CASE REPORT

JUVENILE CHRONIC MYELOID LEUKEMIA

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Two cases of Juvenile Chronic Myeloid Leukemia (CML) are reported. The commonest age of CML is fourth and fifth decades of life, the disease is rare in children specially below the age of ten years. We have found two cases of Juvenile CML, one aged 1 year and other 8 years old. These cases were referred to us from Women and Children Hospital, Abbottabad.

CASE NO. 1:

A 13 months old male child presented with complaints of progressive abdominal distention, pallor and fever off and on for the last 4 months. He had a large spleen 6 cm below subcostal margin, liver was just palpable and had multiple small, non-tender mobile cervical lymph nodes. He was anaemic and emaciated. Blood examination revealed, Hb=8.4 g/dl TLC 138,600 mm'3, P=26%, L=18%, Myelocytes = 30%, Promyelocytes = 06%, Myeloblasts = 20%, Platelets = 80,000 mm'3. Occasional normoblasts were also present, LAP was 20. Bone marrow was hypercellular, with hyperplastic myelopoiesis, and myeloblasts were 20%.

CASE NO. 2:

A male child of 8 years presented with progressive abdominal distention, pallor and fever off and on for the last 2 months. On clinical examination the child was severely anaemic, spleen was 12cm enlarged, liver was just palpable and few small non tender mobile cervical lymph nodes were present. Blood examination showed Hb = 5.8 g/dl, TLC = 199,500 mm'3, P=20%, L: 18%, Mono = 01%, E= 01%, Myeloblasts = 10% myelocytes 30%, band forms = 20%, platelet 70,000 mm'3 LAP was 25. Bone marrow was very cellular, with hyperplastic myelopoiesis and 15% myeloblasts were present.

DISCUSSION:

Both the reported cases were of age below ten years having severe anaemia, marked splenomegaly, cervical lymphadenopathy and mild hepatomegaly. Blood and bone marrow findings were typical in both cases. Follow up of the cases was not possible as these cases did not report back. In Juvenile CML, LAP is usually slightly decreased or even in normal range in contrast to adult type where LAP score is usually zero. Foetal Hb level is characteristically raised. Juvenile CML also differs from adult type in cytogenetic examination of leukemic cells which usually, shows a normal karyotype where as 90% of adult CML have Ph' chromosome. This disease responds poorly to chemotherapeutic drugs normally used for treatment of CML. However, temporary control may be

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achieved with more vigorous chemotherapy used for AML.

The ideal treatment remains the bone marrow transplantation if a suitable donor and financial conditions are met with.

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