A CASE OF LYMPHADENOPATHY- KIKUCHI WITH SLE
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PRESENTATION OF CASE
Kikuchi disease is a rare form of necrotising lymphadenopathy which has been associated with many autoimmune diseases. We are reporting the case of a 40-year-old female patient who presented with lymphadenopathy and pancytopenia who was proven to have Kikuchi disease coexisting with SLE.

A 40-year-old female presented to us with history of high grade fever with chills of 10 days duration. It was associated with loss of weight and appetite. There was no h/o cough, breathlessness, joint pain or swelling, skin rash or photosensitivity.

On examination, she was febrile (T-101), had pallor, grossly enlarged non-tender bilateral axillary lymph nodes (2-3 nodes bilaterally, largest 3*2 cm in size). There were painless oral ulcers. There was no rash or skin lesions. Her vitals were stable and systemic examination was found to be normal.

She gave a history of similar illness in the past and had old records stating she was treated for lymphoma but bearing no further details.

Investigations revealed pancytopenia (Hb- 8.8 g/dl, WBC -1100/cumm, Platelets-96000/cumm), elevated ESR (96/1 hr), negative Mantoux, normal Chest X-ray and negative workup for infections. ds-DNA (Crithidia) was found to be positive.

DIFFERENTIAL DIAGNOSIS
In view of lymphadenopathy and pancytopenia possibility of infections like IMN, EBV, tuberculosis were thought of but the workup was negative. The presence of positive ANA and dsDNA pointed towards SLE.

CLINICAL DIAGNOSIS
With the presence of 4/11 criteria for SLE, a clinical diagnosis of SLE with possible lupus lymphadenitis was made.

PATHOLOGICAL DISCUSSION
Lymph node biopsy showed foci of cortical necrotic areas with scanty histiocytes and karyorrhectic debris suggestive of Kikuchi lymphadenitis.

Kikuchi–Fujimoto’s disease (KFD) is a rare benign form of necrotizing histiocytic lymphadenitis, typically affecting young women of Asian background. Clinical features include lymphadenopathy, predominantly involving cervical lymph nodes, fever, malaise, anorexia, myalgias and arthralgias. Diagnosis is dependent upon presence of appropriate immunohistology of the lymph node, which typically shows abundant CD68+ plasmacytoid monocytes in the node paracortex, eosinophilic fibrinoid material and apoptotic debris. KFD has been associated with a number of autoimmune and infectious diseases, including SLE. KFD was associated with SLE (32 cases), non-infectious inflammatory diseases (24 cases), and viral infections (17 cases) in 244 cases studied by Kukurdali et al in 2007.

The aetiology of Kikuchi-Fujimoto disease remains unclear. Suggested causative agents which have been isolated from lymph nodes of patients with the disease include Epstein-Barr virus, HIV, human T-cell leukaemia virus type 1, human herpesvirus type 6 and 8, hepatitis B virus, parvovirus B19, herpes simplex, varicella zoster, cytomegalovirus, Toxoplasma gondii, Brucella, Yersinia enterocolitica and parainfluenza virus. It has been proposed that these agents activate CD8- positive T cells leading to their proliferation and resultant apoptosis mediated by the Fas and perforin pathways. Engulfment of the apoptotic debris by macrophages would then give rise to the typical histological features.

Santana et al., in 2005, reported a total of 35 cases of SLE-associated KFD all over the world based on Medline and LILACS databases. Seven patients were diagnosed with SLE prior to KFD diagnosis, fourteen patients were diagnosed with KFD and SLE simultaneously, and fourteen patients were after a diagnosis of KFD. The pathogenesis of SLE is believed to be related to defective processing of apoptotic debris, resulting in components of the debris being mistakenly presented to the immune system. Situations in which apoptosis is increased, such as Kikuchi-Fujimoto disease, can therefore be expected to accelerate the
generation of autoantibodies and hence autoantigens, precipitating a flare-up of the disease.6 Electron microscopy has shown that the histiocytes, activated lymphocytes and endothelial cells in the affected lymph nodes of Kikuchi-Fujimoto disease contain tubuloreticular structures similar to those seen in endothelial cells and lymphocytes of patients with SLE.7 It has been suggested that Kikuchi-Fujimoto disease lies on the same disease spectrum as SLE, representing a milder form of the disease.8

Sharma and Rankin have reviewed 55 cases of Kikuchi-Fujimoto disease occurring in the context of definite connective tissue disease, 50 of which were associated with SLE. Of the 55 cases, 22 (40%) had simultaneous onset with, 19 (35%) predated the onset of and 14 (25%) developed after the associated connective tissue disease. The association was usually associated with a flare-up of disease activity, the severity of which varied. They also make the observation that cases of cutaneous manifestations of Kikuchi-Fujimoto disease which progressed to SLE were associated with interface dermatitis and suggested that this feature may be a predictor of progression.9 Finally, one intriguing report described a case of Kikuchi-Fujimoto disease and systemic SLE-like symptoms without any autoantibodies. The symptoms resolved spontaneously within 3 months without treatment, and did not recur Mootsikapun et al.10

In KFD, the most common histologic finding is lymph node showing geographic necrosis with foci of apoptotic cells with abundant karyorrhectic fragments surrounded by histiocytes.11 Characteristically, neutrophils and eosinophils are absent.11

In lupus lymphadenitis, haematophylactic bodies (clusters of basophilic material within lymph node sinuses), DNA deposits in the wall of the vessels, or areas of vasculitis surrounding the necrotic foci are seen.12 Immunohistochimical analysis has great value and is generally used to exclude hematologic malignancies. CD8+ T cells prevail in KFD. The histiocytes typically express myeloperoxidase, along with lysozyme. Also, positive immunostaining appeared for CD68 and CD4 in histiocytes is seen.

Murthy et al report a case of KFD with SLE mistakenly treated as tuberculous lymphadenitis initially.13

Management

Treatment with methotrexate and low dose prednisolone was started following which she became asymptomatic. While on follow up she had a relapse with fever, lymphadenopathy, typical malar rash and oral ulcers and lab investigations showed recurrence of pancytopenia (Hb - 8.6 g/DL, TC- 3100, Platelets- 80000/cumm). She responded to treatment with pulse methyl prednisolone 500 mg for 3 days, when she became asymptomatic and counts were normalised. She is currently on follow up and on low dose prednisolone.

FINAL DIAGNOSIS

The final diagnosis of Kikuchi lymphadenitis with concurrent Systemic Lupus Erythematosus was made based on clinical and pathological findings.

Our patient was initially treated as a case of malignancy whereas KFD is benign and self-limiting.

We are presenting this case to emphasize on the importance of assessing patients with KD for SLE and following them up for development of SLE. Also, KD should be ruled out in a flare-up of SLE accompanied by lymphadenopathy.

REFERENCES