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A DIAGNOSIS OF PLASMACYTOMA THAT TURNED OUT TO BE MULTIPLE MYELOMA

Haematology

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ABSTRACT

Plasmacytoma is a tumor of plasma cells of bone or soft tissue that can occur anywhere in the body with or without evidence of systemic disease. It can progress to multiple myeloma if not evaluated and appropriately managed(1, 4).

KEYWORDS

Multiple myeloma, Plasmascytoma, Bence Jones Protein, Myeloma cells

INTRODUCTION-

Multiple myeloma is a tumor of plasma cells. **Plasmacytoma** may progress to multiple myeloma over 2-3 years. Plasmacytoma is a localized bone disease and is further differentiated from multiple myeloma by the presence of CRABS (hypercalcemia, renal failure, anemia, bone disease), multiple lytic bone lesions, end-organ damage, and serum or urinary monoclonal proteins.(4)

Case-

Zameela Bano, 65 years female, had pain at right femur since 2 years for which she was provided with analgesics and other anti-inflammatory medications. After 2 years , the patient suffered from fracture right femur and she had associated complaints of bone pains, increased urinary frequency , for which her clinician diagnosed her to be suffering from plasmacytoma and advised her to undergo routine blood examination and bone marrow aspiration.

Fig- Fracture Right Femur

On examination=

- General blood picture= Red Blood Cells are predominantly normocytic normochromic , Total Leukocyte Count is slightly raised , Platelet count is adequate.
- Bone marrow aspiration examination=

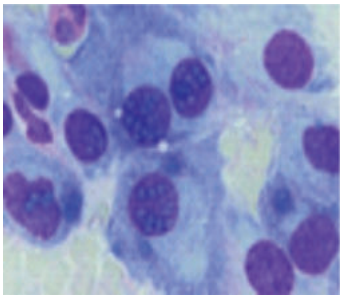

FIG- Dutcher Bodies (Intra- nuclear inclusions in Multiple Myeloma)

Site-posterior superior iliac spine , cellularity-hypercellular for age ; myeloid: erythroid ratio- cannot be assessed as bone marrow is infiltrated by myeloma cells (26%). **Myeloma cells**- these cells show high nucleo-cytoplasmic ratio, having central to eccentrically placed nuclei. Some of them show prominent nucleoli. At places myeloma cells are seen with intranuclear inclusions. Myeloid series-shows normal count and maturation. Erythroid series- shows normal count and maturation. Megakaryocytes-mildly suppressed and normal in morphology.

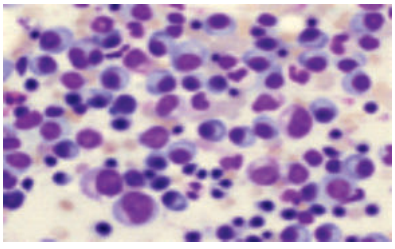

FIG- Plasma cells in Multiple Myeloma

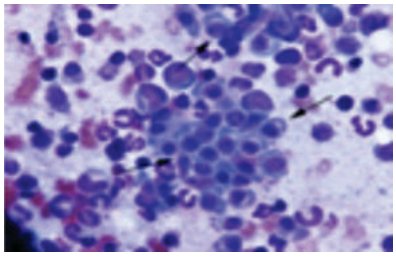

Fig- Bence Jones Protein

- Urine examination= **Bence Jones Protein** present.
- Serum electrophoresis=

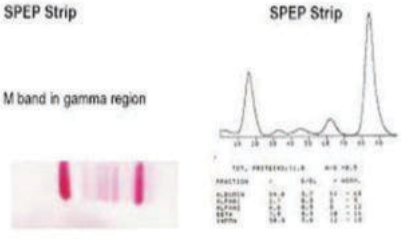

FIG- Showing M- spike in Beta2 region.

DISCUSSION-

(1) As per Holland, Finberg et al , forty-six cases of solitary plasmacytoma were reviewed for response to radiation and progression to multiple myeloma. Cases were classified as solitary plasmacytomas of bone (SPB) (32 cases) or extramedullary plasmacytomas (EP) (14 cases). This study supports the idea of Extramedullary Plasmacytomas (EP) having a lower incidence of conversion to myeloma and Solitary Plasmacytomas of Bone (SPB) more likely to be multiple myeloma in evolution. (2) As per, Ohata and kawahara et al, presented the case of a 63-year-old man who fulfilled the international myeloma working group criteria of skull plasmacytoma with minimal marrow involvement that rapidly

progressed to multiple myeloma. Transition to multiple myeloma should always be considered in plasmacytoma.

Impression–

Morphological features of bone marrow , detection of Bence Jones Protein in urine and M-spike in serum electrophoresis are suggestive of- **Multiple Myeloma.**

CONCLUSION-

1. Awareness of this initial presentation of multiple myeloma is important.
2. Plasmacytoma may evolve to multiple myeloma.

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