CORRESPONDENCE

Hypercalcemia Related Pancreatitis in a Patient with Multiple Myeloma

Joyita Sarkar¹ · Preethi Jeyaraman¹ · Rahul Naithani¹

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Dear Editor,

Hypercalcemia occurs in 30% of patients with malignancy. Most common cancers known to be associated with hypercalcemia include lung cancer, multiple myeloma and renal cell carcinoma. However pancreatitis related to hypercalcemia of malignancy has been rarely reported. This is surprising considering the frequent presentation of hypercalcemia in myeloma in 19% patients [1]. In the following report we describe such a presentation of a patient with multiple myeloma.

A 51 year old lady had presented with back pain and weakness of both legs associated with bladder involvement. She was found to have a D1 vertebral collapse and underwent spinal fixation following which she was on analgesics on an intermittent basis. She was suspected to have myeloma based on the MRI findings of diffusely altered marrow signal intensity. However, patient did not follow up and presented to us 2 months later with diffuse abdominal pain, obstipation and decreased urine output. Her blood investigations showed haemoglobin of 12.7 g/dL, white blood cell count of 7600 cells/cu mm, platelet count – 162,000 cells/cu mm. Serum urea was 94.8 mg/dL and serum creatinine was 4.4 mg/dL. She had hypercalcemia (14.07 mg/dL) with low PTH (2.3 pg/mL; normal—12 to 88 pg/mL) and normal Vitamin D3 (62.73 ng/mL). ECG showed a shortened QTc interval (340 ms). Serum lipase and amylase were elevated (2631 U/L and 765 U/L respectively). Plain CT abdomen showed bulky pancreas with peri-pancreatic stranding,

fascial thickening and mild ascites (CT severity index score was 2 depicting mild acute pancreatitis). There was no evidence of gall stone disease. Serum triglyceride levels was normal (132 mg/dL). She was started on intravenous fluids and analgesics for pancreatitis. Ileus resolved on day 3 of pancreatitis. She did not have any other complication of pancreatitis. Hypercalcemia was managed with Inj Calcitonin and Denosumab 120 mcg. In view of previous suspicion of myeloma due to the vertebral fracture, serum M band was done which was faintly positive. Serum albumin was 3.5 g/dL and serum globulin was 2.7 g/dL. Immuno-fixation revealed IgG lambda subtype and serum free light chain showed kappa of 18.6 mg/L, lambda of 766 mg/L with ratio of 0.024. Bone marrow aspiration and biopsy showed hypercellular marrow with 70% plasma cells. Serum lactate dehydrogenase was 159U/L (normal—98 to 192 U/L) and beta-2 microglobulin was ng/mL. Simultaneously, therapy for multiple myeloma was initiated with bortezomib 1.3 mg/m², cyclophosphamide 300 mg/m², and dexamethasone 40 mg (day 1–day 4) (CyBorD). Patient had non-oliguric renal failure without any need for renal replacement therapy. She was discharged on day 20 of pancreatitis after which weekly CyBorD regimen was continued. Post 2nd cycle CyBorD her creatinine normalised. Currently she has completed 3 cycles and is doing well. Repeat serum protein electrophoresis after 3 cycles shows negative M band and serum free kappa of 28.7 mg/L, lambda of 18.05 mg/L with ratio of 1.58 showing stringent complete response.

Most common etiology of hypercalcemia in patients with pancreatitis is primary hyperparathyroidism with incidence of 1.5% [2]. There are only 4 published reports of pancreatitis in myeloma patients with hypercalcemia [3–6]. Other malignancies have also been reported rarely to

✉ Preethi Jeyaraman
preethijeyaraman1@gmail.com

¹ Division of Hematology and Bone Marrow Transplant, Max Superspeciality Hospital, Saket, New Delhi, Delhi, India

produce pancreatitis due to hypercalcemia including breast cancer and transitional renal cell carcinoma.

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