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PREFACE

Anaesthetising children can be daunting for the trainee or non-specialist Consultant Anaesthetist. The management of paediatric emergencies requires the rapid recall of multiple formulae, drug doses and management guidelines for a multitude of clinical conditions. To provide evidence-based care, clinicians require rapid access to national guidelines presented in a format that enables easy comprehension and application to the clinical scenario.

This book began as a compilation of local treatment guidelines, collated for our anaesthetic trainees. It quickly grew as new sections were added, becoming, we feel, a comprehensive companion for dealing with paediatric emergencies. The aim of the book is to allow confident patient management by non-specialist clinicians in stressful situations without needing to remember formulae, reducing potentially harmful errors.

The book is a collection of 23 flow chart management plans for life-threatening paediatric crises. Topics included in the emergency management guidelines section are:-

- Cardio-pulmonary arrest – Including management of peri-arrest arrhythmia.
- Trauma – Traumatic head injury, massive haemorrhage and burns.
- Anaesthesia – Airway management algorithms, malignant hyperpyrexia, local anaesthetic toxicity, analgesia and fluid management, anaesthetic implications of 50 common conditions and syndromes.
- Medicine – Anaphylaxis, asthma, status epilepticus, sepsis and diabetic ketoacidosis.

The 'age-by-page' section provides pre-calculated drug doses and equipment selections for children from birth to 12 years, ensuring rapid data access and reducing potentially harmful errors.

This is not a textbook of paediatric anaesthesia. It is a comprehensive compendium covering the management of a wide range of paediatric emergencies which provides a succinct summary of management plans for trainees in many paediatric specialties.

We would like to acknowledge the contributions made by three anaesthetic trainees (Joy Abbott, Helen Fenner and Katherine James) to the original local guidelines book and also to Andrew Wignell (Paediatric pharmacist) who has checked all of the medication doses used and our calculations.

AGE : TERM

Wt :	3 – 3.5 kg	HR :	110 – 160	RR :	30 – 40	Systolic BP :	70 – 80
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 AIRWAY	OP Airway : Size : 000	ET Tube : Diameter : Cuffed: 2.5 – 3.0 Uncuffed: 3.0 – 3.5
	LMA : Size : 1	Length (Oral) : 9 – 10 cm

 CARDIAC	Defibrillation (4 J/kg)	20 J	Adrenaline	IV – Arrest (10 microgram/kg)	0.4 mL (1 in 10,000)
	Atropine (20 microgram/kg)	100 microgram (min)		IM – Anaphylaxis (10 microgram/kg)	0.4 mL (1 in 10,000)
	Amiodarone (5 mg/kg)	18 mg (0.6 mL of minijet)		Nebulised – Croup (400 microgram/kg)	1.4 mL (1 in 1,000)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	35 mL 70 mL	Blood, FFP or Platelets (10 mL/kg)	35 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		7 mL	Mannitol 20% (0.25 – 0.5 g/kg)	4 – 8 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (3.5 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	3 – 15 mg	0.3 – 1.5 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	7 mg	0.7 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	4 – 7 microgram	0.4 – 0.7 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	0.3 mg (Repeat PRN)	0.3 mL
	Paracetamol IV (10 mg/kg)	NEAT (10 mg/mL)	35 mg	3.5 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	7 mg	0.7 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	3.5 mg	0.35 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	2 mg	0.2 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	50 mg	0.5 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	50 mg	0.5 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	0.7 mL	0.7 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	2 – 6 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	3.5 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	21 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	1 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 3 months

Wt :	4 – 6 kg	HR :	110 – 160	RR :	30 – 40	Systolic BP :	70 – 80
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 AIRWAY	OP Airway : Size : 00	ET Tube :	
	LMA : Size : 1	Diameter : Cuffed: 2.5 – 3.0 Uncuffed: 3.0 – 3.5 Length (Oral) : 11 cm	

