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Kikuchi's Disease in a Young Female—a Case Report

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Abstract

Kikuchi's disease or histiocytic necrotizing lymphadenitis is a very rare benign disease which is most common in Asia. This disease has a special predilection for cervical lymph nodes of young females. Clinical features of Kikuchi's disease may resemble commonly with tuberculosis and lymphoma. Excision biopsy of lymph node can confirm the diagnosis as it has some typical characteristics. We report a case of young female student who presented with fever and cervical lymphadenopathy. Kikuchi's disease was diagnosed after biopsy from cervical lymph node. She was given symptomatic treatment and her recovery was uneventful.

Keywords: Kikuchi's disease; Cervical lymph nodes; Necrotizing lymphadenitis

Introduction

Kikuchi's disease is a rare, benign and self-limiting disease involving lymph nodes. It occurs mainly in young females [1]. Few cases were reported in elderly and pregnant women [2]. This disease was first described by both Kikuchi and Fujimoto in Japan in early 1970s [3,4]. The cause of this disease is still undetermined. Possible causative agents may be of viral origin including Epstein-Barr virus, human herpes virus 5, human immunodeficiency virus, parvovirus B 19, paramyxo and parainfluenza viruses. Other responsible organisms are Yersinia, toxoplasmosis etc. Kikuchi's disease may be mistaken for tuberculosis, lymphoma and other autoimmune diseases. Recognition of this condition is essential to avoid unnecessary investigations and management. Here we report a case of young female who presented with fever and cervical lymphadenopathy and was diagnosed as a case of Kikuchi's disease subsequently.

Case Report

A 17-year-old female student presented with fever for 1 month, multiple swellings in the neck for same duration and oral ulcers for 15 days. Fever was initially low graded intermittent, later became high graded and continued in nature. She also complained of anorexia and gradual weight loss. She did not have any history of cough, chest pain or breathlessness. On examination, she had enlargement of lymph nodes in both supraclavicular, anterior chain of the cervical and both suboccipital regions. Lymph nodes were 1.5-2.5 cm in size, discrete, firm, tender and without any discharging sinus. She also had few painful ulcers in the oral cavity. Her systemic examination revealed no abnormalities.



Figure 1: Photomicrograph (original magnification×40) of lymph node showing characteristic features of Kikuchi's disease (paracortical necrotizing areas with abundant karyorrhectic debris, scattered fibrin deposits and collection of large mononuclear cells).

Her investigation reports were as follows: Haemoglobin: 11 g/ dL, ESR: 13 mm in 1st hr, WBC count: 6200/ μ L with normal differential count, ANA: negative, Mantoux test was negative, chest radiography and ultrasonography of abdomen was normal. Excision biopsy of the lymph node was done which showed focal well-circumscribed, paracortical necrotizing areas with abundant karyorrhectic debris, scattered fibrin deposits and collection of large mononuclear cells. These features are compatible with histological evidence of Kikuchi's disease (Figure 1). She was managed with symptomatic treatment. Subsequently her swellings reduced and general condition improved within next few weeks. She would continue to be followed up for monitoring her progress.

Discussion

Kikuchi's disease, also called histiocytic necrotizing lymphadenitis is an uncommon and idiopathic cause of lymphadenitis. Involvement of cervical lymph nodes with or without systemic manifestations is the most common clinical presentation of Kikuchi's disease [5,6]. It usually runs a benign course and recurrence rate is rare.

Although etiology of Kikuchi's disease is unknown, it is now proposed that it is a nonspecific hyperimmune reaction to a variety of infectious, chemical, physical and neoplastic agents and it may represent an exuberant T-cell mediated immune response in a genetically susceptible individual to a variety of non-specific stimuli [7].

Patients with Kikuchi's disease present with fever, malaise, weight loss, gastrointestinal upset, myalgia, arthralgia and localized cervical and posterior auricular lymphadenopathy [8]. Rarely there may be hepatosplenomegaly and features of meningitis. Forty percent patients may present with transient skin rash such as facial erythema, erythematous papules, plaques, nodules and ulcers [9]. Upto 50% patients may have leucopenia [10]. Differential diagnoses of Kikuchi's

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disease are tuberculosis, lymphoma, systemic lupus erythematosus, sarcoidosis and viral lymphadenitis.

Diagnosis of Kikuchi's disease is confirmed by histopathological examination of biopsied specimen of lymph node. Three types of findings are identified: proliferative, necrotizing and xanthomatous. The proliferative features are seen in about one-third of cases and have an inflammatory infiltrate. Half of cases show necrotizing pattern and the xanthomatous type is rare and has abundant foam cells [11].

Patients with Kikuchi's disease may develop SLE later infrequently [12]. They may have both diseases simultaneously or can present as a flare up in a known SLE patients [13]. For this reason, it is essential to advise patient to return for regular follow-up. If the symptoms of patient do not resolve or deteriorate, then lymph node biopsy should be repeated to rule out other differential diagnoses.

There is no specific treatment of Kikuchi's disease. It usually resolves within 1 to 4 months [14]. Analgesics, anti-pyretics and NSAIDs can be used. Corticosteroids can be helpful in generalized disease and in aggressive clinical course.

A thorough history, complete physical examination and appropriate investigations are necessary for the diagnosis of Kikuchi's disease. Regular monitoring of the patient is important for checking new development of other autoimmune diseases.

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