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Pulmonology

AN UNRESOLVED CERVICAL MASS WITH PERSISTENT EOSINOPHILIA: A DIAGNOSTIC CHALLENGE

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ABSTRACT Chronic cervical lymphadenopathy in adults presents a diagnostic challenge, particularly in regions where infectious and malignant etiologies are prevalent. We report the case of a 30-year-old male who presented with recurrent, painless cervical lymphadenopathy associated with weight loss and peripheral eosinophilia. Despite multiple surgical resections and empirical antitubercular therapy, the condition persisted. Radiologic evaluation demonstrated a heterogeneous necrotic mass, while microbiological studies for tuberculosis were negative. Markedly elevated serum IgE levels and characteristic histopathological findings ultimately established the diagnosis of Kimura disease. The patient responded favorably to systemic corticosteroid therapy. This case underscores the importance of clinicopathologic correlation and consideration of rare immune-mediated disorders in patients with recurrent lymphadenopathy and eosinophilia to avoid misdiagnosis and inappropriate treatment.

KEYWORDS :

INTRODUCTION

Chronic cervical lymphadenopathy is a common clinical presentation with a broad differential diagnosis that includes infectious, malignant, and inflammatory conditions. In regions where tuberculosis is endemic, empirical therapy is often initiated without definitive confirmation. However, rare immune-mediated disorders may mimic these common conditions and lead to delayed diagnosis. Kimura disease is an uncommon, benign, chronic inflammatory disorder characterized by painless cervical lymphadenopathy, peripheral eosinophilia, and elevated serum IgE levels. Due to its rarity and nonspecific clinical features, it is frequently misdiagnosed. This case highlights the importance of clinicopathologic correlation in establishing an accurate diagnosis.

Case Presentation

A 30-year-old male presented with a six-month history of painless swelling on the left side of his neck. The swelling had gradually increased in size and was associated with an unintentional weight loss of eight kilograms and mild fatigue. He denied fever, night sweats, dysphagia, odynophagia, or breathing difficulty. There was no history of chronic cough, hemoptysis, or recent travel. His past medical history was significant for two previous surgical excisions of similar cervical swellings in 2021 and 2023, both of which were reported histopathologically as reactive lymphadenitis. In 2023, he had been started on empirical antitubercular therapy despite the absence of microbiological confirmation, but the swelling failed to resolve and subsequently recurred.

On physical examination, a firm, non-tender, non-mobile lymph node measuring approximately three centimeters was palpated in the left posterior cervical chain. There was no overlying skin change or sinus formation. No additional lymphadenopathy was detected, and systemic examination was unremarkable, with no hepatosplenomegaly.

Laboratory investigations revealed mild anemia with a hemoglobin level of 12.2 g/dL. A notable finding was peripheral eosinophilia, with an absolute eosinophil count of 1,200 cells per microliter. Serum IgE levels were markedly elevated at 1538 IU/mL. Renal and liver function tests were within normal limits. The presence of persistent eosinophilia prompted reconsideration of the initial differential diagnoses and suggested the possibility of an allergic or immune-mediated process.

Contrast-enhanced computed tomography of the neck and thorax demonstrated a heterogeneous necrotic mass in the left posterior triangle measuring approximately 2 × 4 centimeters. Ultrasonography of the neck (figure 1) confirmed an enlarged lymph node with partially preserved architecture. Given the regional prevalence of tuberculosis, XPERT MTB and MGIT culture testing were performed; both results were negative. These findings made infectious etiologies less likely.

Due to persistent diagnostic uncertainty and recurrence, an excisional biopsy was performed. Histopathological examination revealed preserved lymph node architecture with prominent reactive germinal centers and dense eosinophilic infiltrates within the interfollicular areas. There was also evidence of vascular proliferation. Immunohistochemistry demonstrated PAX5 positivity within reactive B-cell follicles, confirming follicular hyperplasia rather than malignant transformation. When correlated with the clinical features of painless cervical lymphadenopathy, marked eosinophilia, and elevated serum IgE levels, these findings established the diagnosis of Kimura disease. The patient was initiated on oral prednisolone at a dose of 40 mg daily for six weeks, followed by gradual tapering over subsequent months. At follow-up visits, there was significant reduction in lymph node size and improvement in systemic symptoms. The patient was advised regular long-term follow-up due to the known risk of recurrence.

DISCUSSION

Kimura disease is a rare, chronic inflammatory disorder that primarily affects young males and commonly involves the cervical lymph nodes. It is characterized by painless lymphadenopathy, peripheral eosinophilia, and elevated serum IgE levels. Because its presentation overlaps with tuberculosis and lymphoma, misdiagnosis is common, particularly in endemic regions where empirical therapy is frequently initiated [1,2].

The pathogenesis is believed to involve a Th2-mediated immune response leading to increased eosinophil production and IgE synthesis. Radiologic findings are nonspecific, making histopathological examination essential for diagnosis. Typical features include preserved nodal architecture, reactive germinal center hyperplasia, and dense eosinophilic infiltration [3]. Immunohistochemistry helps confirm the reactive nature of the lymphoid proliferation and exclude malignancy. Corticosteroids are the first-line treatment and usually result in clinical improvement, although recurrence may occur and requires long-term follow-up [2,4]. Early recognition is important to avoid unnecessary antitubercular therapy or aggressive oncologic interventions.

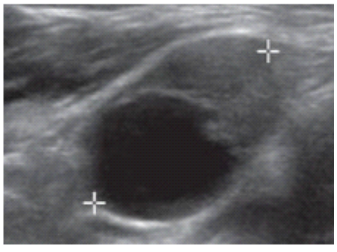

Figure1. USG Neck

CONCLUSION

Kimura disease should be considered in patients presenting with recurrent, painless cervical lymphadenopathy accompanied by peripheral eosinophilia and elevated serum IgE levels, particularly in young Asian males. Accurate diagnosis requires careful clinicopathologic correlation and histopathological confirmation. Early recognition prevents unnecessary empirical therapies and

invasive interventions. Corticosteroid therapy is effective in disease control, but regular follow-up is necessary to monitor for recurrence.

REFERENCES

1. Kikuchi M, et al. Kimura's disease: A rare lymphoproliferative disorder in a young man. American Journal of Clinical Pathology. 1977;67(3):520–525.
2. Zhao Y, et al. Kimura disease: A review and update. Clinical and Experimental Dermatology. 2016;41(2):119–123.
3. Cheuk W, et al. Kimura disease: Clinicopathologic analysis of 13 cases. American Journal of Surgical Pathology. 2003;27(5):661–667.
4. Hirahara K, et al. Kimura's disease: A review of the literature. Journal of Clinical Immunology. 2004;24(1).