

Case Report

Kikuchi's Disease: A Case Report

Md. Saiful Alam¹, Rumana Rahim², Afroza Suraya Majumder³, M Alamgir Chowdhury⁴

Abstract:

A 30-year-old female attended in August 2019, presented with painful swelling in right upper neck and fever for 20 days. Biochemical and microbiological tests, and imaging studies were all inconclusive. Histopathology of the affected lymph nodes revealed consistent with Kikuchi's disease. The Patient was treated properly and complete remission occurred within few weeks. It is a self-limiting idiopathic disease which can mimic several serious conditions such as TB, lymphoma, infectious mononucleosis and others.

Key words: Kikuchi disease, cervical lymphadenopathy.

Introduction:

Kikuchi's Disease (KD) is an idiopathic, rare, self-limiting, benign condition of necrotizing histiocytic lymphadenitis.

It is first described in Japan in 1972,¹ which mainly occurs in East-Asia. Some cases are reported in America and Europe. It is mainly a disease of young adults (mean age, 20-30 years), female predominant.² Diagnosis of Kikuchi disease relies on histopathology and microscopic examination of lymph nodes.

With proper treatment and surgical procedure if needed, patient can completely cure. Lymphadenopathy often resolves over few weeks to 6 months. Recurrence rate is

about only 3%.³ Mortality is extremely rare. Awareness of this disorder will help to prevent misdiagnosis and inappropriate treatment as it is strongly associated with autoimmune disorders like hashimoto's thyroiditis or systemic lupus erythematosus (SLE) and mimic lymphoma, TB etc.⁴

Case presentation:

A 30-year-old female presented with painful swelling in right neck and fever for 20 days in the ENT department in August 2019. There was no weight loss, no previous history of tuberculosis or contact with tuberculosis. Clinical Examinations revealed right sided palpable, oval, mobile and tender-cervical lymphadenopathy, larger node being the right anterior triangle of neck which was measured about 4 x 3 cm, other enlarged nodes were on right posterior cervical region. Lymph nodes were not palpable in other parts of the body. On admission, the patient was febrile to 102° F. She was normotensive, nondiabetic. Routine hematological parameters like complete blood count, hemoglobin, peripheral blood film was within normal limits. X-ray chest revealed no

1. Medical Officer, ENT-HNS, Anwer Khan Modern Medical College, Dhaka.
2. Medical Officer, ENT-HNS, Anwer Khan Modern Medical College, Dhaka.
3. Assistant professor, ENT-HNS, Anwer Khan Modern Medical College, Dhaka.
4. Professor & Head, ENT-HNS, Anwer Khan Modern Medical College, Dhaka.

Correspondence author: Md. Saiful Alam, Medical Officer, ENT-HNS, Anwer Khan Modern Medical College, Dhaka. Mobile no: 01723140877, Email: nahidsaiful2@gmail.com

abnormalities. Day after admission, the patient underwent excisional cervical lymph node biopsy under general anesthesia. Lymph nodes from right anterior and posterior chain of cervical group were completely removed and sent for histopathology. The histopathology revealed area of karyorrhectic debris and focal proliferation of histiocytes, small focus of necrosis and scattered fibrin deposits are presents concluding acute necrotizing lymphadenitis or Kikuchi's disease (Figure 1).

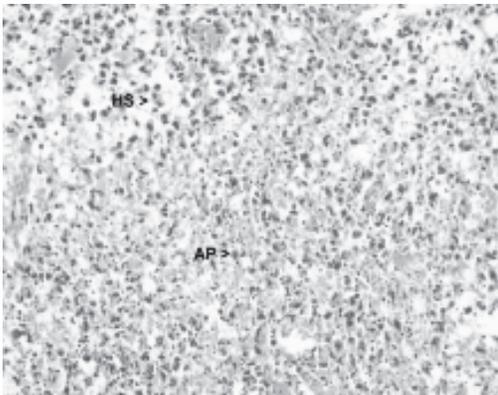


Figure 1: Photomicrograph of lymph node showing focal proliferation of histiocytes, scattered fibrin deposits.

