Late recurrence of Kikuchi-Fujimoto disease in a young male complicated by sensory neuropathy

Sirs,

Kikuchi-Fujimoto disease (KFD) is a rare condition characterised by necrotising lymphadenitis.

KFD is usually benign, self-limiting and systemic treatment is mostly unnecessary. We present a case in which two separate episodes of biopsy-proven KFD, 3 years apart, required oral steroids. Subsequently the patient developed a sensory neuropathy thought to be secondary to KFD.

A 17-year-old Asian male was admitted to hospital with a 2-week history of painful neck lumps and a 1-week history of fever, nocturnal sweats and myalgia. There were no focal infective symptoms and no history of recent foreign travel or tuberculosis (Tb) contact. His temperature was 38.7°C and examination revealed tender cervical lymphadenopathy. Routine blood tests were normal apart from a CRP of 79mg/l. Blood, urine and throat cultures were negative and a chest x-ray was normal. Serology was negative for Epstein Barr virus (EBV), parvovirus B19, toxoplasmosis and Yersinia. There were no clinical features of a connective tissue disorder and an autoimmune profile was negative.

Three years previously, following a similar episode of painful lymphadenopathy and a pyrexial illness, lymph node biopsy showed histiocyctic necrotising lymphadenitis consistent with KFD. On that occasion he failed to improve with indometacin 75 mg daily and required 40 mg of prednisolone daily. Steroid therapy was tapered over 3 months and he had been well in the intervening 3 years.

As KFD is not commonly a late relapsing condition we elected to perform a further open lymph node biopsy. Histology confirmed the diagnosis of KFD (Figs. 1 & 2). No granulomas were evident and microbiological cultures of the tissue and prolonged cultures for mycobacterium were negative. Prednisolone 20mg daily was started and the lymphadenopathy and fever quickly resolved. Steroids were tapered and withdrawn over 6 months. However, two months later, he complained of pins and needles in his legs and loss of sensation in his right hand. Blood tests revealed normal B12, folate, serum glucose, immunoglobulins and negative ANA and ds-DNA once more. Nerve conduction studies demonstrated absent sensory conduction from the right foot, low voltage response in the left sural nerve, and normal results in the upper limbs. A diagnosis of multi-focal sensory neuropathy secondary to KFD was made. Follow-up over a twelve-month period has seen a steady improvement in his symptoms without the need for additional immunosuppression.

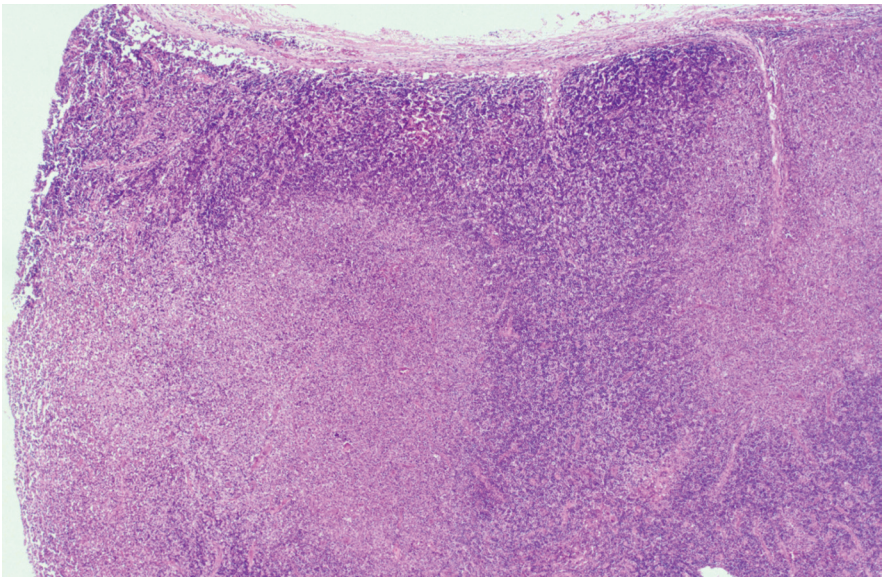

Fig. 1. A low power view of the subcapsular lymph node cortex with two well-circumscribed, pale zones of geographical necrosis effacing normal follicular architecture.

