be used if patient sedated/anaesthetised, or if profound shock present.
Always use SYNCHRONISED DC shock at 1 J/kg (increased to 2J/kg if necessary)

FURTHER RESOURCES

1. SORT guideline for tachyarrhythmias with pulse
   http://www.sort.nhs.uk/Media/Guidelines/ManagementofTachyarrhythmiaswithapulse.pdf


Management of Tachyarrhythmias with a pulse
Patients at risk
Congenital cardiac disease
FH of sudden death or long QT
Previous episode of unexplained collapse
Arrhythmia suspected?
Call for help
ABC
High flow oxygen
IV access
IF PULSELESS FOLLOW APLS PROTOCOL
Be suspicious of arrhythmia if:
Neonate HR > 200
Toddler HR > 180
School age HR > 160
HR > 220 (suspect SVT)
Do 12 lead ECG
EXCLUDE SINUS TACHYCARDIA
IF PULSE PRESENT ASSESS FOR CIRCULATORY SHOCK
Respiratory distress, poor peripheral pulses, hypotension, prolonged CRT, altered conscious level
NO CIRCULATORY SHOCK
Contact Paediatric Cardiology and Fax 12 lead ECG
CIRCULATORY SHOCK
Follow algorithm below
Urgent 12 lead ECG
BROAD COMPLEX
NARROW COMPLEX
NARROW COMPLEX
BROAD COMPLEX
Amiodarone 5 mg/kg Over 30 min
Vagal Manoeuvre
Vagal Manoeuvre (if no delays)
Synchronous DC shock 1 J/kg
CONSIDER Synchronous DC Shock
(Seek advice)
Adenosine 100mcg/kg
IV access present
YES
NO
Synchronous DC shock 2 J/kg
Administering Adenosine
Central access if available
Attach 3 way tap with 5 ml flush on one part and adenosine on the other
Ensure that ECG is recording
Adenosine 200mcg/kg
Synchronous DC Shock 1 J/kg
Amiodarone
Adenosine 300mcg/kg
Synchronous DC Shock 2 J/kg
Consider:
• Synchronous DC shock
• In children >1 month Adenosine 500 mcg/kg [Max 12mg]
• Amiodarone/ other antiarrhythmics
(Seek advice)
Vagal Manoeuvres
Cold facial stimulus
Valsalva
Unilateral carotid sinus massage
Electrolyte Management
Correct K+, Ca2+ and Mg2+
Consider Mg2+ bolus for Torsades
SORT May 2012 Review 2014
www.sort.nhs.uk

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_CARD_GEN_01	Have the knowledge and skills to be able to assess and initiate management of babies and children presenting with cardiological disorders
PAED_L1_CARD_GEN_03	Be able to formulate a differential diagnosis
PAED_L1_CARD_GEN_06	Understand the life threatening nature of some of these conditions and when to call for help
PAED_L1_CARD_GEN_08	Know when referral for specialist paediatric cardiology assessment for further management is appropriate
PAED_L1_CARD_ACU_ARRY_01	Know the causes of arrhythmias
PAED_L1_CARD_ACU_ARRY_02	Be able to recognise common dysrhythmias on ECG
PAED_L1_CARD_ACU_ARRY_03	Be able to initiate emergency treatment in arrhythmias such as tachycardia

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
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_CARD_GEN_01	Be able to provide advanced life support and lead the team at a cardiac arrest
PAED_L2_CARD_GEN_02	Be able to identify common ECG abnormalities
PAED_L2_CARD_ACU_ARRY_01	Be able to initiate emergency treatment in arrhythmias such as paroxysmal superventricular tachycardia

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_07	Leadership skills in the management of common and complex conditions in general paediatrics and paediatric subspecialties seeking additional advice and opinion as appropriate
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
PAED_L3_CARD_GEN_01	Be able to identify ECG abnormalities

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	
Secondary Participant (e.g. 'Call for Help' responder)	
Other health care professional (e.g. nurse/ODP)	
Other role (please specify):	
Observer	

	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?