 CARDIAC	Defibrillation (4 J/kg)	20 J	Adrenaline	IV – Arrest (10 microgram/kg)	0.5 mL (1 in 10,000)
	Atropine (20 microgram/kg)	110 microgram		IM – Anaphylaxis (10 microgram/kg)	0.5 mL (1 in 10,000)
	Amiodarone (5 mg/kg)	28 mg (0.6 mL of minijet)		Nebulised – Croup (400 microgram/kg)	2.2 mL (1 in 1,000)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	55 mL 110 mL	Blood, FFP or Platelets (10 mL/kg)	55 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		12 mL	Mannitol 20% (0.25 – 0.5 g/kg)	7 – 14 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (5.5 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	5 – 20 mg	0.5 – 2 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	10 mg	1 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	5 – 10 microgram	0.5 – 1 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	0.5 mg (Repeat PRN)	0.5 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	80 mg	8 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	10 mg	1 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	5 mg	0.5 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	2.5 mg	0.25 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	90 mg	0.9 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	80 mg	0.8 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	1.1 mL	1.1 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	2 – 6 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	5.5 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	30 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	1.5 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 6 months

Wt :	6 – 8 kg	HR :	110 – 160	RR :	30 – 40	Systolic BP :	70 – 90
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 AIRWAY	OP Airway : Size : 000	ET Tube : Diameter : Cuffed: 3.0 Uncuffed: 3.5	
	LMA : Size : 1.5	Length (Oral) : 12 cm	

 CARDIAC	Defibrillation (4 J/kg)	30 J	Adrenaline	IV – Arrest (10 microgram/kg)	0.7 mL (1 in 10,000)
	Atropine (20 microgram/kg)	140 microgram		IM – Anaphylaxis (10 microgram/kg)	0.7 mL (1 in 10,000)
	Amiodarone (5 mg/kg)	35 mg (1.2 mL of minijet)		Nebulised – Croup (400 microgram/kg)	2.8 mL (1 in 1,000)

 FLUIDS	Crystalloids : Trauma (10 mL/kg): Other (20 mL/kg) :	70 mL 140 mL	Blood, FFP or Platelets (10 mL/kg)	70 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)	14 mL	Mannitol 20% (0.25 – 0.5 g/kg)	9 – 18 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (7 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	7 – 30 mg	0.7 – 3 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	15 mg	1.5 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	7 – 15 microgram	0.7 – 1.5 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	0.7 mg (Repeat PRN)	0.7 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	100 mg	10 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	14 mg	1.4 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	7 mg	0.7 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	4 mg	0.4 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	120 mg	1.2 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	100 mg	1 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	1.4 mL	1.4 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	3 – 8 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	7 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	42 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	2 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

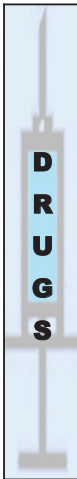
AGE : 9 months

Wt :	7 – 9 kg	HR :	110 – 160	RR :	30 – 40	Systolic BP :	70 – 90
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 AIRWAY	OP Airway : Size : 00	ET Tube : Diameter : Cuffed: Uncuffed:	3.5 3.5 – 4.0 12 cm
	LMA : Size : 1.5	Length (Oral) :	

 CARDIAC	Defibrillation (4 J/kg)	30 J	Adrenaline	IV – Arrest (10 microgram/kg)	0.8 mL (1 in 10,000)
	Atropine (20 microgram/kg)	170 microgram		IM – Anaphylaxis (10 microgram/kg)	0.8 mL (1 in 10,000)
	Amiodarone (5 mg/kg)	43 mg (1.4 mL of minijet)		Nebulised – Croup (400 microgram/kg)	3.4 mL (1 in 1,000)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	85 mL 170 mL	Blood, FFP or Platelets (10 mL/kg)	85 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		17 mL	Mannitol 20% (0.25 – 0.5 g/kg)	10 – 20 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (8.5 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	8.5 – 35 mg	1 – 3.5 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	17 mg	1.7 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	10 – 20 microgram	1 – 2 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	0.8 mg (Repeat PRN)	0.8 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	120 mg	12 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	17 mg	1.7 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	8 mg	0.8 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	4 mg	0.4 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	130 mg	1.3 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	120 mg	1.2 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	1.7 mL	1.7 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	3 – 10 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	8.5 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	50 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	2.5 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 1 year

