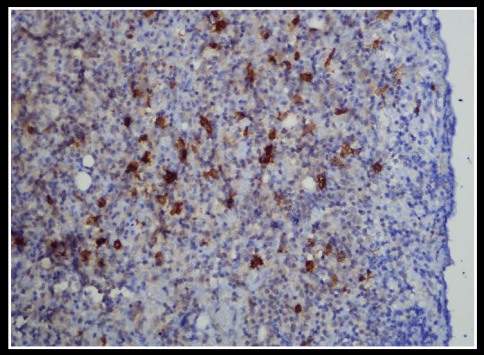
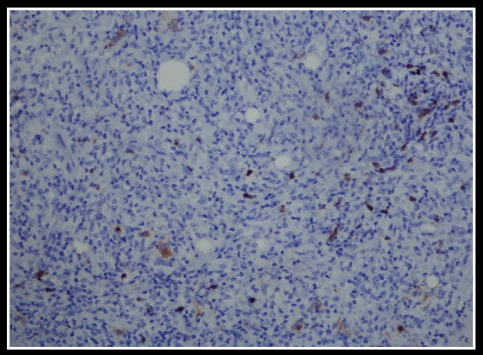
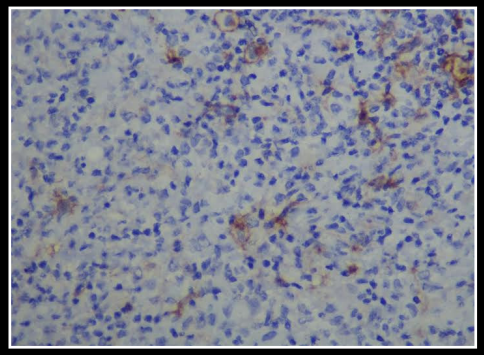
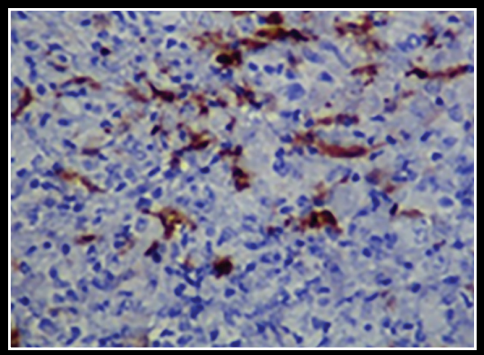

CD1a


CD15


CD30


S100

A panel of immunohistochemical markers was done to differentiate between the entities. The spindle cell population was positive for S100 and CD1a. Immunostains such as PanCK, EMA, CD117, CD21 and ALK were negative in the spindle cell population. CD20 and PAX5 stained the B cells and CD3 stained the T cells. CD30 was positive in the larger mummified cells and these also revealed positivity for CD45 and were negative for CD15. EBV immunostain revealed a lot of background and hence was non contributory. The positivty for CD45 argued against a Classical Hodgkin's Lymphoma and positivity for S100 and CD1a supported the rendered diagnosis.

DISCUSSION

Langerhans cell histiocytosis is characterized by the infiltration of one or more organs by Langerhans cell-like dendritic cells, most often organized in granulomas. It is a clonal neoplastic proliferation of Langerhans type cells that express CD1a, langerin and S100 protein, and show Birbeck granules by ultrastructural examination.

The term eosinpophilic granuloma was coined by Lichenstein and Jaffe in 1940. The skeleton is the most commonly involved organ system in LCH and is by far the most common location for single lesion, often referred to as eosinophilic granuloma (EG) (the terms are used interchangeably in this case study).

The skeletal system is the commonest site of involvement of LCH and in 60-80% of the cases is the only organ system involved. It primarily occurs in older children and young adults, with a male preponderance, with a male to female ratio of 2:1. Patients may have one or many lesions. The most common locations are: