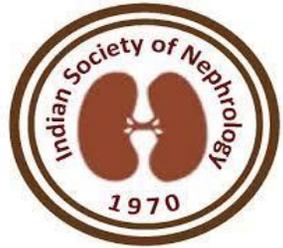


AN INTRIGUING CASE OF HYPERCALCEMIA : A CASE REPORT

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INTRODUCTION

- Vitamin D intoxication is rarely observed in clinical practice.
- It occurs due to inappropriate use of high doses of vitamin D supplements and causes hypercalcemia.
- Clinical manifestations are non-specific and identification may be difficult.

HISTORY



- A 38 years old male was admitted with complaints of fever 20 days, loss of weight and appetite for one month, dysuria for 2 weeks. He was treated for COVID-19 a month back.
- General examination was unremarkable, no lymphadenopathy was noted. Systemic examination was normal

LABS



- Anemia (Hb 8.8 g/dl), leucocytosis (13,260/cu.mm), hypercalcemia (calcium 14.2 g/dl), renal failure (creatinine 3.4 mg/dl)
- Urine analysis: proteinuria (3+), 19 pus cells. Urine culture yielded no growth
- Blood culture yielded Staphylococcus infection, sensitive antibiotics were started
- Started on intravenous hydration, furosemide, calcitonin for hypercalcemia.
- iPTH was low and vitamin D level was more than 100
- Patient revealed that he was given oral vitamin D tablets during treatment for COVID-19. Hypercalcemia and fever spikes persisted.
- No M band in serum protein electrophoresis, no lytic bone lesions visible in X rays
- CT chest showed old healed lesions, no mediastinal lymphadenopathy and ACE level was normal

DIAGNOSIS



- In view of persistent fever spikes, hypercalcemia and renal failure, a bone marrow biopsy was done. Bone marrow biopsy showed normocellular bone marrow with plasma cells 6%.
- Immunofixation electrophoresis was negative for monoclonal gammopathy. Injection denosumab was given. Repeat urine culture yielded E.coli and sensitive antibiotic was started.
- 1, 25 hydroxy Vitamin D was elevated (480 pmol/L).
- On further probing, patient revealed that he was given liquid medication orally one week prior to hospitalisation.
- After review of old records, the medication was found to be injection vitamin D3. He was given 30 ampoules of inj vitamin D3 (6 lakh IU) orally.
- His creatinine subsequently dropped to 1.4 and calcium to 11.6.

CONCLUSION



- Fever in this patient was due to infection. Presence of fever and other symptoms evaded the correct diagnosis.
- Awareness of this entity and detailed history taking with medication details can aid early diagnosis and treatment
- Vitamin D is lipophilic nature and stored in adipose tissue. It has a long half-life (2 months). Hence, hypercalcemia due to Vitamin D toxicity can severe and prolonged.
- Early treatment will prevent acute kidney.

REFERENCES



1. Bansal, R.K., Tyagi, P., Sharma, P. et al. Iatrogenic hypervitaminosis D as an unusual cause of persistent vomiting: a case report. J Med Case Reports 8, 74 (2014)
2. Pandita et al. Excess good can be Dangerous". A case series of iatrogenic symptomatic hypercalcemia due to hypervitaminosis D Clin Cases Miner Bone Metab. 2012 May-Aug; 9(2): 118-120