Wt :	9 – 10 kg	HR :	100 – 150	RR :	25 – 35	Systolic BP :	80 – 95
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 AIRWAY	OP Airway : Size : 00 – 0	ET Tube : Diameter : Cuffed: Uncuffed:	3.5 4.5
	LMA : Size : 2	Length (Oral) :	12.5 cm

 CARDIAC	Defibrillation (4 J/kg)	50 J	Adrenaline	IV – Arrest (10 microgram/kg)	1.0 mL (1 in 10,000)
	Atropine (20 microgram/kg)	200 microgram		IM – Anaphylaxis (10 microgram/kg)	1.0 mL (1 in 10,000)
	Amiodarone (5 mg/kg)	50 mg (1.7 mL of minijet)		Nebulised – Croup (400 microgram/kg)	4.0 mL (1 in 1,000)

 FLUIDS	Crystalloids : Trauma (10 mL/kg): Other (20 mL/kg) :	100 mL 200 mL	Blood, FFP or Platelets (10 mL/kg)	100 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)	20 mL	Mannitol 20% (0.25 – 0.5 g/kg)	12 – 25 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (10 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	10 – 40 mg	1 – 4 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	20 mg	2 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	10 – 20 microgram	1 – 2 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	1 mg (Repeat PRN)	1 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	150 mg	15 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	20 mg	2 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	10 mg	1 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	5 mg	0.5 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	150 mg	1.5 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	150 mg	1.5 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	2 mL	2 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	4 – 12 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	10 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	60 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	3 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 18 months

Wt :	10 – 11 kg	HR :	100 – 150	RR :	25 – 35	Systolic BP :	80 – 95
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 AIRWAY	OP Airway : Size : 00 – 0	ET Tube : Diameter : Cuffed: Uncuffed:	3.5 4.5
	LMA : Size : 2	Length (Oral) :	12.5 – 13 cm

 CARDIAC	Defibrillation (4 J/kg)	50 J	Adrenaline	IV – Arrest (10 microgram/kg)	1.1 mL (1 in 10,000)
	Atropine (20 microgram/kg)	220 microgram		IM – Anaphylaxis (10 microgram/kg)	0.11 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	55 mg (1.8 mL of minijet)		Nebulised – Croup (400 microgram/kg)	4.4 mL (1 in 1,000)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	110 mL 220 mL	Blood, FFP or Platelets (10 mL/kg)	110 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		22 mL	Mannitol 20% (0.25 – 0.5 g/kg)	14 – 28 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (11 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	10 – 45 mg	1 – 4.5 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	25 mg	2.5 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	10 – 20 microgram	1 – 2 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	1 mg (Repeat PRN)	1 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	165 mg	16.5 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	22 mg	2.2 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	10 mg	1 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	5 mg	0.5 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	170 mg	1.7 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	160 mg	1.6 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	2.2 mL	2.2 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	4 – 12 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	11 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	60 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	3 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 2 years

Wt :	11 – 12 kg	HR :	95 – 140	RR :	25 – 30	Systolic BP :	80 – 100
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 AIRWAY	OP Airway : Size : 0 – 1	ET Tube : Diameter : Cuffed: 4.0 Uncuffed: 5.0	
	LMA : Size : 2	Length (Oral) : 13 cm	

 CARDIAC	Defibrillation (4 J/kg)	50 J	Adrenaline	IV – Arrest (10 microgram/kg)	1.2 mL (1 in 10,000)
	Atropine (20 microgram/kg)	240 microgram		IM – Anaphylaxis (10 microgram/kg)	0.12 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	60 mg (2.0 mL of minijet)		Nebulised – Croup (400 microgram/kg)	4.8 mL (1 in 1,000)

 FLUIDS	Crystalloids : Trauma (10 mL/kg): Other (20 mL/kg) :	120 mL 240 mL	Blood, FFP or Platelets (10 mL/kg)	120 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)	24 mL	Mannitol 20% (0.25 – 0.5 g/kg)	15 – 30 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (12 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	12 – 50 mg	1.2 – 5 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	25 mg	2.5 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	12 – 25 microgram	1.2 – 2.5 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	1.2 mg (Repeat PRN)	1.2 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	180 mg	18 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	24 mg	2.4 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	12 mg	1.2 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	6 mg	0.6 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	200 mg	2 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	180 mg	1.8 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	2.4 mL	2.4 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	4 – 14 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	12 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	72 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	3.6 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 3 years

