Management of Hypomagnesaemia Flowchart

Magnesium serum concentration is 0.3 - 0.7 mmol/L and the patient is asymptomatic?

Magnesium serum concentration is <0.3 mmol/L or the patient is showing signs of hypomagnesaemia?

Will the patient tolerate or absorb oral magnesium supplements?

NO

YES

Oral magnesium supplements
(**N.B.** read notes below before prescribing)

Magnesium aspartate dihydrate 243 mg sachet (e.g. Magnaspartate®) (10 mmol magnesium per sachet):
1 -2 sachets daily in 50 ml - 200 ml water, tea or orange juice

Or

Magnesium glycerophosphate tablet (4 mmol magnesium per tablet):
3 - 6 tablets daily

- Renal impairment – Manufacturers contraindicate use if CrCl <30 ml/minute. Avoid, or reduce dose by 50% and use with caution.
- Monitor serum magnesium concentrations (daily if renal impairment).
- Reduce dose if diarrhoea occurs.

Intravenous magnesium supplementation
(**N.B.** read notes below before prescribing)

Magnesium sulphate 20mmol to 30mmol per day for up to 3 days.
Add 20 mmol (10 ml of magnesium sulphate 50%) to a 500 ml infusion bag of glucose 5% and infuse over 12 - 24 hours.

- Renal impairment – reduce dose by 50%.
- There may be clinical circumstances when a shorter duration infusion would be desirable; check with senior for advice.
- Monitor serum magnesium concentrations (daily if renal impairment). Blood sample should be taken from the opposite arm 2 hours after infusion has stopped.
- In some patients (e.g. colorectal patients) a 5 day infusion may be required to correct deficit. Discuss with senior if unsure of course duration.

N.B. Doses shown are suggested starting doses. Further advice is available from the Biochemistry Department.