A CASE OF REFRACTORY HYPERCALCEMIA-DIFFUSE LARGE B CELL LYMPHOMA

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ABSTRACT
Patients with DLBCL may have associated hypercalcemia but it is rare at the onset of disease. Here we report a 53 year old lady with no known comorbidities who presented with generalised weakness and fever of 3 weeks duration. Blood tests revealed hypercalcemia P/V examination revealed mass from which biopsy was taken which came out to be diffuse large B cell lymphoma. Patient was treated symptomatically for hypercalcemia with vigorous hydration and haemodialysis. Her general condition improved and she was referred to higher centre for treatment of her malignancy.

KEYWORDS: Refractory hypercalcemia, Diffuse large B cell Lymphoma, Gynaecological Malignancy.

CASE PRESENTATION
INTRODUCTION
Hypercalcemia may occur in patients with both solid tumours and hematologic malignancies. The most common malignancy associated with hypercalcemia are breast, renal, lung cancer and multiple myeloma. Patients with hypercalcemia of malignancy often have very poor prognosis. Here, we report a 53 year old female with no known comorbidities presenting as hypercalcemia with presence of DLBCL of vagina.

CASE REPORT
53 year old female with no known comorbidities presented with fever and generalised weakness, nocturnal backache, intermittent episodes of abdominal pain and vomiting of 3 weeks duration. She also gives history of unmeasured weight loss in past 6 months. Examination revealed pallor and tenderness in mid-thoracic region of spine. There was no evidence of peripheral lymph node enlargement or hepatosplenomegaly. P/V examination showed 2 mobile nodules posteriorly in pouch of douglas. Per speculum examination showed friable mass arising from lateral vaginal wall from which biopsy was taken.

Investigations revealed normocytic normochromic anaemia, elevated creatinine values along with hypercalcemia. There was no evidence of pancytopenia, total count and platelets were within normal limits.

Fig 1: Normocytic Normochromic anaemia with neutrophilic leucocytosis and shift to left.

Peripheral smear examination also revealed normocytic normochromic anaemia with neutrophilic leucocytosis and shift to left. No leucoerythroblastic blood picture. Further workup showed low parathyroid hormone levels, elevated PTHrp levels with depressed 25 hydroxy Vitamin D levels. Imaging with ultra sonogram revealed a hypechoic lesion with vascularity inferior and close to external os of cervix of uterus-possibility of malignancy. Biopsy from lesion showed poorly differentiated high grade diffuse large B cell lymphoma of germinal center subtype.
Patient was diagnosed to have hypercalcemia secondary to DLBCL. Hypercalcemia was treated with vigorous hydration, calcitonin injections and 3 rounds of hemodialysis. Due to financial concerns, she opted to continue further treatment in government setup. She was started on neoadjuvant chemotherapy to be followed by surgery. However, her disease didn’t respond well to chemotherapy and she ultimately died from complications due to malignancy.

DISCUSSION
Major mechanism of hypercalcemia of malignancy is tumour secretion of parathyroid hormone related peptide; osteolytic metastasis with local release of cytokines or tumour production of 1, 25 dihydroxy vitamin D. In patients with tumoral production of 1, 25 dihydroxy vitamin D, hypercalcemia is a result of combination of increased calcium absorption and bone resorption. Less than 1% malignancy related hypercalcemia is due to tumoral production of calcitriol, usually seen in lymphomas. Hypercalcemia presents late in course of malignancy and presents a poor prognosis. In malignancy associated hypercalcemia, the disease is usually not occult; rather symptoms of malignancy bring patient to physician and hypercalcemia is detected during evaluation. In such patients duration between detection of hypercalcemia and death especially without vigorous treatment is often < 6 months. Accordingly, if an asymptomatic individual has had hypercalcemia or some other manifestation of hypercalcemia, such as renal stones for >1 or 2 years, it is unlikely that malignancy is the cause. Although, hypercalcemia is fairly common paraneoplastic syndrome, its occurrence in gynaecological malignancies is rare. Patients with DLBCL occasionally develop hypercalcemia but hypercalcemia at the onset of disease is uncommon. Hence, here we report a rare case of humoral hypercalcemia occurring as paraneoplastic syndrome in setting of a high grade diffuse large B cell lymphoma of vagina.

CONCLUSIONS
Malignancies of various etiologies are increasingly recognised as cause for humoral hypercalcemia. Hence it should be an important differential in females with hypercalcemia and abdominal symptoms.

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REFERENCES