LETTER TO THE EDITOR

Haemophagocytosis in a Patient with Diffuse Large B Cell Lymphoma

Izza Hussain and Natasha Ali*

Department of Pathology and Microbiology/Oncology, The Aga Khan University Hospital, Stadium road 74800, P.O. Box 3500, Karachi, Pakistan

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DEAR EDITOR,

We report a case of a bone marrow biopsy specimen of a patient with history of weakness and bone pains since approximately three months. Past history was significant for blood and blood product transfusion. Examination findings revealed pallor with bilateral cervical and axillarylymphadenopathy. He had left sided facial swelling. Biopsy of facial mass was consistent with Diffuse Large B Cell Non-Hodgkin's Lymphoma. He was advised for bone marrow examination as part of staging. Complete blood counts performed with bone marrow showed Hb: 9.6 gm/dl, Hct: 29.0 %, MCV: 87.9 Fl, MCH: 29.1 PG, WBC: 14.4 $x10^{9}/L$, ANC: 9.9 x $10^{9}/L$ and Platelets: 109 x $10^{9}/L$. Peripheral blood film showed dimorphic blood picture with anisocvtosis. poikilocytosis, dysplastic neutrophils. occasional metamyelocytes and few large platelets. Bone marrow aspirate was a cellular specimen showing numerous histiocytes and prominent areas of haemophagocytosis with a few showing panphagocytosis. Bone trephine showed normal cellularity for age with prominent increase in histiocytes. Although there was no evidence of involvement of bone marrow with underlying lymphoma in the sections examined, the panphagocytosis in the bone marrow was probably related to the underlying lymphoma. Malignant histiocytosis was first described by Rappaport as asystemic, progressive, invasive proliferation of morphologically atypical histiocytes and their precursors [1]. More appropriately, now it is viewed as a syndrome that can result from a variety of hematological malignancies [2]. Haemophagocytosis in bone marrow aspirate has been reported previously. Janka et al. in 1998 reported hemophagocytic syndrome associated with DLBCL exclusively in patients from Asian countries [3]. Takeshita M et al. [4] reported a series of 19 patients with malignant histiocytosis and/or malignant lymphoma (ML) with concurrent hemophagocytic syndrome. Two of the patients had an underlying B-cell lymphoma. Erythrophagocytosis was more profound in this series. Fig. (1A-C) is showing prominent haemophagocytosis.

^{*}Address correspondence to this author at the Department of Pathology and Microbiology/Oncology, The Aga Khan University Hospital, Stadium road 74800, P.O. Box 3500, Karachi, Pakistan; Tel: +9221-34861306; Fax: +9221-34934294; E-mail: natasha.ali@aku.edu



Fig. (1). (A-C) Showing areas with panhaemophagocytosis.

AUTHORS CONTRIBUTION

Izza Hussain: took pictures, drafted manuscript.

Natasha Ali: drafted manuscript, critically reviewed the manuscript and submitted it.

CONFLICT OF INTEREST

The authors confirm that this article content has no conflicts of interest.

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REFERENCES

- Rappaport, H. Tumors of the hematopoietic system. In: Atlas of [1] Tumor Pathology, Section III, Fascicle 8. US Armed Forces Institute of Pathology, Washington, DC. 1966; pp. 49-63.
- [2] Warnke RA, Weiss LM, Chan JKC, Cleary ML, Dorfman RF. Tumors of the lymph nodes and spleen: so-called malignant histiocytosis. In: Atlas of Tumor Pathology, Third Series, Fascicle 14. US Armed Forces Institute of Pathology, Washington, DC. 1995a; pp. 371-5. Janka G, Imashuku S, Elinder G, Schneider M, Henter JI.
- [3] Infection- and malignancy-associated hemophagocyticsyndromes. Hematol Oncol Clin North Am 1998; 12: 435-44.
- [4] Takeshita M1, Kikuchi M, Ohshima K, et al. Bone marrow findings in malignant histiocytosis and/or malignant lymphoma with concurrent hemophagocytic syndrome. Leuk Lymphoma 1993; 12(1-2): 79-89.