

KIKUCHI DISEASE OR TUBERCULOSIS? A RARE CASE OF CERVICAL LYMPHADENOPATHY

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Introduction

Kikuchi-Fujimoto disease is a rare, self-limiting cause of cervical lymphadenopathy with systemic symptoms like fever. Though first described in young Asian women, it occurs in diverse populations [1,2]. Diagnosis requires biopsy showing necrosis and histiocytic-lymphocytic infiltrates [3].

Most cases resolve with supportive care; corticosteroids may be needed for severe or recurrent disease [4].

Clinical Scenario

Initial Presentation:

- Progressively enlarging
- Painless
- Right-sided neck mass
- Over 2 months
- Accompanied by productive cough and fever

Lab Results:

- CRP: 110mg/L
- ESR: 62mm/hr
- WBC: 9.1, 62% Neu

Imaging:

- US: multiple hypoechoic nodules (the largest 4.7x2.9x2.6cm)
- CXR: RUL opacities

Initial Treatment:

- Antibiotic therapy started but no improvement

Excisional LN biopsy:

- Necrotizing lymphadenitis consistent with Kikuchi-Fujimoto disease
- AFB stain: Negative
- Cultures: Negative

Unique Aspects

This case illustrates several challenges, including the coexistence of Kikuchi-Fujimoto disease and latent tuberculosis. The patient's cervical necrotizing lymphadenopathy and necrotic mediastinal nodes suggested tuberculosis, yet the biopsy pointed to Kikuchi-Fujimoto disease. A positive QuantiFERON and later development of pericarditis further complicated management. Treatment required a combination of corticosteroids, antibiotics, latent tuberculosis therapy, and colchicine.

Timeline

1 month:

- The patient was lost to follow-up
- But returned a month later
- With lymph node drainage and persistent fever

Additional work up:

- QuantiFERON test +
- CT Chest: Necrotic mediastinal lymph nodes
- Autoimmune negative
- Other infectious work up negative

Treatment:

- Started on doxycycline and steroids
- Initiation of treatment for latent tuberculosis resulted in clinical improvement

Discussion

Kikuchi-Fujimoto disease is rare and often mimics infections like tuberculosis, making diagnosis challenging. It should be suspected in lymphadenopathy unresponsive to antibiotics and confirmed with biopsy and appropriate workup.

[1] Kikuchi A, Chang Z, Gleeson PA. A special issue of IUBMB Life celebrating the 50th anniversary of FAOBMB (1972-2022). IUBMB Life. 2022;74(12):1124-1125. doi:10.1002/iub.2691

[2] Shen Z, Ling J, Zhu X, Yang J, He T. Macrophage activation syndrome in children with Kikuchi-Fujimoto disease. Pediatr Rheumatol Online J. 2023;21(1):10. Published 2023 Jan 25. doi:10.1186/s12969-023-00788-w

[3] Seong GM, Kim JH, Lim GC, Kim J. Clinicopathological review of immunohistochemically defined Kikuchi-Fujimoto disease-including some interesting cases. Clin Rheumatol. 2012;31(10):1463-1469. doi:10.1007/s10067-012-2036-y

[4] Hutchinson CB, Wang E. Kikuchi-Fujimoto disease. Arch Pathol Lab Med. 2010;134(2):289-293. doi:10.5858/134.2.289

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2 months:

- Developed chest pain
- Which relieved by leaning forward

Diagnosis:

- Elevated ESR (57mm/hr)
- Normal Trop ECG and TTE
- Dx: Pericarditis

Treatment:

- Tx: Ibuprofen + Colchicine

Outcome:

- Marked clinical improvement