# All Need High Flow (100%) **OXYGEN**

# 45 Kg LIME

## **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

## **SEPTICAEMIA**

Including? Meningococcal Sepsis, Significant volume expansion required, (Blood cultures, Bone, CRP, Coag, PCR, Glucose, Blood Gas) May need ventilation & Inotropes, CEFOTAXIME(IV/IO):2g

> **ANALGESIA** MORPHINE(IV/IO):4.5mg

#### WHEEZE

SALBUTAMOL (Neb):5mg IPRATROPIUM (Neb):250mcg PREDNISOLONE (Oral):40mg HYDROCORTISONE (IV/IO):100mg AMINOPHYLLINE(IV/IO):225mg (over 20 minutes as a loading dose)

SALBUTAMOL (IV/IO):250mcg over 10 mins loading dose MAGNESIUM (IV/IO):1.8g over 20 minutes May need ventilation, If life threatening contact Anaesthetist

# **ANAPHYLAXIS**

ADRENALINE(1:1000)(IM):0.45ml

consider repeat in 5 min.

HYDROCORTISONE(IV/IO):200mg CHLORPHENIRAMINE(IV/IO):10mg

(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

900 ml

Give in 450ml aliquots in TRAUMA/CARDIAC

## **HYPOGLYCAEMIA**

10% DEXTROSE(IV/IO):90ml

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):4mg Or DIAZEPAM (PR):10mg Or BUCCAL MIDAZOLAM:10mg

Repeat after 10 minutes if no improvement PHENYTOIN (IV/IO): 900mg over 20 minutes Consider PARALDEHYDE (PR) 10ml mixed with 10ml olive oil

Call for anaesthetic help if still fitting when phenytoin is commenced

## Senior/ Specialist Supervision Required: **Raised Intracranial Pressure:**

20% Mannitol (IV/IO):113ml over 30 mins Or Hypertonic Saline 2.7% (IV/IO):135ml

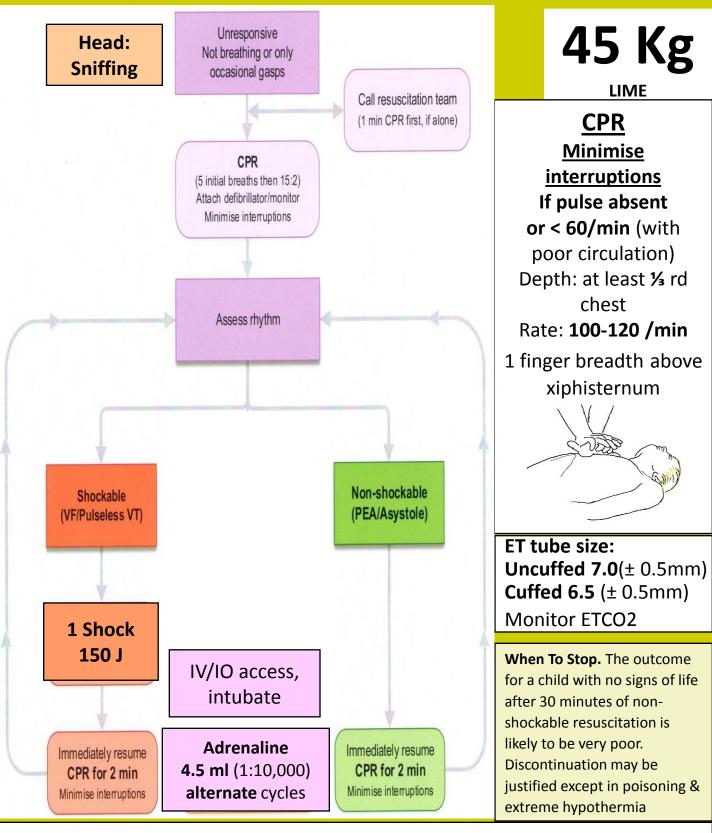
**Tricyclic overdose with ECG changes:** 

8.4% Sodium Bicarbonate (IV/IO):45ml **SVT rate >220** Following vagal manoeuvres:

Adenosine (3mg/ml) (IV/IO):4.5mg then 9mg then

13.5mg

VT with pulse: Amiodarone 225mgs over 20mins. Consider cardioversion if unstable: 45J, 90J, 90J



Consider **Amiodarone** (300mg/10ml): **8.0 ml** (after 3<sup>rd</sup> and 5<sup>th</sup> shock)

Consider **Bicarb** (8.4%): **45 ml** 

Consider Fluid challenge: 900 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