Case Report:

ATYPICAL CASE OF MULTIPLE MYELOMA PRESENTING WITH ANEMIA AND NEPHROTIC RANGE PROTINURIA

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Abstract:

Multiple myeloma represents a malignant proliferation of plasma cells derived from a single clone. The tumor, its products and the host response to it results in a number of organ dysfunction and symptoms. 40 year old male with no known co-morbidities was admitted with complaints of loss of weight since one year (8kgs), easy fatigability since one week. There was no history of back pain or bone pain . He was conscious, well oriented, moderately built and poorly nourished with BMI of 18.4 kg/m^2 vital signs were stable. Pallor was present; there was no evidence of edema or lymphadenopathy. Systemic examination was normal. This is a rare case of Multiple Myeloma presenting at 40 years of age with atypical complaints with Dimorphic anemia and Nephrotic range proteinuria (Minimal change disease found in less than 1% of total myeloma population)

Case report:

Herewith we reported case of , 40 year old male with no known co-morbidities was admitted with complaints of loss of weight since one year (8kgs), easy fatigability since one week. There was no history of back pain or bone pain . He was conscious, well oriented, moderately built and poorly nourished with BMI of 18.4 kg/m^2 vital signs were stable. Pallor was present; there was no evidence of edema or lymphadenopathy. Systemic examination was normal.

Blood investigations revealed Hemoglobin of 7.5 g/dl, ESR : 48 mm 1^{st} hr, other investigations were unremarkable with normal albumin, A/G ratio, Renal function test, electrolytes, calcium, lipid profile. Urine routine showed proteinuria of 4+, which was quantified by 24 hour urine protein, which revealed Nephrotic range proteinuria of 6.3g/day.

USG abdomen showed normal sized kidneys with no other organomegaly. ECG and ECHO were normal.

Anemia workup was done which showed Dimorphic anemia, there was no evidence of blood loss or hemolysis. Patient was supplemented with vitamin B12 and folic acid for 5 days, however there was no improvement in reticulocyte count, hence Bone marrow aspiration and biopsy was done which showed elevated plasma cells (90%) which was suggestive of Multiple Myeloma(fig 1). Serum electrophoresis was normal and Bence jones proteins were negative. X ray of skull revealed lytic lesions.(fig 2)

Renal biopsy was done as cause for proteinuria was not known which showed features suggestive of Minimal change disease. Glomerular trufts negative for granular deposits. Congo red stain was negative for amyloid.

Discussion:

Multiple Myeloma represents a malignant proliferation of plasma cells. Median age of presentation is 70 years and is uncommon below 40 years of age[1]. Bone pain is the most common presenting complaint. Normocytic

normochromic anemia occurs in 60-80% of the cases of myeloma[2]. Common renal biopsy finding in myeloma is myeloma cast nephropathy (33%), monoclonal immunoglobulin deposition disease (22%), Amyloidosis (21%) Minimal change disease in multiple myeloma is very rare finding accounting for less than 1% of the cases[3].

Conclusion:

This is a rare case of Multiple Myeloma presenting at 40 years of age with atypical complaints with Dimorphic anemia and Nephrotic range proteinuria (Minimal change disease found in less than 1% of total myeloma population)

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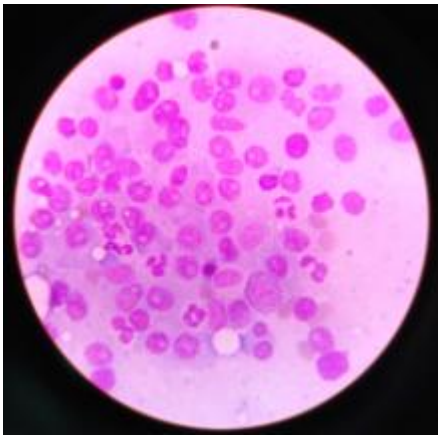

FIGURE 1: Showing multiple plasma cells and plasma blasts (100x)

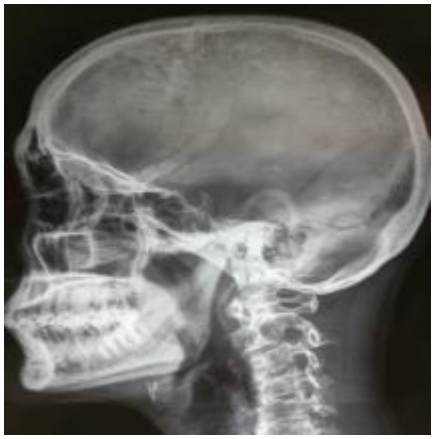

FIGURE 2 : Skull X ray showing lytic lesions

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1) Costello, C.L., 2013. Multiple Myeloma In Patients Under 40 Years Old Is Associated With High-Risk Features and Worse Outcomes. Blood Nov 2013, 122 (21) 5359;
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3) Nasr SH, Valeri AM, Sethi S, Fidler ME, Cornell LD, Gertz MA, Lacy M, Dispenzieri A, Rajkumar SV, Kyle RA, Leung N. Clinicopathologic correlations in multiple myeloma: a case series of 190 patients with kidney biopsies. American Journal of Kidney Diseases. 2012 Jun 1;59(6):786-94.