

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	PO ₄ increased PTH decreased
Post-surgery Idiopathic Magnesium depletion	
Pseudohypoparathyroidism	PO ₄ increased PTH increased
Drug therapy	Clinical assessment
Anticonvulsants Mithramycin Calcitonin Phosphates Bisphosphonates	
Vitamin D deficiency/Malabsorption	PO ₄ decreased PTH increased ALP increased
Malignancy	Clinical assessment
Tumour lysis Osteoblastic metastases	
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