CORE DIAGNOSTICS[™]

DISCUSSION:

Mantle cell lymphoma (MCL), is relatively an uncommon type of malignant lymphoma, seen in 6% to 10% of all non-Hodgkin lymphoma in adults, presenting at a median age of 60-65 years. It is an aggressive lymphoma which has a median survival of 5 to 7 years. In the vast majority of cases, the tumor is characterized by an aggressive course and at the time of diagnosis, disseminated lesions of lymphatic and extranodal organs. The incidence of bone marrow damage and leukemization of MCL is reported in 20–80% of cases.

The most important pathogenetic stage of MCL development is translocation of genes encoding cyclin D1 (CCND1) and heavy chains of immunoglobulins - t(11; 14)(q13;q32). The other common abnormalities seen are 3q deletion, Monosomy 9, 9q deletion, TP53/17p deletion.

We report this case as mantle cell lymphoma transformation into B cell lymphoblastic leukemia is rarely documented. To the best of our knowledge this is the third reported case of such transformation. Flow cytometry analysis of this case showed CD103 positivity, which to the best of our knowledge has never been reported before in a case of B cell ALL.ATM gene mutation is studied to have poor prognosis in Mantle cell lymphoma and is also reported mutation in adult B cell acute lymphoblastic leukemia

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