All Need High Flow (100%) OXYGEN

30 Kg

ACUTE AIRWAY OBSTRUCTION

Senior help needed (Anaesthetics/A&E)
Calm Environment.
Close Observation.
ADRENALINE(1:1000) (Neb):5ml
may repeat every 10 minutes

BUDESONIDE (Neb):2mg

WHEEZE SALBUTAMOL (Neb):5mg

IPRATROPIUM (Neb):250mcg
PREDNISOLONE (Oral):40mg
HYDROCORTISONE (IV/IO):100mg
AMINOPHYLLINE(IV/IO):150mg
(over 20 minutes as a loading dose)
SALBUTAMOL (IV/IO): 250mcg
over 10 mins loading dose
MAGNESIUM (IV/IO):1.2g
over 20 minutes
May need ventilation,

ANAPHYLAXIS

If life threatening contact Anaesthetist

ADRENALINE(1:1000)(IM):0.3ml

in 1 ml syringe with 22 G needle consider repeat in 5 min.

If using auto injector syringe use 300mcgs

HYDROCORTISONE(IV/IO):100mg CHLORPHENIRAMINE(IV/IO):5mg

(mix with 10 ml 0.9% saline, give over 1 min.) IV Adrenaline 1microgram/Kg may be considered but **must** be discussed with Senior/Anaesthetics

WARM FLUID CHALLENGE

600ml

Give in 300ml aliquots in TRAUMA/CARDIAC

SEPTICAEMIA

Including? Meningococcal Sepsis,
Significant volume expansion required,
(Blood cultures, Bone, CRP, Coag, PCR,
Glucose, Blood Gas)
May need ventilation & Inotropes,
CEFOTAXIME(IV/IO):1.5g

ANALGESIA MORPHINE(IV/IO):3mg

HYPOGLYCAEMIA

10% DEXTROSE(IV/IO):60ml

Followed by an infusion of 0.9% Saline 5% Dextrose at maintenance volume; adjust dextrose content if required.

FITS/CONVULSIONS

Check Blood Sugar & Temperature
IV/IO access: LORAZEPAM(4mg/ml):3mg
Or DIAZEPAM (PR):10mg
Or BUCCAL MIDAZOLAM:10mg

Repeat after 10 minutes if no improvement **PHENYTOIN** (IV/IO):**600mg** over 20 minutes Consider **PARALDEHYDE** (PR) **10ml** mixed with

10ml olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

<u>Senior/ Specialist Supervision Required:</u>

Raised Intracranial Pressure:

20% Mannitol (IV/IO):**75ml** over 30 mins Or Hypertonic Saline 2.7% (IV/IO):**90ml**

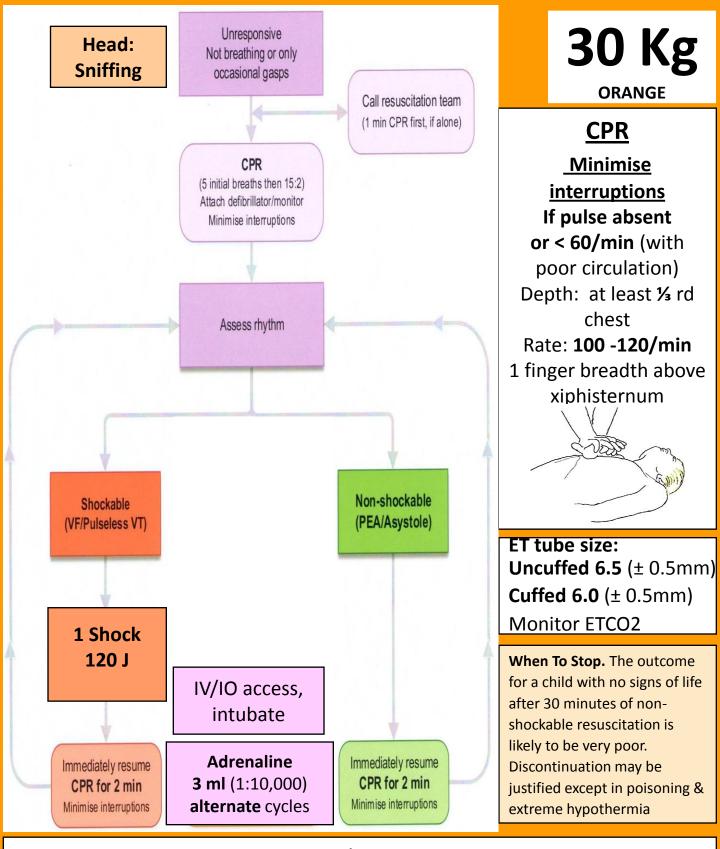
Tricyclic overdose with ECG changes:

8.4% Sodium Bicarbonate (IV/IO):**30ml**

SVT rate >220 Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO): **3mg** then **6mg** then **9mg**

VT with pulse: Amiodarone 150mgs over 20mins. Consider cardioversion if unstable: 30J, 60J, 60J



Consider Amiodarone (300mg/10ml): 5 ml (after 3rd and 5th shock)

