SEVERE RECURRENT HYPERCALCAEMIA DUE TO MILK ALKALI SYNDROME AND IMMobilisation

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BACKGROUND

- Milk Alkali Syndrome, classically the triad of hypercalcaemia, metabolic alkalosis and renal failure,[1] is caused by excessive ingestion of calcium and absorbable alkali.
- Historically, it was prominent when large quantities of milk and bicarbonate were ingested simultaneously as treatment for peptic ulcer disease.[2]
- The incidence of Milk Alkali Syndrome significantly declined after the advent of conventional pharmacotherapy for peptic ulcer disease, which became routinely used in clinical practice.
- However, there has been a recrudescence of the disorder and it currently accounts for 12% of cases of hypercalcaemia, making it the third leading cause of hyperparathyroidism and malignancy in select groups of patients.[3,4]

CASE REPORT

- A 37 year old female presented via her GP with a six month history of several non-specific symptoms, corrected calcium of 3.44mmol/l, and acute kidney injury.
- Past medical history included bipolar disorder, fibromyalgia, juvenile idiopathic arthritis, spina bifida occulta, total hip replacement and lumbar spine fusion. Her only medication was an over-the-counter vitamin D supplement (400IU daily).
- Bloods are shown. A CT thorax-abdomen-pelvis was normal.
- Following treatment with IV normal saline, her calcium and AKI improved.

The patient was readmitted 3 days later with recurrence of symptoms and corrected calcium of 3.01mmol/L. She was treated with IV pamidronate and IV fluids.

- Upon further careful history taking, it was revealed that patient had been drinking 1 pint of milk per day for many years in addition to over the counter antacids.
- 1 pint of milk contains approximately 600 mg of calcium. Her hypercalcaemia was further exacerbated by immobility.[5]

- She was advised to stop taking excessive milk and antacids. Since discharge, her calcium levels have been in normal range.

- Our case report emphasises the importance of good history-taking in establishing the diagnosis of milk alkali syndrome.
- Although considered an uncommon cause of hypercalcaemia, our case illustrates it may go underdiagnosed in select patient populations with other contributing factors.
- Milk alkali syndrome may result in severe hypercalcaemia warranting admission[5] for treatment, including IV bisphosphonates.

REFERENCES