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Case Report

Kikuchi – Fujimoto disease presenting as FUO in an adolescent girl

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ABSTRACT

Kikuchi – Fujimoto disease is a rare usually self-limiting disease mainly reported in Asian population. Herein we are reporting same disease in a 16-year-old child who presented with FUO.

Keywords: Fever, Lymphadenopathy, Pancytopenia, Kikuchi – Fujimoto disease

INTRODUCTION

Kikuchi – Fujimoto disease is a rare usually self-limiting disease mainly reported in the Asian population.[1,2] The etiology is unknown, although viral and bacterial causes have been postulated.[1] Autoimmune diseases such as Systemic lupus erythematosus (SLE) have also been associated.[1-8] The patients present with fever of unknown origin but more often presents with unilateral cervical adenitis, fever, malaise, elevated ESR atypical lymphocytosis, and leukopenia.[3] Usual age group is 8–16 years. The lymphadenopathy can mimic lymphoma. Herein we are reporting a 16-year-old who presented with fever, lymphadenopathy, and pancytopenia, turned out to be Kikuchi – Fujimoto disease.

CASE REPORT

Sixteen-year-old female presented with fever for 3 months on and off and swelling over the neck for the past 15 days. There was no loss of appetite, bleeding manifestations, no bony tenderness. And no h/o contact with tuberculosis. On examination found to have matted cervical lymph nodes. Per abdomen revealed mild splenomegaly. Rest of the systemic examination was normal. Visited multiple private hospitals for fever and evaluated and found only persistent leucopenia before coming to our hospital. Here, complete hemogram showed pancytopenia. ESR was elevated. Sputum for AFB was negative. RAT test was non-reactive, ANA was negative, EBV and SARS-CoV-2 IgG was not done. FNAC of lymph nodes showed reactive lymphadenitis. Chest X-ray and CT chest were normal. USG abdomen and CT abdomen showed mild splenomegaly. Bone marrow aspiration was done for the evaluation of pancytopenia and showed normocellular normoblastic erythroid marrow with increase in megakaryocytes.Started on a course of antibiotics. Lymph node biopsy done. The histopathological examination revealed the following features [Figures 1 and 2], Altered architecture of lymph node with pericapsular infiltration of lymphoid cells, areas of fibrinoid necrosis containing nuclear dust, surrounded by histiocytes and plasma cells, vessels show mild thickening, which is suggestive of Kikuchi – Fujimoto

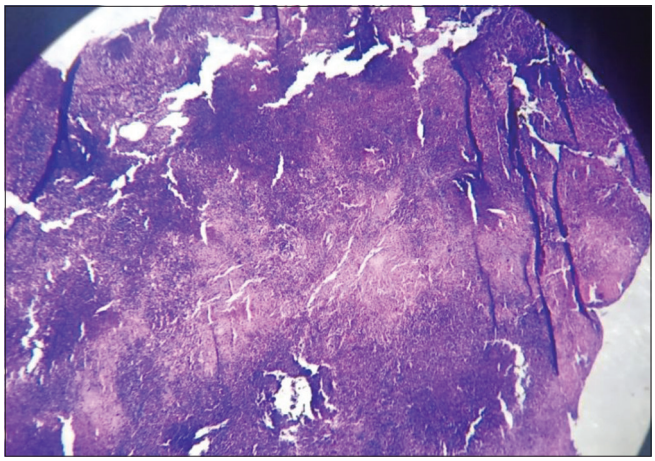

Figure 1: Histopathology showing altered architecture of lymph node ×200.

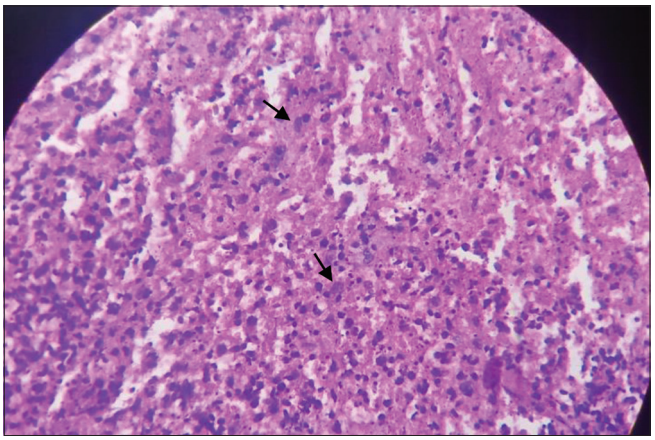

Figure 2: Histopathology showing nuclear dust with Histiocytes ×400. Black arrow: Cresentic histiocytes.

lymphadenitis. No additional immunohistochemical stains performed.

Our child with improved with symptomatic therapy and followed up for last 3 months doing well.

DISCUSSION

Kikuchi – Fujimoto lymphadenitis also known as histiocytic necrotizing lymphadenitis is a rare disease affecting the Asian population can present as fever of unknown origin with or without lymphadenopathy.[2] Might have cutaneous lesions also along with malaise arthralgia. Lymphoma, tuberculosis, and SLE has to be ruled out before diagnosing the condition. Biopsy of the lymphnode aids in diagnosis and histiocytes are positive for myeloperoxidase[2,5,6] and CD68.[5,6] The condition is usually benign. The diagnosis is by lymph node biopsy. Kikuchi – Fujimoto disease usually resolves within 6 months although relapses have occurred up to 16 years. Patients with severe symptoms require therapy with steroids.[1,2,3] Our child improved with symptomatic therapy without requiring steroids.

CONCLUSION

Kikuchi – Fujimoto has to be kept in mind especially in adolescent age group presenting with fever and lymphadenopathy. As condition mimics TB and lymphoma excision biopsy and histopathological examination is needed for diagnosis. Steroids are of benefit in patients with severe symptoms.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Tower RL 2nd, Camitta BM. Kikuchi Fujimoto disease. In: Kliegman RM, Stanton BF, St. Geme J, editors. Nelson Textbook of Pediatrics. 19th ed. Philadelphia, PA: Elsevier Saunders; 2011. p. 1724.
2. Masab M, Surmachevska N, Farooq H. Kikuchi Disease. Treasure Island, FL: StatPearls Publishing; 2021.
3. Mohamad AA, Zahid M, Khan AA, Alani B, Khalil M, Saeed A, *et al*. Kikuchi-fujimoto disease: Review of 11 cases diagnosed over 10 years at a tertiary care hospital in Doha, Qatar. Eur J Case Rep Intern Med 2020;7:001598.
4. Xu S, Sun W, Liu J. Kikuchi-Fujimoto disease: A case report and the evaluation of diagnostic procedures. BMC Oral Health 2019;19:223.
5. Perry AM, Choi SM. Kikuchi-Fujimoto disease: A review. Arch Pathol Lab Med 2018;142:1341-6.
6. Pepe F, Disma S, Teodoro C, Pepe P, Magro G. Kikuchi-Fujimoto disease: A clinicopathologic update. Pathologica 2016;108:120-9.
7. Mathew LM, Kapila R, Schwartz RA. Kikuchi-Fujimoto disease: A diagnostic dilemma. Int J Dermatol 2016;55:1069-75.
8. Hutchinson CB, Wang E. Kikuchi-Fujimoto disease. Arch Pathol Lab Med 2010;134:289-93.

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