Medical Oncology

90. Clinical Profile and Treatment Outcome of AML: A Single Centre Experience

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Objective: To study the clinical profile and treatment outcome of acute myeloid leukemia patients in a newly upcoming single centre.

Methodology: A total of 23 patients were diagnosed to have AML, including one with extramedullary myeloid cell tumour at Asian Institute of Oncology at SL Raheja Hospital from January 2003 to June 2004. A detailed analysis of clinical profile and treatment outcome using IOSG protocol was done.

Summary of Results: Out of 23, 22 were analyzable. Male to female ratio was 3:1, the age range was 2-65 years. Fifty percent of patients presented with fever, followed by bleeding in 31.8%, gum hypertrophy in 20%, Forty percent had patechiae, hepatosplenomegaly in 27.2% and subcutaneous nodule in 4.54% of patients. Fifty percent of patients are alive in remission, 9% expired during induction due to febrile neutropenia with septicemia, 18.28% died during consolidation, 22.72% died due to relapse on follow up.

Conclusion: Our results are comparative to other centers. Use of more effective induction protocols to achieve higher CR rates and aggressive consolidation chemotherapy may be possible areas of improvement in future studies.

686. Clinical and Hematological Response to Imatinib Mesylate Versus Hydroxyurea in Chronic Myeloid Leukaemia

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A study was conducted in 30 patients of chronic phase CML admitted in Pt. BD Sharma, PGIMS, Rohtak. 15 patients were treated with hydroxyurea and 15 patients with imatinib mesylate in standard doses and patients were followed upto 6 months. Patients were observed for general signs and symptoms and hematological response was assessed by Hb, TLC, platelet counts, blasts in peripheral blood film and bone marrow. The toxic effect of the drugs were also observed. Of 30 patients 14 patients were males and 16 were females, their age varied from 15 years to 70 years (mean age = 37.4 years). All the patients except two treated with imatinib mesylate responded to chemotherapy clinically and hematologically. Of patients treated with hydroxyurea only 10 out to 15 responded to chemotherapy. Both the drugs were well tolerated. A few side effects to imatinib mesylate were also observed like bony pains in 3, diarrhea in 1, gastritis in 3 and fluid retention in 1 patient. Hydroxyurea produced bleeding gums in 2, gastritis in 1 and increased pigmentation of skin in 1 patient. Patient on imatinib therapy responded in 3-4 weeks time while on hydroxyurea therapy responded in two weeks. The study demonstrates the superiority of imatinib therapy to hydroxyurea therapy in patients of chronic phase CML although it took longer time to produce remission in these patients.

687. Alterations in Lipid Profile in Patients of CML Before and After Chemotherapy

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30 patients of CML admitted at PGIMS, Rohtak were studied for their lipid profile that included estimation of serum cholesterol, serum triglyceride, HDL-C, LDL-C and VLDL-C before and after chemotherapy of CML patients in chronic phase.

Material and Methods: The total serum cholesterol and serum triglycerides were estimated by enzymatic method. HDL-C was estimated by precipitation method and VLDL and LDL-C were calculated by Friedward's formula.

Observations:

i. Cholesterol: Mean cholesterol level in CML patients at presentation was 149.96 mg/dl that increased to 182.96 mg/dl after chemotherapy.

ii. Serum triglycerides: Serum triglycerides increased to 133.3 mg/dl from mean level of 130.2 mg/dl after chemotherapy.

iii. HDL-C increased from 36.10 to 42.6 mg/dl after chemotherapy.

iv. LDL-C; LDL-C increased after chemotherapy to 113.20 mg/dl from mean level of 130.2 mg/dl after chemotherapy.

v. Mean VLDL-C level at presentation was 87.86 mg/dl which increased to 27.10 mg/dl.

vi. After follow up of 6 months, serum cholesterol increased to 200.06 mg/dl, serum triglyceride increased to 131.90 mg/dl, HDL-C increased to 42.66 mg/dl, LDL-C increased to 113.20 mg/dl and VLDL-C increased to 27.10 mg/dl.

vii. TLC correlated inversely with total cholesterol.

viii. An inverse correlation of spleen size with serum cholesterol, HDL-C and LDL-C was observed. As the size of spleen increased, the values of serum cholesterol, HDL-C and LDL-C decreased.

Conclusion: The results of the present study clearly demonstrates that significant alterations occur in serum lipid and lipoprotein levels in patients of CML. Haematological remission in CML is associated with significant increase in cholesterol, HDL-C, a LDL-C levels. Low levels of lipid and lipoprotein are associated with poor prognosis of the disease.
702. A New Approach to The Treatment of Chronic Myeloid Leukemia - Imatinib

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Objectives: To evaluate the response of CML to Imatinib therapy.

Methodology: It is a pro-retrospective study conducted over a period of one year in the Meenakshi Mission Hospital and Research Centre, Mumbai. Totally six patients were included. Those in accelerated phase of CML were treated with 600 mg per day of Imatinib, while those in chronic phase were treated with 400 mg per day. Each patient was clinically and hematologically assessed before starting and after 3 months of treatment. PCR for the bcr/abl gene was done in three patients.

Note: Imatinib is a tyrosine kinase inhibitor, while the bcr/abl translocation in CML forms abnormal tyrosine kinase. Hence Imatinib acts at "grassroot" level.

Summary of results: 1. All the patients had hematological remission. 2. Spleen size decreased within one month of therapy. 3. Cytological remission was seen in 1 out of 3 patients.

Conclusions: Imatinib given in recommended doses to CML patients brings near complete hematological remission with cytological remission. It brings about the possibilities in achieving "near cure", especially in resource restricted settings like ours where we are not in a situation of providing the only known curative therapy for CML - Stem cell transplantation.

*Adjudged Best Papers and got an award of Rs. 1000/- each from Chairman Scientific Committee, Diamond APICON 2005.