"MAST CELL LEUKEMIA- RARE CASE REPORTED"

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ABSTRACT:

***INTRODUCTION*:** Mast cell leukemia is a rare and aggressive clonal disorder of mast cells & their precursor cells. Systemic mastocytosis clinical course ranging from cutaneous mastocytosis, indolent disease, mast leukaemia and multisystem involvement.

***CASE PRESENTATION*:** 14 Y/M presented with skin coloured plaque present over whole body with itching. On histopathological evaluation of skin lesion cutaneous mastocytosis was diagnosed. Further evaluation for systemic involvement by bone marrow aspiration was carried out, which shows hypercellular marrow for age, erythropoiesis and megakaryopoiesis within normal limits. The differential count revealed 70% of all nucleated cells were mast cells, with many large aggregates of >15% cells and 20% atypical mast cells seen as suggestive of MAST CELL LEUKEMIA (ALEUKEMIC LEUKEMIA) S.trptase level >200ng/ml.

RESULTS: The presence of the major criteria-bone marrow at least 20% atypical immature mast cell with least ≥15 multifocal dense Mast cells in bone marrow or extracutaneous organ, in addition to at least one minor criterion: 1) presence of atypical morphology in more than 25% Bone marrow or extracellular mast cells 2) Serum tryptase>20ng/ml. 3) Bone marrow, blood or extracutaneous organs: (a) CD2 and/or CD25 positive (b) Detection of KIT mutation at codon 816.

CONCLUSION: Considering characteristic bone marrow feature, and with biochemical and radiological investigation mast cell leukemia (Aleukemic leukemia) was diagnosed which helping clinicians to plan further management.

KEYWORDS: Mast cell leukemia, Serum tryptase.