Hodgkin’s lymphoma with exuberant granulomatous reaction

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ABSTRACT

Granulomatous lymphadenitis is a common presentation in the Kingdom of Saudi Arabia (KSA). The chronic granulomatous inflammation can be necrotizing and non-necrotizing. The most common cause of the former type of inflammation in KSA is tuberculosis (TB). Less likely, the differential diagnosis includes the cat scratch disease, toxoplasmosis, and Kikuchi-Fujimoto disease. However, non-necrotizing granulomatous inflammation in the lymph node, the differential diagnosis includes also TB as well and other diseases such as sarcoidosis. However, we have to be aware that some known malignant conditions are rarely very rarely in a very extensive manner that may mask the malignant component. We describe a case of an unusual Hodgkin’s lymphoma that was associated with exuberant granulomatous reaction and has been misdiagnosed and treated as TB for one year. The objective of reporting this case is to emphasize the importance of a very careful microscopic evaluation of the lymph nodes with granulomatous reaction searching for any associated tumor. The case also emphasizes the value of immunohistochemistry in diagnoses.

Case Report.

A 36-year-old woman presented with widespread cervical lymphadenopathy and low-grade fever. Physical examination revealed no other lymph node involvement. There was no hepatosplenomegaly. The chest x-ray was unremarkable. Investigations for the etiology included 2 fine needle aspiration cytology and one excisional biopsy were performed in the referral hospital, all showed granulomatous lesions without necrosis. A tentative diagnosis of tuberculosis was made, and she started on antituberculous treatment. However, there was no clinical improvement. She presented to our institution one year after the initial diagnosis, and a new biopsy from the cervical lymph node revealed effacement of the whole node by marked non-necrotizing granulomatous reaction. However, there were scattered large cells with few classic Reed-Sternberg cells between the granulomas. Immunohistochemistry reveals strong reaction of CD15 and CD30, and negative staining for CD45RB, CD45RO, and CD20. These findings confirmed the diagnosis of Hodgkin’s lymphoma with remarkable granulomatous reaction that almost masked the malignant component. She was treated with chemotherapy, and she showed an excellent response.
excisional biopsy. All showed granulomatous lesions of cervical lymph nodes without necrosis. A tentative diagnosis of TB was made. She was treated by anti-TB drugs for 6 months. However, there was no clinical improvement. She presented to our institution one year after the initial diagnosis and new cervical lymph was excised. Gross examination revealed a large lymph examination revealed effacement of the whole node by marked non-necrotizing granulomas. However, between the granulomas there were scattered large cells with a few classic Reed-Sternberg cells (Figure 1a). Immunohistochemistry revealed strong reaction (Figure 1b), and negative staining granulomatous reaction that almost masked the malignant component. Ziehl-Neelsen stain for acid-fast bacilli was negative as well as the fungal stains (periodic acid-Schiff and Grocott methenamine silver). Computed tomography scan of the abdomen revealed spleen involvement. However, there was no abdominal lymphadenopathy. Subsequently, standard complete clinical remission.

**Discussion.** Rarely, the diagnosis of a lymphoma may be obscured by the presence of extensive granulomatous lesions. Lymphomas associated with marked granulomatous reaction are well documented in the literature including association with primary presentation or in relapse. The occurrence of a sarcoidosis associated with Hodgkin or Non-described event. Malignant lymphomas and solid tumors that mimic or are associated with epithelioid granulomas are a dilemma in cytological materials. Khurana et al described 6 malignant cases who presented with granulomatous reaction on cytology.

malignant neoplasms with epithelioid morphologic features and included one example of each diffuse large cell lymphoma, anaplastic carcinoma of the disease associated with diffuse sarcoid-like reactions has been described. A prognostic relevance of the clear. Granulomatous reaction after chemotherapy literature.

lymphoma with remarkable granulomatous reaction has also been described. Our patient presented with cervical lymphadenopathy and found to have granulomatous reaction. This case emphasizes the importance of a very careful microscopic evaluation of the lymph nodes with non-necrotizing granuloma searching for any large atypical cells that may represent a hidden malignant cells that can be easily overlooked. Although, TB is the most common cause of caseating, and one of the common causes of non-caseating granulomatous lymphadenitis in our community, the second condition should be evaluated tremendously to exclude all the possible associated tumors particularly within the context of the low incidence of sarcoidosis in KSA. In patients with suboptimal response to anti tuberculous treatment given for tuberculous lymphadenitis, we recommend
a review of the pathological material searching for a possible hidden tumor. This case also emphasizes the value of immunohistochemistry in highlighting diagnoses. Tissue culture and molecular studies for TB, particularly with a non-classic morphological appearance.

References