Patient was discharged with advices and follow up schedule.

At last follow-up she reports no symptoms, remains well and there are no abnormalities on clinical examination.

Discussion:

Kikuchi's disease, known as necrotizing histiocytic lymphadenitis is a rare, idiopathic cause of lymphadenopathy that may be difficult to differentiate from other causes of lymphadenopathy such as mononucleosis, tuberculosis and lymphoma.

The most common clinical presentation is fever and cervical lymphadenopathy in a

previously healthy young female. Less frequent presentations are malaise, weight loss, rash, arthritis, fatigue and hepatosplenomegaly, although there are case reports in the literature of more serious presentations such as meningitis, polymyositis and acute cerebellar syndromes⁵. In our case there was only fever and cervical lymphadenopathy.

The clinical presentation and the usually self-limited course suggest an immune response to an infectious agent. Numerous inciting infectious agents have been proposed, including EBV, HHV 6 and 8, HIV and parvovirus B19.⁶ We didn't do any virological tests because of patient's poor financial condition.

Histopathological examination of involved lymph nodes is necessary to make a definitive diagnosis and to exclude other such as lymphoma and hematologic malignancies. Microscopic examination of the node revealed area of karyorrhectic debris and focal proliferation of histiocytes, small focus of necrosis and scattered fibrin deposits.

Laboratory studies are mostly non-specific. Leukopenia is common; however, the majority of the patient have a normal Complete Blood Cell count. Erythrocyte sedimentation Rate (ESR) also tends to be elevated in most patients and there may also be abnormalities in liver enzymes and an elevated LDH. In our case, only ESR was elevated and other hematological reports were normal.

Symptomatic and supportive treatment is usually adequate.⁷ If the lymph nodes are large and painful, its better to excise the lymph nodes and sent for histopathology.

A complete history, physical examinations 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.⁸

References:

1. Kikuchi M. Lymphadenitis showing focal reticulum cell hyperplasia with nuclear debris and phagocytosis. *Nippon Ketsueki Gakkai Zasshi*. 1972; 35: 378–380.
2. Lopez C, Oliver M, Olavarria R, Sarabia MA, Chopite M. Kikuchi-Fujimoto necrotizing lymphadenitis associated with cutaneous lupus erythematosus: a case report. *Am J Dermatopathol*. 2000; 22 (4): 328–333.
3. Sudhakar MK, Sathyamurthy P, Indhumathi E, Amarabalan R, Bavya V. Kikuchi's Disease: A case report from south India. *IJCRL* 2011; 2 (2): 15-18.
4. Saratziotis A, Karakousis K, Tzika K, Oikonomou KG, Vlachostergios PG (2012) Hashimoto's thyroiditis and Kikuchi's disease: Presentation of a case and review of the literature. *Case Rep Otolaryngol* 2012: 267595.
5. Spies J, Foucar K, Thompson CT, Le Boit PE) The histopathology of cutaneous lesions of Kikuchi's disease (necrotizing lymphadenitis) A report of five cases. *Am J Surg Pathol* (1999) 23: 1040-1047.
6. MD. Nurul Hossain, MD. Sarwar Ferdous, Sabina Sultana, Biplab Kumar Basak, Asma Ferdous, Tahmina Islam. Kikuchi-Fujimoto Disease: A Case Report. *BANGLADESH J CHILD HEALTH* 2010; VOL 34 (3): 113-117
7. MSU Rahman, G Muktadir, SAM Ahmed. Kikuchi's Disease: A Case Report. *Faridpur Medical College Journal*, 8(2), 96-98.
8. Parvin R, Mamun Ali Biswas Md (2013) Kikuchi's Disease in a Young Female—a Case Report. *J Gen Pract* 1:130