

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
Post-surgery	PTH decreased
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. Consider:

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

3. Estimate serum magnesium

4. Estimate serum PTH

5. Evaluate Vitamin D metabolism