Wt :	11 – 15 kg	HR :	95 – 140	RR :	25 – 30	Systolic BP :	80 – 100
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 AIRWAY	OP Airway : Size : 1	ET Tube : Diameter : Cuffed: 4.0 Uncuffed: 5.0	
	LMA : Size : 2	Length (Oral) : 13cm	

 CARDIAC	Defibrillation (4 J/kg)	70 J	Adrenaline	IV – Arrest (10 microgram/kg)	1.4 mL (1 in 10,000)
	Atropine (20 microgram/kg)	280 microgram		IM – Anaphylaxis (10 microgram/kg)	0.14 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	70 mg (2.3 mL of minijet)		Nebulised – Croup (400 microgram/kg)	5.0 mL (1 in 1,000) (max)

 FLUIDS	Crystalloids : Trauma (10 mL/kg): Other (20 mL/kg) :	140 mL 280 mL	Blood, FFP or Platelets (10 mL/kg)	140 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)	28 mL	Mannitol 20% (0.25 – 0.5 g/kg)	17.5 – 35 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (14 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	14 – 55 mg	1.5 – 5.5 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	30 mg	3 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	15 – 30 microgram	1.5 – 3 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	1.4 mg (Repeat PRN)	1.4 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	210 mg	21 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	30 mg	3 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	15 mg	1.5 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	7 mg	0.7 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	225 mg	2.25 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	210 mg	2.1 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	2.8 mL	2.8 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	5 – 16 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	14 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	84 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	4.2 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 4 years

Wt :	14 – 16 kg	HR :	95 – 150	RR :	25 – 30	Systolic BP :	80 – 100
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 AIRWAY	OP Airway : Size : 1	ET Tube : Diameter : Cuffed: Uncuffed:	4.5 5.5
	LMA : Size : 2	Length (Oral) :	14 cm

 CARDIAC	Defibrillation (4 J/kg)	70 J	Adrenaline	IV – Arrest (10 microgram/kg)	1.6 mL (1 in 10,000)
	Atropine (20 microgram/kg)	320 microgram		IM – Anaphylaxis (10 microgram/kg)	0.16 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	80 mg (2.7 mL of minijet)		Nebulised – Croup (400 microgram/kg)	5.0 mL (1 in 1,000) (max)

 FLUIDS	Crystalloids : Trauma (10 mL/kg): Other (20 mL/kg) :	160 mL 320 mL	Blood, FFP or Platelets (10 mL/kg)	160 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)	32 mL	Mannitol 20% (0.25 – 0.5 g/kg)	20 – 40 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (16 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	15 – 65 mg	1.5 – 6.5 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	30 mg	3 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	15 – 30 microgram	1.5 – 3 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	1.5 mg (Repeat PRN)	1.5 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	240 mg	24 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	30 mg	3 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	15 mg	1.5 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	10 mg	1 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	250 mg	2.5 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	240 mg	2.4 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	3.2 mL	3.2 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	6 – 18 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	16 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	96 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	4.5 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 5 years

Wt :	16 – 22 kg	HR :	90 – 130	RR :	20 – 25	Systolic BP :	90 – 110
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 AIRWAY	OP Airway : Size : 1	ET Tube : Diameter : Cuffed: Uncuffed:	4.5 5.5
	LMA : Size : 2 – 2.5	Length (Oral) :	14.5 cm

 CARDIAC	Defibrillation (4 J/kg)	70 J	Adrenaline	IV – Arrest (10 microgram/kg)	1.8 mL (1 in 10,000)
	Atropine (20 microgram/kg)	360 microgram		IM – Anaphylaxis (10 microgram/kg)	0.18 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	90 mg (3 mL of minijet)		Nebulised – Croup (400 microgram/kg)	5.0 mL (1 in 1,000) (max)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	180 mL 360 mL	Blood, FFP or Platelets (10 mL/kg)	180 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		36 mL	Mannitol 20% (0.25 – 0.5 g/kg)	22.5 – 45 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (18 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	18 – 72 mg	2 – 7 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	35 mg	3.5 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	20 – 40 microgram	2 – 4 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	1.8 mg (Repeat PRN)	1.8 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	270 mg	27 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	35 mg	3.5 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	20 mg	2 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	10 mg	1 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	290 mg	2.9 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	270 mg	2.7 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	3.6 mL	3.6 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	7 – 21 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	18 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	108 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	5.4 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 6 years

