

AN UNUSUAL CO EXISTENCE OF HEMATOLOGICAL MALIGNANCY AND AVASCULAR NECROSIS IN PREVIOUSLY DIAGNOSED YOUNG HB E BETA THALASSEMIA PATIENT

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β -thalassemia is a genetic deficiency in the synthesis of α -globin chains, causes hemolysis and ineffective hematopoiesis which leads to chronic anaemia. Currently available proper care and appropriate treatment strategies have increased life expectancy and quality of life in patients suffering from α -thalassemia major. The prolonged life span increases the possibility of other diseases and co-morbidity. such malignancies may occur, possibly due to the iron-overload-induced oxidative stress in bone marrow microenvironment, and the increased hematopoietic drive. Again, Avascular Necrosis (AVN) of the head of femur commonly occurs in haematological disorders associated with thrombosis. Sickle cell disease is traditionally associated with AVN. The occurrence of osteonecrosis of femoral head in thalassaemia is rare and only limited case reports are available, which only reported in transfusion dependent Thalassemia. In this study we report the case of a patient affected by Hb E β -Thalassemia with Chronic Myeloid Leukaemia with Avascular necrosis of the left hip. We carried out a careful revision of the current literature on the occurrence of hematological malignancies and osteonecrosis in β -thalassemia patients. CML and AVN occurrence in β -thalassemia patients has been very rarely reported. A more detailed evaluation should have been carried out to look for other contributory factors. Thus, this article highlights the rarity of association of avascular necrosis of femoral head in children, CML and thalassaemia and the importance of early clinical suspicion. Further research is needed to shed light in the complex Biology of these diseases to improve clinical improvement of this population.

Keywords: Hematological malignancy, Avascular Necrosis , HB E beta Thalassemia

Date received: 08.05.2024

Date of acceptance: 19.05.2024

DOI: <https://doi.org/10.3329/bjm.v35i20.73474>

Citation: Monsur S. An unusual co existence of Hematological malignancy and Avascular Necrosis in previously diagnosed young HB E beta Thalassemia patient. *Bangladesh J Medicine* 2024; Vol. 35, No. 2, Supplementation: 179.