# Magnesium

# **INDICATIONS**

- Shock refractory VF in the presence of possible hypomagnesaemia
- Ventricular tachyarrhythmias in the presence of possible hypomagnesaemia
- Torsades de pointes
- Seizures associated with eclampsia
- Acute severe asthma

# DOSE

## Cardiac

1-2g (2-4ml of 50% magnesium sulphate) over 1-2 minutes may be repeated after 10-15 minutes

50% magnesium sulphate produced in 10 ml vials containing 5g of magnesium i.e. 1g = 2ml

# Asthma

Single Infusion 2g in 50 ml 0.9% saline

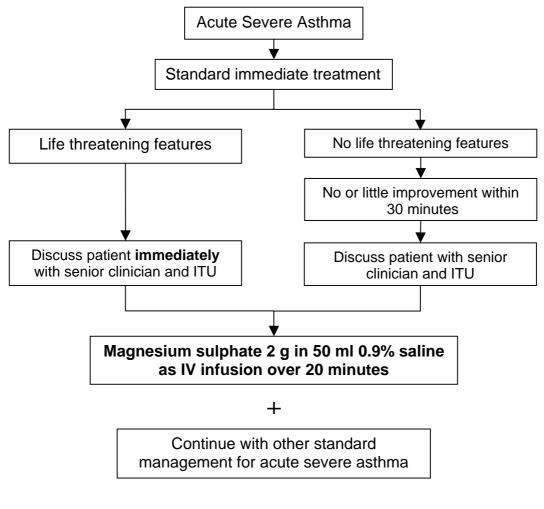
IV infusion over 20 minutes

Patients given Magnesium for asthma must not be discharged from A&E.

# Eclampsia

Loading dose	4g (8ml 50% magnesium) IV over 5-10 Minutes.
Infusion dose	<b>1</b> g/hour continued for 24h after last fit (add to 0.9% saline)

## RAH Respiratory Unit Magnesium sulphate treatment in acute severe asthma in adults



• 2 g magnesium sulphate = 4 ml of a 2 mmol/ml (or 50%) solution •

### • ONLY ONE DOSE OF MAGNESIUM SULPHATE SHOULD BE GIVEN •

#### Features of Acute Severe Asthma

- Peak flow rate 33 50% best or predicted
- Can't complete sentences in one breath
- $\bullet$  Respirations  $\geq 25$  breaths/min
- Pulse  $\geq$  110 beats/min

#### Life Threatening Features

- Peak flow rate ≤ 33% best or predicted
- SpO2 < 92%
- Silent chest, cyanosis, feeble respiratory effort
- Bradycardia, dysrhythmia, hypotension
- Exhaustion, confusion, coma

#### **Standard Immediate Treatment**

- Oxygen 40 60%.
- Salbutamol 5 mg via an oxygen-driven nebuliser; repeat every 15 30 minutes.
- Ipratropium bromide 0.5 mg via an oxygen-driven nebuliser; repeat every 15 30 minutes.
- Prednisolone tablets 40 mg or IV hydrocortisone 100 mg or both if very ill.

## Patients given Magnesium must not be discharged from A&E