

ATLL-Clinical and Laboratory Features and Treatment

Adult T Cell leukaemia/lymphoma (ATLL) is caused by HTLV-1 infection. It is seen in about 5% of persons infected before the age of 20 years. It is characterized by a highly aggressive disease course with death occurring within a few months of diagnosis in persons with acute and lymphoma types of ATLL. The molecular basis of the disease involves expression of anti-apoptotic proteins, disruption of cell cycle regulators and induction of angiogenesis. These factors contribute to the invasiveness and extravasation of malignant cells. This mature T cell non-Hodgkin's lymphoma was the commonest type of non-Hodgkin's lymphoma seen in Jamaica (1.2:1) between 1999 and 2004.

Development of this lymphoma occurs earlier than in developed countries with most patients being acute or lymphoma types at presentation. Hypercalcaemia, lymphadenopathy and organ enlargement are prominent features but despite leukaemia, haemoglobin and platelet counts are preserved. These leukaemic cells show classic features by flow cytometric analysis. Treatment has evolved from standard chemotherapy, which is associated with poor survival, to the use of biologic agents, monoclonal antibodies, stem cell transplantation and angiogenesis inhibitors. Death usually results from progressive disease, metabolic derangement and infections. Management of this disease must focus on preventive strategies, enhancing host immunity and targeted therapies.

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