Emergency drugs etc for child of	age. 14year	S Expected Withformation Contry
Acceptable Systolic BP	95-140	mmhg
Acceptable Heart Rate	60-120	bpm Read important instructions on page 3
Acceptable Respiratory Rate	14-26	bpm
]
Adrenaline dose	5.0	mls of 1:10,000.
Fluid bolus	1000	mls of normal saline
Glucose / Dextrose (25%)	50	mls
DC Shock	250	Joules
ET tube size	7.5	internal diameter (use 0.5 smaller if cuffed tube)
ET tube length	19 / 23	cm to lip / nose
Ketamine	50	mg (Intubation Dose – 1mg/kg) May be repeated.
Atropine	0.6	mg (Intubation Dose – 0.02mg/kg)
Diazepam	10	mg (0.2mg/kg) Beware respiratory depression
Propofol	125 - 175	mg (dose varies with age). Beware cardiovascular depression. Titrate dose
Thiopentone	75 - 125	mg (2.5-5.0mg/kg) Beware cardiovascular depression. Titrate dose
Suxamethonium	50	mg (dose varies with age)
Pancuronium	5	mg (0.1mg/kg)
Vecuronum	5	mg (0.1mg/kg)
Fentanyl	100	mcg (2mcgkg) Beware respiratory depression. Titrate dose
Morphine	5	mg (0.1mg/kg) Beware respiratory depression. Titrate dose
Midazolam	5	mg (0.1mg/kg) Beware respiratory depression.
Benzylpenicillin	2500	mg (50mg/kg)
Cefotaxime	2500	mg (50mg/kg)
Mannitol	13	g (0.25g /kg) = 104mls of 12.5%, or 65mls of 20%
		P C C C C C C C C C C C C C C C C C C C

Dopamine or Dobutamine: To make an infusion where 1ml/hr = 5mcg/kg/min add 750mg of the drug to 50mls of Normal Saline.



Advanced Life Support for Infants and Children





(then every 2nd loop) **Consider and Correct** Hypoxia Hypovolaemia Hyper / hypokalaemia / metabolic disorders Hypothermia / hyperthermia Tension pneumothorax Tamponade Toxins Thrombosis (pulmonary / coronary)

(e.g. charge manual defibrillator to 4 J/kg)

* Adrenaline 10 mcg/kg after 2nd shock

* Amiodarone 5mg/kg after 3rd shock

* Adrenaline 10 mcg/kg immediately

(then every 2nd loop)

Shockable

Non Shockable

Post Resuscitation Care Re-evaluate ABCDE 12 lead ECG Treat precipitating causes Re-evaluate oxygenation and ventilation Temperature control (cool)

December 2010

For child of age: 14years

Expected Wt around: 50 Kg

Shock 250 Joules

Adrenaline 5.0 mls of 1:10,000.

Fluid Bolus 1000 mls of normal saline

Important

This tool is designed to be a readily available guide to endotracheal tube sizes and positions, and to doses of drugs and other therapies.

It is not a recipe book - it is important that you think carefully if "standard" doses of drugs are appropriate for any individual patient, especially acutely unstable ones.

For systolic blood pressure, heart and respiratory rate – look at trends as well as absolute numbers. HR and RR ranges are from rounded 5th centile in Bonafide CP, Brady PW, Keren R, Conway PH, Marsolo K, Daymont C. (2013). Development of heart and respiratory rate percentile curves for hospitalized children. Pediatrics, 131 (4), e1150-e1157).

Do not just blindly follow the doses given here - think first.

Information presented here comes from several sources, particularly Drug Doses by Frank Shann. The algorithm comes from the Australian Resuscitation Council <u>http://www.resus.org.au</u>

Doses have been rounded where sensible to do so, and minimum and maximum doses applied to some drugs.

Doses may need to be modified if drugs are used in combination.

DC shock energy has been rounded to figures commonly found on defibrillators. 4j/kg

For Morphine, Fentanyl, Thiopentone and Propofol it is important to titrate the dose for its desired effect. Be very cautious of hypotension in sick children and respiratory depression if not ventilated. Be careful in patients with haemodynamic compromise - cardiac failure, pulmonary hypertension, septic shock. Correct hypovolaemia first. Have vasopressors available (eg metaraminol 5-10 mcg/kg). Be careful of propofol in infants <1 year of age dosing is more complex.

Propofol is based on approximately: 1-5yo: 2.5-3.5mg/kg, 5-10yo: 2-3 mg/kg, >10: 1.5-2.5 mg/kg

Suxamethonium is based on 3mg/kg for newborn, 2mg/kg child, 1mg/kg adult.

I've done my best to ensure this information is accurate and cross checked doses with other experts but it is your responsibility to verify doses etc before using this tool.

Comments and suggestions welcome

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Mike

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