Wt :	20 – 25 kg	HR :	80 – 120	RR :	20 – 25	Systolic BP :	90 – 110
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 AIRWAY	OP Airway : Size : 1	ET Tube : Diameter : Cuffed: Uncuffed: Length (Oral) :	5.0 6.0 15 cm
	LMA : Size : 2.5		

 CARDIAC	Defibrillation (4 J/kg)	100 J	Adrenaline	IV – Arrest (10 microgram/kg)	2.5 mL (1 in 10,000)
	Atropine (20 microgram/kg)	500 microgram		IM – Anaphylaxis (10 microgram/kg)	0.25 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	125 mg (4.2 mL of minijet)		Nebulised – Croup (400 microgram/kg)	5.0 mL (1 in 1,000) (max)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	250 mL 500 mL	Blood, FFP or Platelets (10 mL/kg)	250 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		50 mL	Mannitol 20% (0.25 – 0.5 g/kg)	30 – 63 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (25 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	25 – 100 mg	2.5 – 10 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	50 mg	5 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	20 – 50 microgram	2.5 – 5 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	2.5 mg (Repeat PRN)	2.5 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	380 mg	38 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	50 mg	5 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	25 mg	2.5 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	13 mg	1.3 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	400 mg	4 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	380 mg	3.8 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	5 mL	5 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	10 – 30 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	25 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	150 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	7.5 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 7 years

Wt :	22 – 30 kg	HR :	80 – 120	RR :	20 – 25	Systolic BP :	90 – 110
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 AIRWAY	OP Airway : Size : 1 – 2	ET Tube : Diameter : Cuffed: Uncuffed: Length (Oral) :	5.0 6.0 15 cm
	LMA : Size : 2.5		

 CARDIAC	Defibrillation (4 J/kg)	125 J	Adrenaline	IV – Arrest (10 microgram/kg)	2.8 mL (1 in 10,000)
	Atropine (20 microgram/kg)	560 microgram		IM – Anaphylaxis (10 microgram/kg)	0.28 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	140 mg (4.6 mL of minijet)		Nebulised – Croup (400 microgram/kg)	5.0 mL (1 in 1,000) (max)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	280 mL 560 mL	Blood, FFP or Platelets (10 mL/kg)	280 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		56 mL	Mannitol 20% (0.25 – 0.5 g/kg)	35 – 70 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (28 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	30 – 115mg	3 – 11.5 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	55 mg	5.5 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	30 – 55 microgram	3 – 5.5 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	2.8 mg (Repeat PRN)	2.8 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	420 mg	42 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	55 mg	5.5 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	28 mg	3 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	14 mg	1.4 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	450 mg	4.5 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	420 mg	4.2 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	5.6 mL	5.6 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	11 – 33 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	28 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	168 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	8.4 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 8 years

Wt :	25 – 31 kg	HR :	80 – 120	RR :	20 – 25	Systolic BP :	90 – 110
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 AIRWAY	OP Airway : Size : 1 – 2	ET Tube : Diameter : Cuffed: Uncuffed: Length (Oral) :	5.5 6.5 16 cm
	LMA : Size : 3		

 CARDIAC	Defibrillation (4 J/kg)	125 J	Adrenaline	IV – Arrest (10 microgram/kg)	3.0 mL (1 in 10,000)
	Atropine (20 microgram/kg)	600 microgram (max)		IM – Anaphylaxis (10 microgram/kg)	0.3 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	150 mg (5.0 mL of minijet)		Nebulised – Croup (400 microgram/kg)	5.0 mL (1 in 1,000) (max)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	300 mL 600 mL	Blood, FFP or Platelets (10 mL/kg)	300 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		60 mL	Mannitol 20% (0.25 – 0.5 g/kg)	38 – 75 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (30 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	30 – 120 mg	3 – 12 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	60 mg	6 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	30 – 60 microgram	3 – 6 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	3 mg (Repeat PRN)	3 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	450 mg	45 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	60 mg	6 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	30 mg	3 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	15 mg	1.5 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	500 mg	5 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	450 mg	4.5 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	6 mL	6 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	12 – 36 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	30 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	180 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	9 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 9 years

