

Evaluation of Hypocalcaemia

Suggested scheme for evaluation of Hypocalcaemia

Possible causes	Further investigations
Hypoalbuminaemia	Correct for albumin*
* Corrected Ca = Total Ca - 0.02(39.2 - [Alb] g/L) mmol/L	
Renal failure	Creatinine > 350 µmol/L
Hypoparathyroidism Post-surgery Idiopathic Magnesium depletion	PO ₄ increased PTH decreased
Pseudohypoparathyroidism	PO ₄ increased PTH increased
Drug therapy Anticonvulsants Mithramycin Calcitonin Phosphates Bisphosphonates	Clinical assessment
Vitamin D deficiency/Malabsorption	PO ₄ 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