

This guideline assumes patient has normal renal function.

Normal range: Mg^{2+} 0.7 – 1.05 mmol/L

Hypomagnesaemia: $Mg^{2+} < 0.7$ mmol/L

The underlying cause of hypomagnesaemia should be established before the commencement of treatment and a review of patient's medication may be required and if appropriate, medications may be stopped. Hypomagnesaemia often causes secondary hypocalcaemia, hypokalaemia and hyponatraemia. Therefore, correction of magnesium may aid the correction of other electrolytes.

REMEMBER: Always establish and treat the cause of hypomagnesaemia – don't just treat the biochemical imbalance.

❖ **Mild ($Mg^{2+} \geq 0.5$ mmol/L) and Asymptomatic Hypomagnesaemia :**

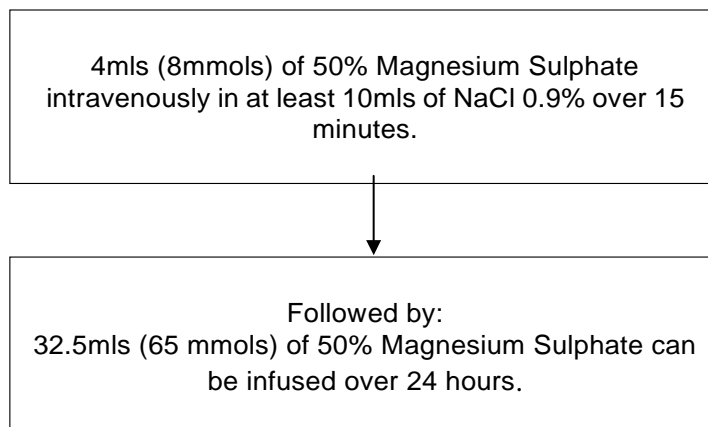
Oral Magnesium Aspartate (Magnaspartate) 10mmol – 20mmol magnesium daily. Which is provided by 1 sachet once or twice daily.

Magnesium Aspartate can be dissolved in 50ml- 200ml of water, tea or orange juice and should be taken immediately after preparation. The solution should be stirred until cloudy or transparent. In tea or orange the inactive particles will be visible. If diarrhoea occurs during treatment, dose should be reduced.

Magnesium aspartate dissolved in 200ml of water can be administered via gastric, duodenal and nasal feeding tubes.

Serum magnesium should be monitored on a daily basis. Owing to the fact that intracellular stores take a while to replete. Thus therapy should continue for two days after serum magnesium has normalised.

Severe ($Mg^{2+} < 0.5$ mmol/L) or Symptomatic Hypomagnesaemia:



- ❖ Magnesium level should be monitored daily.
- ❖ Note: Repletion of total body magnesium may take several days.
Normal serum magnesium may not indicate that full replacement has been achieved.
Thus therapy should continue for two days after serum magnesium has normalised.
- ❖ Check that serum potassium does not require correction.

Nursing Interventions:

- ◆ Four hourly observations
 - Temperature
 - Pulse
 - BP
 - Respirations
 - Oxygen saturations
 - More frequently if clinically indicated
- ◆ Cardiac monitoring should be performed in severe hypomagnesaemia

References:

BMJ Best Practice downloaded 17/6/19

<https://bestpractice.bmj.com/topics/en-gb/1137/urgent-considerations>

UpToDate downloaded 17/6/19

https://www.uptodate.com/contents/evaluation-and-treatment-of-hypomagnesemia?search=hypomagnesemia&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1