

Evaluation of Hypocalcaemia

Suggested scheme for evaluation of Hypocalcaemia

Possible causes

Further investigations

Hypoalbuminaemia

Correct for albumin*

* Corrected Ca = Total Ca – 0.02(40 – [Alb] g/L) mmol/L

Renal failure

Creatinine > 350 µmol/L

Hypoparathyroidism

Post-surgery

Idiopathic

Magnesium depletion

PO₄ increased

PTH decreased

Pseudohypoparathyroidism

PO₄ increased

PTH increased

Drug therapy

Anticonvulsants

Mithramycin

Calcitonin

Phosphates

Bisphosphonates

Clinical assessment

Vitamin D deficiency/ Malabsorption

PO₄ decreased

PTH increased

ALP increased

Malignancy

Tumour lysis

Osteoblastic metastases

Clinical assessment

Acute pancreatitis

Clinical assessment

Lipase

increased

Rhabdomyolysis

Serum CK increased

Clinical assessment

Evaluation

1. Correct for hypoalbuminaemia

2. Exclude

- Renal failure
- Acute pancreatitis
- Drug therapy
- Malignancy
- Rhabdomyolysis

3. Estimate serum Magnesium

4. Estimate serum PTH

5. Evaluate Vitamin D metabolism