Severe Hypercalcaemia
Unusual presentation of Graves’ thyrotoxicosis

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Case Presentation

- 46-years-old woman
- 2 months history of
  - Thirst, Polydipsia, Polyuria
  - Constipation
  - 3-stones weight loss
  - Abdominal pain
- PMHx: Pulmonary embolism, Personality disorder, No thyroid disease
- FHx: No history of thyroid disease
- Drug Hx: Quetiapine, Lamotrigine, Lorazepam
  - No OTC medications, Off lithium for 5 years
- Clinically dry, anxious looking, talking gibberish
- HR-120, BP- 152/62, T-37.2, R-16, Sat 100% Air
- Systemic examination: NAD
- Goitre: firm, symmetrical, no nodules
- Palmar erythema
- No Eye signs

Working Diagnoses

Θ Thyroid Storm
Θ Hypercalcaemia ? Cause

Management

- Carbimazole, Porpanolol, IV Glucocorticoid were commenced
- Hydration with IV 0.9% NaCl
- IV Pamidronate
- Further investigations for cause of hypercalcaemia

Follow up

- Reviewed in clinic 8/52 after discharge
- Clinically well
- Serum Calcium level remained within normal range
- TFT had improved
- TRAb < U/L (<1)

Further Investigations

- Burch-Wartofsky score = 50: Suggestive of thyroid storm
  - Temperature 37.2 5
  - Delirium =30
  - Abdominal pain = 10
  - Tachycardia 120-129 bpm= 15

Case Progress

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<th>25 Feb</th>
<th>27 Feb</th>
<th>1 Mar</th>
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Diagnosis: Hypercalcaemia secondary to Graves’ thyrotoxicosis

Discussion

- Mild asymptomatic hypercalcaemia is common in hyperthyroidism
- One-fourth of patients with proven hyperthyroidism without increased parathyroid level, had hypercalcaemia
- Symptomatic hypercalcaemia is a rare presentation of hyperthyroidism
- Several case reports of thyrotoxicosis induced hypercalcaemia
- Serum calcium usually normalizes once hyperthyroidism has improved

References