Consider **Bicarb** (8.4%): **30 ml**

Consider Fluid challenge: 600 ml

CORRECT REVERSIBLE CAUSES:

Hypoxia, Hypovolaemia, Hyper/hypokalaemia /metabolic, Hypothermia, Tension pneumothorax, Tamponade, Toxins, Thromboembolism

Other Useful Drugs and Information

INFUSIONS:

Dopamine*:

To make standard solution: 15mg/kg in 50ml 5% dextrose

Concentration: 1ml/hr = 5 micrograms/kg/min

Dose Range: 5 – 20 micrograms/kg/min

Dobutamine*:

To make standard solution: 15mg/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 5 micrograms/kg/min

Dose Range: 5 – 20 micrograms/kg/min

Adrenaline:

To make standard solution: 0.3mg/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 0.1 micrograms/kg/min

Dose Range: 0.1 - 4 micrograms/kg/min

Noradrenaline:

To make standard solution: 0.3mg/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 0.1 micrograms/kg/min

Dose Range: 0.1 - 4 micrograms/kg/min

Morphine*:

To make standard solution: 1mg/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 20 micrograms/kg/hr

Dose Range: 10 - 40 micrograms/kg/hr

Midazolam*:

To make standard solution: 3mg/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 1 micrograms/kg/min

Dose Range: 1 - 4 micrograms/kg/min

*To be doubled for infants less than 10kg.

Use 0.9% Saline rather than 5% Dextrose to mix infusions in head injury / meningitis / encephalitis / seizure.

Other Useful Drugs and Information (continued):

Alprostadil (Prostaglandin E2):

To make standard solution: 30micrograms/kg in 50ml 5% dextrose

Concentration: 1 ml/hr = 10 nanograms/kg/min

Dose Range: 5 - 20 nanograms/kg/min

Amiodarone:

Initial loading dose 5mg/kg over 20 minutes followed by infusion.

To make standard solution: 15mg/kg in 50ml 5% Dextrose

Concentration: 1ml/hr = 5micrograms/kg/min Dose Range: 5 – 15 micrograms/kg/min/hour

Aminophylline:

Initial loading dose of 5mg/kg (maximum 500mg) over at least 20 minutes followed by infusion.

To make standard solution: 1mg/ml solution in 5% Dextrose

Concentration: 1ml/kg/hr = 1mg/kg/hr

Dose Range: 0.5 – 1mg/kg/hr

Insulin for DKA:

0.05-0.1units/kg/hour

http://www.bsped.org.uk/clinical/docs/DKAcalculator.pdf

Calcium (for hyperkalaemia, hypocalcaemia and calcium channel blocker overdose):

0.3ml/kg of 10% Calcium Gluconate (i.e. 0.1mmol/kg Ca) to maximum of 4.5mmol (20ml) over 30 minutes **OR**

0.1mls/kg of 10% Calcium Chloride to a maximum of 4.5mmol (6.5mls) over 30 minutes.

Atropine (stat dose after vagal stimulation induced bradycardia): 20 micrograms/kg iv (minimum 100mcg to maximum 600mcg)
Birth – 1 month 15 micrograms/kg iv

GLASGOW COMA SCALE

SUITABLE FOR **UNDER 4 YEARS**

Best = 15, Worst = 3

RESPONSE	SCORE
EYE OPENING	
Spontaneously	4
To verbal stimuli	3
To pain	2
No response to pain	1
BEST MOTOR RESPONSE	
Spontaneous or obeys verbal command	6
Localises to pain or withdraws to touch	5
Withdraws to pain	4
Abdominal flexion to pain (decorticate)	3
Abnormal extension to pain (decerebrate)	2
No response to pain	1
BEST VERBAL RESPONSE	
Alert, babbles, coos, words to usual ability	5
Less than usual words/ spontaneous irritable co	ry 4
Cries only to pain	3
Moans to pain	2
No response to pain	1

GLASGOW COMA SCALE

SUITABLE FOR **4 YEARS AND OVER**

Best = 15, Worst = 3

RESPONSE	SCORE
EYE OPENING	
Spontaneously	4
To verbal stimuli	3
To pain	2
No response to pain	1
BEST MOTOR RESPONSE	
Obeys verbal command	6
Localises to pain	5
Withdraws from pain	4
Abnormal flexion to pain (decorticate)	3
Abnormal extension to pain (decerebrat	e) 2
No response to pain	1
BEST VERBAL RESPONSE	
Orientated and converses	5
Disorientated and converses	4
Inappropriate words	3
Incomprehensible sounds	2
No response to pain	1

Normal fluid requirements

Body weight	Fluid req / day (ml/kg)	Fluid req /hour (ml/kg)
First 10 kg	100	4
Second 10 kg	50	2
Subsequent kilograms	20	1

Normal Paediatric Ranges

Age (Years)	Heart Rate / min	Respiratory Rate / min	Systolic BP (mmHg)
<1	110 – 160	30 – 40	80 – 90
1 – 2	100 – 150	25 – 35	85 – 95
2 – 5	95 – 140	25 – 30	85 – 100
5 – 12	80 – 120	20 – 25	90 – 110
>12	60 - 100	15 - 20	100 - 120