## Correspondence

# Kikuchi-Fujimoto disease, histiocytic necrotizing lymphadenitis

To the Editor

We read with interest the detailed review article on Kikuchi-Fujimoto disease (KFD) by Al-Maghrabi (SMJ, November 2011). The author suggests that the most likely cause of KFD is infectious or autoimmune. Many viruses and very rarely non-viral infections such as Brucella, Toxoplasma, and Giardia have been associated with the disease.

In addition to systemic lupus erythematosus, other immune mediated diseases such as antiphospholipid syndrome, polymyositis, systemic juvenile idiopathic arthritis, bilateral uveitis, peripheral arthritis, cutaneous necrotizing vasculitis, and pulmonary hemorrhage have been linked to KFD. It has also been described with the auto-inflammatory disease, Well's syndrome.

A physical factor could also be the trigger: a patient developed KFD 6 weeks after pacemaker was implanted.<sup>2</sup> The simultaneous occurrence of KFD and silicone lymphadenopathy in an axillary lymph node of a patient with a leaking silicone breast implant has been described suggesting a chemical trigger.<sup>3</sup> In this patient, a lymph node biopsy revealed silicone lymphadenopathy along with the classic morphologic and immunophenotypic features of KFD.

Kikuchi-Fujimoto disease has also been reported in association with carcinoma of the breast, 4 carcinoma of the stomach<sup>5</sup> and diffuse large B-cell lymphoma.<sup>6</sup> Given the variety of disease associations (viral and non-viral infections, immune mediated, and auto-inflammatory, cancer, physical and chemical factors), it is possible that KFD is not a specific disease entity but represents an unusual immuno-pathological response of histiocytes and T-cells to a range of local or systemic immune stimuli, including both foreign (viruses and other pathogens) and self-antigens as well as physical and chemical factors (Figure 1). Perhaps the term histiocytic necrotizing lymphadenitis or Kikuchi-Fujimoto lymphadenitis is more appropriate than KFD.

Ali S. Jawad
Dept. of Rheumatology, The Royal London Hospital
Ibtisam T. Saeed
Queens Hospital, Romford
London, United Kingdom



Figure 1 - Factors and disease associations with Kikuchi-Fujimoto disease (Histiocytic necrotising lymphadenitis).

### Reply from the Author

I read with interest the valuable comment by Prof. Ali S. Jawad and Dr. Ibtisam T. Saeed related to my review article (Kikuchi-Fujimoto disease; Histiocytic necrotizing lymphadenitis). As stated in the article, it is suggested that infections and immune reaction are the most likely pathogenetic pathways in KFD. I agree that physical or chemical factors as well as non-viral infections may contribute to the pathogenesis through the immune pathway by acting as triggering factors; however, this needs further research to be proven. The reported cancer cases with KFD are exceedingly rare and I think they most likely represent coincidental findings rather than true association.

#### Jaudah Al-Maghrabi

Department of Pathology, Faculty of Medicine King Abdulaziz University Hospital Jeddah Kingdom of Saudi Arabia

## References

- Al-Maghrabi JA. Kikuchi-Fujimoto Disease. Histiocytic necrotizing lymphadenitis. Saudi Med J 2011; 32: 1111-1121.
- Charalabopoulos K, Charalabopoulos A, Binolis J, Papalimneou V, Ioachim E. Is implant pacemaker a physicochemical cause triggering Kikuchi-Fujimoto disease? *In Vivo* 2002; 16: 73-76.

## Correspondence

- Sever CE, Leith CP, Appenzeller J, Foucar K. Kikuchi's histiocytic necrotizing lymphadenitis associated with ruptured silicone breast implant. *Arch Pathol Lab Med* 1996; 120: 380-385.
- Aqel NM, Al-Sewan M, Collier DS. Kikuchi's disease in axillary lymph nodes draining breast carcinoma. *Histopathology* 2000; 36: 280-281.
- Radhi JM, Skinnider L, McFadden A. Kikuchi's lymph-adenitis and carcinoma of the stomach. J Clin Pathol 1997; 50: 530-531
- Yoshino T, Mannami T, Ichimura K, Takenaka K, Nose S, Yamadori I, et al. Two cases of histiocytic necrotizing lymphadenitis (Kikuchi-Fujimoto's disease) following diffuse large B-cell lymphoma. *Hum Pathol* 2000; 31: 1328-1331.

## Copyright

Whenever a manuscript contains material (tables, figures, etc.) which is protected by copyright (previously published), it is the obligation of the author to obtain written permission from the holder of the copyright (usually the publisher) to reproduce the material in Saudi Medical Journal. This also applies if the material is the authors own work. Please submit copies of the material from the source in which it was first published.