Histiocytic Sarcoma Presenting As Nodular Skin Lesion on the Anterior Chest In a 38-Year-Old Woman: A Case Report

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INTRODUCTION

Histiocytic sarcoma is extremely rare accounting for less than 1% of all hemato-lymphoid neoplasm with overall incidence of 0.17 per 1,000,000 individuals. It is a malignant proliferation of cells showing morphologic and immunophenotypic features similar to those of mature tissue histiocytes. Histologic and immunohistochemistry are used to diagnose this challenging disease

AIM

The objective of this case report is to present a rare neoplasm and how we should be vigilant in the diagnosis and treatment of this rare condition.

CASE

A 38-year-old woman with histiocytic sarcoma initially presented with a three-month history of a nodular skin lesion (Figure 1) on the anterior chest associated with pruritus and bloody discharge. Further, the workup revealed a sternal mass extending to other structures in the anterior mediastinum, such as the pulmonary artery, cardiac border, and lymph nodes on bilateral axillary, subpectoral regions, paratracheal, prevascular, and right hilar regions.

Biopsy of sternal mass was done. Microscopy revealed atypical lymphoid or mononuclear proliferation with consideration of round cell neoplasm. An extensive panel of immunohistochemical markers was done (Table 1).

The patients tested positive for CD68 and littoral cell angioma (LCA) by immunohistochemistry but negative for CD1a and Langerin. The patient underwent three cycles of CHOP-E with remission of the lesions noted. Currently she is being prepared for autologous stem cell transplant in another institution.

DIAGNOSTIC RESULTS



Figure 1.Nodular lesion <0.5cm with bloody discharge on sternal area.

Table 1. Result of Immunochemistry markers

IHC Markers	Expression	IHC Markers	Expression
CAM 5.2	Negative	Langerin	Negative
CD68	Positive, diffuse	CD4	Positive
LCA	Positive, diffuse	CD21	Negative
S100	Positive, focal	CD117	Negative
Desmin	Negative	MPO	Negative
Myogenin	Negative	CD1a	Negative
SOX10	Negative	GATA3	Negative

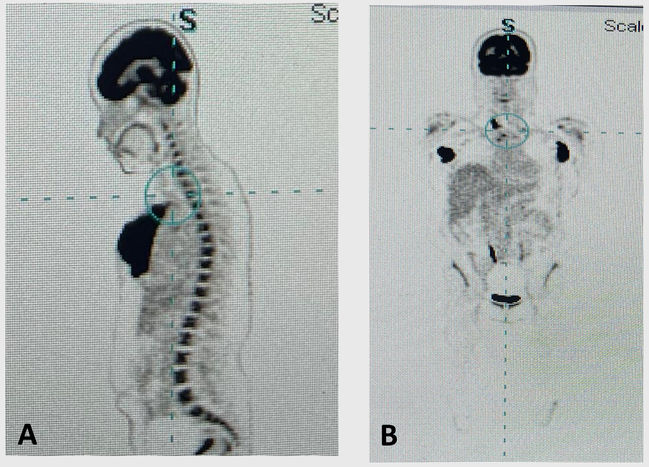


Figure 2. PET Scan. A. Sagittal section showing uptake on sternum measuring 6 x 8.5 x 9.7cm. B. Coronal section showing uptake on lymph nodes in the bilateral axillary, paratracheal, prevascular, and right hilar regions

CONCLUSIONS

Histiocytic sarcoma is a very rare and aggressive hematological lymphoid malignancies with extensive morphological differential diagnosis. It is important to confirm its diagnosis using specific immunohistochemical markers immediately to administer prompt treatment in this rare and aggressive malignancy

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