When remedy becomes Toxin-rare cause of Hypercalcaemia

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Introduction

Hypercalcaemia is found in 5% hospital admissions and in 0.5% of the general population. There are wide variety of causes which could cause high calcium and this needs systematic approach.

We present the rare cause of hypercalcaemia encountered during inpatient stay which was resistant to treatment. It emphasized the importance of collateral information from the sources available to get more insight into management.

Investigations

<table>
<thead>
<tr>
<th>Adj calcium</th>
<th>3.41 mmol/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea</td>
<td>raised</td>
</tr>
<tr>
<td>Creatinine</td>
<td>raised</td>
</tr>
<tr>
<td>PTH</td>
<td>&lt;1.3 pmol/L</td>
</tr>
<tr>
<td>ACE</td>
<td>Normal</td>
</tr>
<tr>
<td>25-OH Vit D</td>
<td>383 nmol/L</td>
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<tr>
<td>1,25-OH Vit D</td>
<td>195pmol/L</td>
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Discussion

We were wondering if he is using over the counter additional Vitamin D due to underlying MS which was confirmed later on. His family admits patient taking colecaciferol 10,000 units daily with hope of remission with MS. He was started on high dose prednisolone 40 mg daily with careful monitoring of calcium and kidney function.

Management

He was investigated for non-PTH mediated hypercalcaemia having whole host of investigations. His serum ACE level were normal and there was no radiological evidence of granulomatous disease or malignancy. Due to rise in free light chains, Myeloma was one differential but later on ruled out by haematology.

His calcium remains high despite IV fluids and IV bisphosphonates.

He was found to have exceptionally high vitamin D level.

Conclusion

There are no consensus guidelines in management of vitamin D intoxication. Empirical steroids has been used on occasions. Fortunately our patient had responded to the treatment well and calcium normalised.

This case underlies importance of systematic approach in dealing with hypercalcaemia. This also underlies importance of history taking in good patient care.

**case summary**

Mr X was 79 year old gentleman with background of Multiple sclerosis admitted with feeling unwell. No history of weight loss. He denies any osmotic symptoms.

He had series various of Investigations and found to have hypercalcaemia with suppressed PTH and AKI.