Wt :	28 – 35 kg	HR :	80 – 120	RR :	20 – 25	Systolic BP :	90 – 110
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 AIRWAY	OP Airway : Size : 1 – 2	ET Tube : Diameter : Cuffed: Uncuffed: Length (Oral) :	5.5 6.5 16.5 cm
	LMA : Size : 2.5 – 3		

 CARDIAC	Defibrillation (4 J/kg)	150 J	Adrenaline	IV – Arrest (10 microgram/kg)	3.4 mL (1 in 10,000)
	Atropine (20 microgram/kg)	600 microgram (max)		IM – Anaphylaxis (10 microgram/kg)	0.34 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	170 mg (5.6 mL of minijet)		Nebulised – Croup (400 microgram/kg)	5.0 mL (1 in 1,000) (max)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	340 mL 680 mL	Blood, FFP or Platelets (10 mL/kg)	340 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		68 mL	Mannitol 20% (0.25 – 0.5 g/kg)	42 – 85 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (34 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	35 – 140 mg	3.5 – 14 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	70 mg	7 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	35 – 70 microgram	3.5 – 7 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	3.4 mg (Repeat PRN)	3.4 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	500 mg	50 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	70 mg	7 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	35 mg	3.5 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	17 mg	1.7 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	550 mg	5.5 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	500 mg	50 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	6.8 mL	6.8 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	13 – 40 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	34 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	204 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	10.2 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

AGE : 10 years

Wt :	30 – 37 kg	HR :	80 – 120	RR :	20 – 25	Systolic BP :	90 – 110
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 AIRWAY	OP Airway : Size : 2 – 3	ET Tube : Diameter : Cuffed: 6.0 Uncuffed: 7.0	
	LMA : Size : 3	Length (Oral) : 17 cm	

 CARDIAC	Defibrillation (4 J/kg)	150 J	Adrenaline	IV – Arrest (10 microgram/kg)	3.7 mL (1 in 10,000)
	Atropine (20 microgram/kg)	600 microgram (max)		IM – Anaphylaxis (10 microgram/kg)	0.37 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	185 mg (6.1 mL of minijet)		Nebulised – Croup (400 microgram/kg)	5.0 mL (1 in 1,000) (max)

 FLUIDS	Crystalloids : Trauma (10 mL/kg): 370 mL Other (20 mL/kg) : 740 mL	Blood, FFP or Platelets (10 mL/kg)	370 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)	74 mL	Mannitol 20% (0.25 – 0.5 g/kg) 46 – 92 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (37 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	37 – 150 mg	3.7 – 15 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	75 mg	7.5 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	37 – 75 microgram	3.7 – 7.5 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	3.7 mg (Repeat PRN)	3.7 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	555 mg	55.5 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	75 mg	7.5 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	37 mg	3.7 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	18 mg	1.8 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	590 mg	5.9 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	555 mg	5.6 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	7.5 mL	7.5 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	14 – 42 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	37 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	222 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	11.1 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

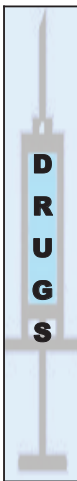
AGE : 11 years

Wt :	31 – 45 kg	HR :	60 – 100	RR :	15 – 20	Systolic BP :	100 – 120
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 AIRWAY	OP Airway : Size : 3 – 4	ET Tube : Diameter : Cuffed: Uncuffed:	6.0 7.0
	LMA : Size : 3	Length (Oral) :	17 cm

