Letters to the Editor

Systemic lupus erythematosus presenting as Kikuchi-Fujimoto disease

Sirs,

Kikuchi-Fujimoto disease (KFD) is one of the inflammatory conditions of lymph nodes, characterised histologically by histiocytic necrotising lymphadenitis without granulocytic infiltration (1). Although KFD first appeared in the literature in 1972, the disease is not well known in clinical practice. KFD may exist as a single disease, or it may also coexist with other diseases, including malignant, infectious or autoimmune diseases (2). We report a case of KFD as a presenting feature of SLE.

A 44-year-old man was sent to our clinic from a national hospital because of fever, myalgia and a weight loss of 7 kg, which appeared in the period of one month. Cefuroxime axetil given for 10 days failed to control his fever. His past history revealed a 2-week period of hospitalisation 5 years previously for lung tuberculosis, and he had taken antituberculosis therapy for one year.

On physical examination the patient's temperature was 39°C, and there was no pathological finding except for an axillary lymph node (1x1.5 cm). Laboratory investigations showed mild leukopenia (3800/ L) and a raised ESR (105 mm/h). Tests for renal and liver function were normal. There were no growths in blood, urine and throat cultures. Bilateral apical fibrotic changes were observed on chest X-ray; however, a PPD test was negative and acid-fast bacilli were negative on sputum examination. Serologic tests for infectious pathogens including brucella, salmonella, toxoplasma, and HIV were negative.

A series of investigations were made to exclude the possibility of a malignancy or an autoimmune rheumatic disease; ultrasonography of the abdomen and the pelvis, and computed tomography of the thorax were normal. A biopsy of the axillary lymph node was carried out and showed wide foci of necrosis and karyorrhectic debris surrounded by histiocytes, lymphocytes, plasmacytoid monocytes with sinusoidal dilatation and histocyte proliferation (Fig. 1). The specimen, stained by Ziehl-Nilsen for acid-fast bacilli,proved negative. Based on these findings, a diagnosis of KFD was made.

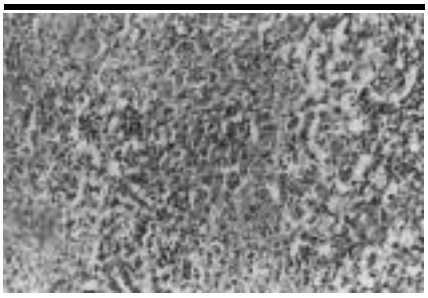

Fig. 1. Lymph nodes show large discrete areas of necrosis with abundant nuclear debris surrounded by transformed lymphocytes, histiocytes and plasmacytoid monocytes (HE x200).

In the meantime, serologic tests for autoimmune rheumatic diseases resulted in a lupus serology, i.e. positive antibodies to nuclear antigen (ANA) (1/1280), double-stranded DNA (1/160), Ro (SS-A), and cardiolipin (IgG 147, IgM 97 U/ml). Serum complement levels were within normal limits. In addition to these autoantibodies, monoarthritis in the left knee and generalised erythematous skin rash developed in the patient. Although proteinuria was never detected, a renal biopsy was carried out which indicated mesangial lupus glomerulonephritis. The diagnosis of SLE was made based on the clinical features, positive autoantibodies, and renal biopsy findings. Treatment with prednisolone 40 mg/day, hydroxychloroquine 200 mg/day, and isoniazid 300 mg/day (as a prophylactic therapy against tuberculosis) was begun, and the patient's fever, adenopathy, arthritis and skin rash improved within one month. The patient has been followed up for one year; no relapse has been recorded, and he is still in remission.

KFD is a clinocopathological entity of unknown origin characterised by patchy areas of necrosis associated with marked karyorrhexis (nuclear fragmentation) and proliferation of distinctive 'crescentic' histiocytes and plasmacytoid monocytes (1,2). The precise incidence of KFD is unknown and it commonly affects young women (20-30 years). The main features of the disease are fever, weight loss and localised lymphadenopathy (usually cervical), mild leukopenia and a raised erythrocyte sedimentation rate (60 mm/h or more). It is a self-limiting disease and usually resolves within a few months without treatment. However, it may mimic a malignant disease (lymphoma), an infectious disease (tuberculosis), or an autoimmune disease (SLE); hence, patients may undergo unnecessary treatments (3-5).

Although in the literature the association of KFD with mixed connective tissue disease and Still's disease has been reported, the main rheumatic disease associated with KFD is SLE (6). Lymphadenopathy is one of the protean clinical findings of SLE; its prevalence is 12% to 59%. The necrotising lymphadenitis of SLE is similar to KFD pathologically; however, the existence of granulocytes, plasma cells and hematoxylin bodies within the lesion of SLE lymphadenitis may help to differentiate this disease from KFD (2,7). In our patient the lymph node biopsy findings were more consistent with KFD. Because of the morphologic similarities between SLE and KFD lymphadenitis, some authors suggest that there is a relationship between the two diseases (6,7). Reasons for this proposal are that some KFD cases may evolve into SLE, and that apoptosis may play a role in the pathogenesis of both diseases (8). Recent studies showed that cytolytic T-lymhocyte-mediated apoptosis may be a major mechanism for the karyorrhectic necrosis in KFD (8, 9).

The association of KFD with SLE reported in the clinical literature remains scarce and is limited to isolated reports totaling less than 10 cases that makes it difficult to draw a conclusion. As a result, we would recommend conducting a routine lymph node biopsy in SLE patients with lymphadenopathy. Studies to determine the relationship between the diseases would also be useful.

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