

# RSI DRUGS

## The Basics

STAR COURSE Foundation Lecture



# Aims

- For each drug we should understand:
  - What it does
  - How Quickly
  - How do I draw it up
  - How much do I give
  - Main Side effect.



# Anesthetic Drugs are just sedatives given faster.

- So an anesthetic drug is just a large dose of sedative given quickly, the dose pre estimated based on age, weight and stability.



# RSI Drugs are not Titrated they are Calculated

- Most sedatives are titrated
- RSI we “Bestimate” what will be safe and effective
- We give more if you are heavier
- And less if you are lighter
- And less if you are sicker!



# To pass a tube we need to paralyze the airway.

- We still need to relax the muscles after giving the sedative/ anesthetic drug.



# 1. Ketamine

	Anesthesia	Sedation
Action	Dissociative Sedation	
Dose	1.0 - 2.0mg/kg iv	Target 1.0mg Kg Initial 0.5mg/kg
Dilution	10mg/ml usually 200mg in 20mls	
Onset	45-60	
Side Effect	Tachycardia, Hypertension, Bronchodilation.	

**Dilution Danger!**



# 2. Etomidate

Anesthesia	
Action	Sedation
Dose	0.1-0.3mg/kg iv
Dilution	2mg/ml usually 20mg in 10 mls
Onset	30-45s
Side Effect	Myoclonus, Hypotension, Adrenal Suppression



# 3. Propofol

	Anesthesia	Sedation
Action	Sedation	
Dose	0.5 - 3 mg/kg iv	Target ~ 1.0mg Kg Initial 0.25mg/kg
Dilution	10mg/ml (1%) usually 200mg in 20mls	
Onset	45-60s	
Side Effect	Profound shock and apnoea	



# 4. Rocuronium

Anesthesia	
<b>Action</b>	Non depolarizing muscle relaxant
<b>Dose</b>	1.2 -1.5 (v.sick) mg/Kg
<b>Dilution</b>	10mg/ml usually 100mg in 10 mlx
<b>Onset</b>	45-75 s
<b>Side Effect</b>	tachycardia



# 5. Suxamethonium aka Succinylcholine

Anesthesia	
<b>Action</b>	Depolarizing muscle relaxant
<b>Dose</b>	1.5 - 2.0 (kids + v.sick) mg/Kg
<b>Dilution</b>	20mg ml, usually 200 mg in 10 mls
<b>Onset</b>	30-45s
<b>Side Effect</b>	bradycardia, hyperkalemia



# Contraindications to Suxamethonium/Succinylcholine

- muscular dystrophy or other skeletal myopathies (including critical illness myopathy)
- personal or family history of malignant hyperthermia
- hypersensitivity to Suxamethonium
- acute phase of injury following major burns, extensive denervation of skeletal muscle, or upper motor neuron injury
- [The risk of hyperkalemia in these patients increases over time and usually peaks at 7-10 days after the injury. The risk is dependent on the extent and location of the injury. The precise time of onset and the duration of the risk period are not known.]