

# Severe hypercalcemia in Parathyroid Adenoma and Multinodular Goiter

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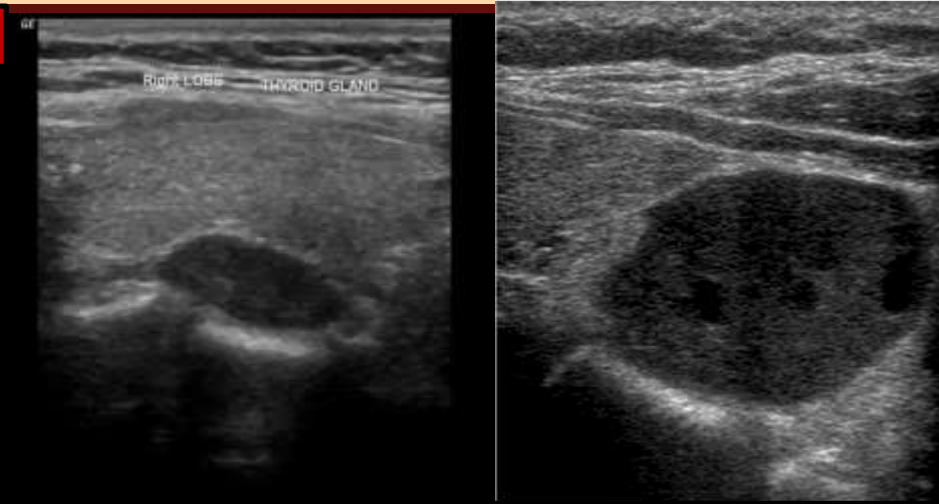
- Case Presentation**
- A 60 years old patient with constipation, agitation and vomiting
  - Background of hypertension

## Examination

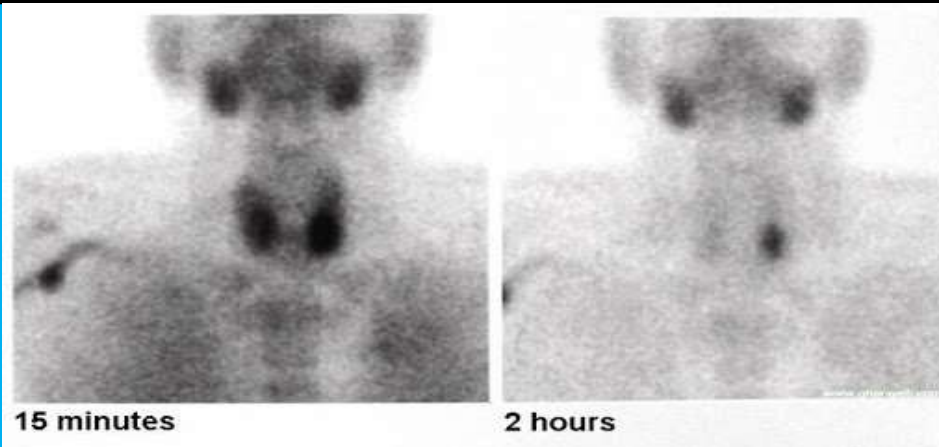
- Dehydrated and mild confusion
- Tachycardiac, Tachypneic and has low blood pressure.

## Investigations

- **Blood adjusted calcium:** 5.72 mmol/L
- Myeloma screen: Negative
- Thyroid stimulating hormone: 0.30 mIU/L
- **Serum Parathyroid hormone:** 2473 ng/L
- **Urine calcium:** 13.83 mmol/24hrs
  
- Chest Radiograph: Unremarkable
- Computed Tomography (CT) head: Normal
- **CT Thorax abdomen and Pelvis:** No malignancy identified
- **Ultrasound Thyroid:** Multinodular goiter and 4x2x1.7 cm mass at right tracheoesophageal groove
- **Parathyroid gland nuclear scan:** Right parathyroid adenoma



Ultrasound Imagings of Parathyroid adenoma(Internet)



Parathyroid Adenoma on Nuclear Scan(Internet)

## Treatment

- Intravenous fluids, loop diuretic, Pamidronate and Calcitonin
- Right side inferior parathyroidectomy
- **Biopsy Report:** Benign tumor, measuring 6.20g. No evidence of malignancy

## Outcome and Follow-up

- Post-operative hypocalcemia managed with calcium replacement

## Discussion

- Adenoma constitutes 85% of the cases of primary hyperparathyroidism
- Hypocalcemia and Hungary bone syndrome are major complications postoperatively that need follow-up