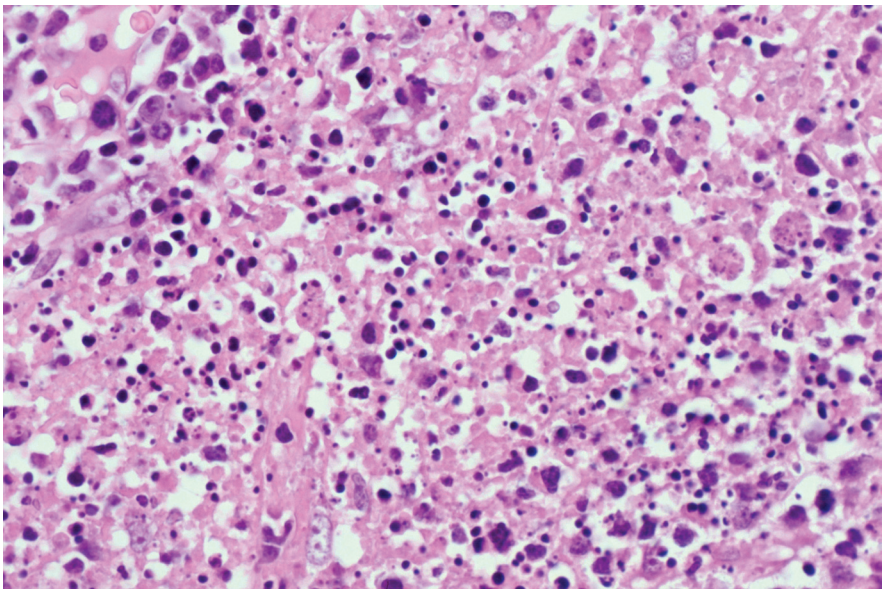

Fig. 2. The high power view demonstrates apoptotic nuclear debris with occasional lymphocytes but no neutrophil polymorphs.

KFD was first described in Japan in 1972 (1, 2). Information about this rare disease has been taken from case reports and large case series. Most cases are from East Asia and the Far-East although patients of European descent are also described. In the largest analysis of 244 cases from the world literature, 77% of cases were female and the mean age of disease onset was 25 years (3).

The hallmark clinical feature is lymphadenopathy, usually cervical and mostly painless. Other clinical features are non-specific and include fever, fatigue and arthralgia. Non-specific cutaneous lesions, such as erythema, plaques and papules, occur in 10% of patients (4). Laboratory findings usually reflect inflammation with elevated ESR, anaemia and elevated transaminases. Leukopaenia is more commonly seen than leukocytosis (3).

KFD has been found in association with SLE, mixed connective tissue disease, Sjögren's syndrome, Adult Still's disease and polymyositis (3). Post-viral KFD has been described following EBV, HIV, Parvovirus B19 and dengue (3).

The diagnosis is most reliably confirmed histologically by open lymph node biopsy. KFD is typified by dissolution of lymphoid tissue, infiltration of histiocytic cells, including abundant plasmacytoid monocytes, and patches of fibrinoid necrosis within the cortex and paracortex. Extensive karyorrhexis,

karyolysis and apoptotic nuclear debris is characteristic. Discrete granuloma formation is not a feature.

In the largest analysis of the condition, 64% of cases were self-limiting, 18% required NSAIDs or disease modifying drugs. Azathioprine, hydroxychloroquine and methotrexate have all been used. 16% of the 244 cases required steroids usually given orally, and in doses up to 1mg/kg (3). Corticosteroids should be considered if symptoms persist despite NSAIDs or if the disease is complicated by an autoimmune condition (5).

Our patient is unusual because of his recurrent KFD, the need for systemic steroids and the presence of a sensory neuropathy. Recurrent disease is rare with a widely quoted recurrence rate of 3.3% from a case series of 79 patients in Taiwan (6). Recurrence usually occurs within a few weeks although cases occurring up to 19 years later are described (7).

The most frequently described neurological association is aseptic meningitis (8). Neuropathy is rare; one case is reported of right ulnar and bilateral deep peroneal axonal neuropathies (9).

In summary we present a 17-year old male with 2 biopsy proven episodes of KFD requiring systemic corticosteroids with each illness. The development of an axonal sensory neuropathy described just once previously in the literature has complicated his disease. Awareness of KFD as a clinical entity is important and early lymph node biopsy essential to make the diagnosis and guide treatment.

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