 CARDIAC	Defibrillation (4 J/kg)	175 J	Adrenaline	IV – Arrest (10 microgram/kg)	4.0 mL (1 in 10,000)
	Atropine (20 microgram/kg)	600 microgram (max)		IM – Anaphylaxis (10 microgram/kg)	0.4 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	200 mg (6.7 mL of minijet)		Nebulised – Croup (400 microgram/kg)	5.0 mL (1 in 1,000) (max)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	400 mL 800 mL	Blood, FFP or Platelets (10 mL/kg)	400 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		80 mL	Mannitol 20% (0.25 – 0.5 g/kg)	50 – 100 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (40 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	40 – 160 mg	4 – 16 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	80 mg	8 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	40 – 80 microgram	4 – 8 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	4 mg (Repeat PRN)	4 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	600 mg	60 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	80 mg	8 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	40 mg	4 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	20 mg	2 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	650 mg	6.5 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	600 mg	6 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	8 mL	8 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	16 – 48 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	40 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	240 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	12 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)

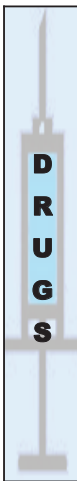
AGE : 12 years

Wt :	32 – 50 kg	HR :	60 – 100	RR :	15 – 20	Systolic BP :	100 – 120
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 AIRWAY	OP Airway : Size : 3 – 4	ET Tube : Diameter : Cuffed: Uncuffed:	6.5 7.5
	LMA : Size : 3	Length (Oral) :	18 cm

 CARDIAC	Defibrillation (4 J/kg)	175 J	Adrenaline	IV – Arrest (10 microgram/kg)	4.3 mL (1 in 10,000)
	Atropine (20 microgram/kg)	600 microgram (max)		IM – Anaphylaxis (10 microgram/kg)	0.43 mL (1 in 1,000)
	Amiodarone (5 mg/kg)	215 mg (7.1 mL of minijet)		Nebulised – Croup (400 microgram/kg)	5.0 mL (1 in 1,000) (max)

 FLUIDS	Crystalloids :	Trauma (10 mL/kg): Other (20 mL/kg) :	430 mL 860 mL	Blood, FFP or Platelets (10 mL/kg)	430 mL
	10% Dextrose : (Hypoglycaemia) (2 mL/kg)		86 mL	Mannitol 20% (0.25 – 0.5 g/kg)	53 – 107 mL (0.5 g/kg = 2.5 mL/kg)

 DRUGS	Drug (Dose)	Neat or Dilution (mg/mL)	Calculated Dose (43 kg)	Volume to be given (mL)
	Propofol (1 – 4 mg/kg)	NEAT (10 mg/mL)	40 – 170 mg	4 – 17 mL
	Ketamine IV (2 mg/kg)	NEAT (10 mg/mL)	85 mg	8.5 mL
	Fentanyl (1 – 2 microgram/kg)	Dilute to 10 microgram/mL	40 – 80 microgram	4 – 8 mL
	Morphine (0.1 mg/kg)	Dilute to 1 mg/mL	4.3 mg (Repeat PRN)	4.3 mL
	Paracetamol IV (15 mg/kg)	NEAT (10 mg/mL)	650 mg	65 mL
	Suxamethonium (2 mg/kg)	Dilute to 10 mg/mL	85 mg	8.5 mL
	Rocuronium (1 mg/kg)	NEAT (10 mg/mL)	45 mg	4.5 mL
	Atracurium (0.5 mg/kg)	NEAT (10 mg/mL)	21 mg	2.1 mL
	Sugammadex (16 mg/kg)	NEAT (100 mg/mL)	690 mg	6.9 mL
	Tranexamic Acid (15 mg/kg)	NEAT (100 mg/mL)	650 mg	6.5 mL
	10% Calcium Chloride (0.2 mL/kg)	NEAT	8.6 mL	8.6 mL

 INFUSIONS	Drug	To Make Up in 50 mL	Infusion Rate
	Propofol (4 – 12 mg/kg/hr)	NEAT (10 mg/mL)	17 – 51 mL/hr
	Morphine (10 – 40 microgram/kg/hr)	43 mg (1 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 20 microgram/kg/hr)
	Midazolam (60 – 240 microgram/kg/hr)	258 mg (6 mg/kg)	0.5 – 2 mL/hr (1 mL/hr = 120 microgram/kg/hr)
	Noradrenaline / Adrenaline (0.01 – 0.5 microgram/kg/min)	12.9 mg (0.3 mg/kg) in 5% Dextrose	0.1 – 5 mL/hr (1 mL/hr = 0.1 microgram/kg/min)