

Kimura's Disease - a Rare Chronic Inflammatory Entity

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Abstract: Kimura's disease is a rare chronic inflammatory disease mainly involves the soft tissue of the head and neck region and lymph nodes. Clinical differential diagnoses of KD include lymphoma, lymphangioma, reactive lymphadenopathy, salivary gland tumor and nodal metastasis. Hence one needs to be careful while examining the slide of the kimura's disease.

Keywords: kimura's disease, submandibular glands, lymph nodes

I. Introduction

Kimura's disease is a chronic inflammatory disease mainly involves the soft tissue of the head and neck region and lymph nodes. The definitive histological description was published by Kimura et al in 1948, which they termed 'Kimura's disease.[1] Recent studies have shown that KD occasionally shows a clonal proliferation of T-cells.[2] Here we present a case of kimura's disease involving unilateral submandibular gland along with lymph nodes.

II. Case Report

A 25 years male presented in the department of surgery with the chief complaint of swelling in the left submandibular region since 3 months which was gradually increasing in the size. Patient did not have any other complaints, there was no significant past or present history. On examination a diffuse growth was seen in the left submandibular region which was firm in consistency. Multiple lymph nodes were also palpable on the same side. USG neck was performed which showed multiple enlarged necrotic lymph nodes in the left cervical and the submandibular region with largest measuring 18mmX16mm. Based on the above findings the possibility of tubercular or malignant lesion was kept and surgery was performed.

In our histopathology lab we received two specimens one was left submandibular gland and other was level I, II, III and IV lymph nodes of same side. On gross examination salivary gland showed multiple grey white areas along with normal salivary gland parenchyma. Multiple sections from the salivary gland and lymph node showed marked follicular hyperplasia, proliferating thin walled vessels and dense eosinophilic infiltrate along with eosinophilic abscess. Based on the histomorphological findings the diagnosis of kimura's disease of the left submandibular gland and left sided cervical and submandibular lymph node was given.

III. Discussion

Kimura's disease is a rare chronic inflammatory disorder. Several etiological factors have been accused including autoimmune, allergic and infective causes such as insect bites, parasites and Candida, although no infective agent has been isolated so far in lesions. It is commonly seen in the young and middle aged Asian males of Chinese and Japanese population.[3] The characteristic feature of this disease is its typical presentation as painless subcutaneous masses with adenopathy in the head and neck region. The disease usually involves subcutaneous tissues about the parotid and submandibular glands with regional lymphadenopathy (mainly periauricular, axillary or the inguinal group) and the oral mucosa is rarely affected.[4] Kimura's disease is a benign condition and is usually self-limiting, occasionally presenting with renal involvement with nephrotic syndrome being the most common associated with this disease. Proteinuria may occur in 12–16% of the cases.[5]

Clinical differential diagnoses of KD include lymphoma, lymphangioma, reactive lymphadenopathy, salivary gland tumor, nodal metastasis, Mikulicz's disease and angiolymphoid hyperplasia with eosinophilia.[6]

The characteristic histopathologic feature of KD is the presence of prominent germinal centers in the involved lymph nodes containing cellular, vascular, and fibrous components. The cellular component consists of dense eosinophilic infiltrates in a background of abundant lymphocytes and plasma cells, eosinophilic microabscesses with central necrosis.[4]

The difficulty in distinguishing KD from angiolymphoid hyperplasia with eosinophilia (ALHE) is due to certain similar clinical and histopathologic features. Common histopathologic characteristics of ALHE and

KD are as follows. In both the dermis and subcutaneous tissues are involved with an inflammatory infiltrate composed of lymphocytes and eosinophils and blood vessels with endothelial cells that may be protruded with abundant cytoplasm. Both may present with fibroplasia with a plasma cell infiltrate. However, the epithelial and nonepithelial adnexal structures may be spared.[7]

IV. Figures



Fig 1. showing usg image with enlarged lymph node



Fig 2. Image Showing Gross Of The Submandibular Gland With Many Grey White Areas

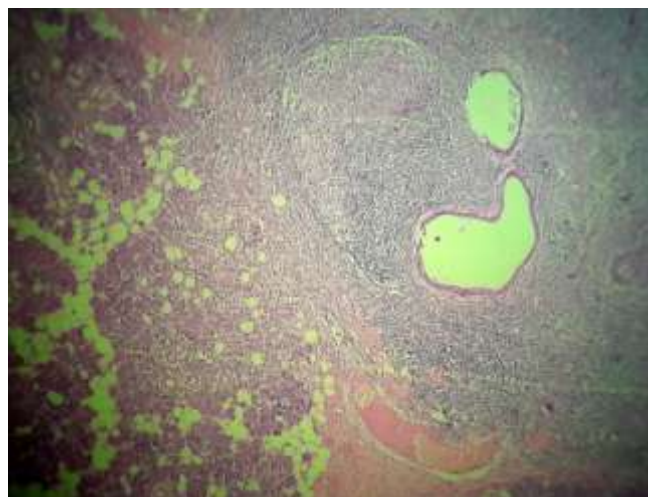


Fig 3. Photomicrograph Showing Scanner View Of The Salivary Gland With Large Lymphoid Follicle With Many Eosinophils.

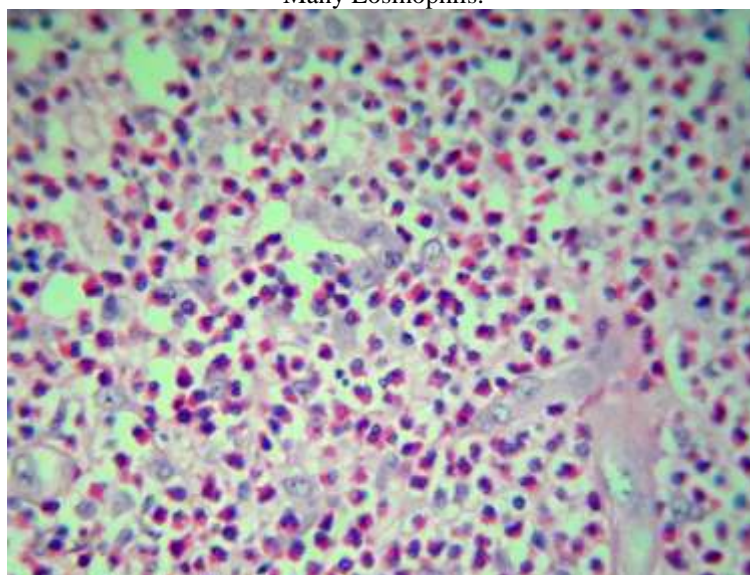


Fig 4. Photomicrograph Showing Many Large Areas Of Eosinophilic Abscess And Proliferating Vessels

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