

Possible causes of Hypomagnesaemia

(Mg < 0.7 mmol/L)

Alcoholism

Multifactorial - increased GIT and urine loss and also decreased intake

Drugs

Loop Diuretics
Gentamicin
Cisplatin
Cyclosporine and Tacrolimus
Proton pump inhibitors (common cause)

Gastrointestinal disorders

Vomiting
Diarrhoea
Malabsorption

Renal loss

Hypercalcaemia
Renal tubular acidosis
Osmotic diuresis
Inherited tubular disorders

Specific Mg absorption defect in neonates

Endocrine

Diabetes mellitus (probably increased renal loss)
Hyperaldosteronism
Hypoparathyroidism
SIADH

Miscellaneous

Acute pancreatitis (sequestration)
Insulin administration (redistribution)
Hungry bone syndrome: postparathyroidectomy,
post-thyroidectomy

Note

If hypomagnesaemia is associated with a urinary excretion rate > 0.5 mmol/day, then renal wastage is indicated. Levels < 0.5 mmol/day suggest an extrarenal cause.