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Case Report

Rare Presentation of Kimura's Disease – A Case Report

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Abstract

Kimura's illness is an immune disorder that frequently affects the head and neck lymph nodes. A bulge in the forearm rarely forms. A positive outcome is less frequent after glucocorticoid medication and surgical resection. We present a unique example of a right forearm mass in a 45 year old female with Kimura's disease. The postoperative pathology was unknown after the patient had the tumour resected two years before at a nearby hospital. Due to expansion of the mass, he underwent a second resection. After postoperative pathology revealed the patient had Kimura's Disease. He was given corticosteroid therapy. We followed the patient for one year after surgery. He is now recovering well and continues to be closely monitored during follow-up. It is unusual for Kimura's disease to be identified as the painless lump in the forearm. The patient had a successful outcome following full removal of the tumour and systemic administration of prednisone.

Key words: Kimura's Disease, Vascular proliferation, Esinophilia

INTRODUCTION

Kimura's disease is a chronic inflammatory condition that rarely affects the forearm and frequently affects the lymph nodes. Its cause is unknown. Clinical signs and symptoms vary depending on the location and size of the masses, which are typically painless and increase gradually.[1] A patient just brought to our hospital has Kimura's Disease of the right forearm.

CASE DETAILS

A 45-year-oldfemale patient complained of a right forearm swelling that had changed his appearance and gradually grown larger over the previous five years. Five years ago, the patient noticed the swelling on the right forearm. of size of a peanut, soft, smooth, with normal skin colour and no additional symptoms. A local hospital performed a mass excision two years before, however the postoperative pathology was not evident. The tumour gradually grew over the next 10 months to a size of 5 cm x 2.5 cm after a relapse. The patient came to our department in need of a precise diagnosis and course of action. The patient was in good condition and had never had a chronic illness.

A physical examination revealed right forearm mass measured roughly 5 cm x 2.5 cm. There was no redness, swelling, ulceration, or discomfort, and it was soft with a smooth surface. No abnormalities were discovered in routine investigations. Prior to surgery, neither IgG4 nor IgE levels were checked, nor was the likelihood of Kimura's condition taken into account.

Imaging by MRI and CT revealed features of Malignant soft tissue lesion. FNAC of swelling was done. But we could not give the definite diagnosis as material yeided was sparse. Surgical excision was done and sent for histopathological examination. On histology, in the hyperplastic fibrous tissue, there were hyperplastic lymphoid tissues, lymphoid follicles, a significant number of eosinophils between follicles, and small hyperplastic blood vessels in the follicles [Figure 1 and 2].

Final diagnosis was made as Kimura's disease of forearm. After surgery, patient was treated with corticosteroids and there was no recurrence.

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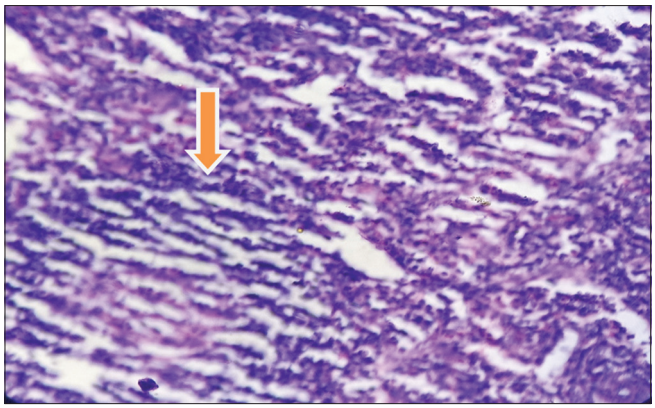

Figure 1: Hyperplastic lymphoid tissues, lymphoid follicle and small hyperplastic blood vessels in the follicles H&E 40X

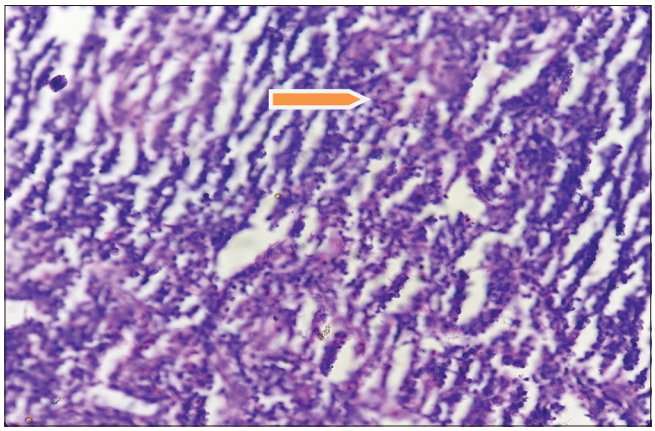

Figure 2: A significant number of eosinophils between follicles, and small hyperplastic blood vessels in the follicles H&E 40x

DISCUSSION

A rare, benign immune-system disorder with an unknown cause, Kimura's disease is more common in the craniofacial area.[1] Eosinophilic granulomas and lympho-proliferative lymphoid follicles in soft tissue or lymph nodes are its defining features.[2] Kimura's disease can occur at any age, but the peak incidence period is between the ages of 20 and 40. Middle-aged males make up the majority of the disease's patients.[3,4] Kimura's disease has to be distinguished from Kaposi sarcoma, benign tumours, lymphomas and Langerhans cell histiocytosis.

At the moment, histopathology is the key factor used in the diagnosis of Kimura's disease. Kimura's disease can also be diagnosed with the aid of CT and MRI scans. The majority of lesions exhibit moderate to severe enhancement in post-contrast MR images and mild to moderate enhancement in post-contrast CT scans.[5] The histological features of Kimura's disease include tissue infiltration, lymphocyte follicular hyperplasia, fibro-collagenous deposition, and vascular proliferation.[6]

In the past, Kimura's disease have occasionally been confused angiolymphoid hyperplasia with eosinophilia (ALHE). As opposed to Kimura's disease, which manifests as a subcutaneous lesion, ALHE mostly affects the skin. Both are distinguished by a propensity to develop in the head and neck region, a significant eosinophilic infiltrate, and vascular proliferation. On histology, Kimura's disease is evidently characterised by eosinophilic infiltration and hyperplastic lymphoid follicles with obvious germinal centres. According to laboratory results, people with Kimura's disease had significantly higher levels of eosinophils on normal blood tests and serum IgE.[6–11] Regular blood tests show a large increase in eosinophils and IgE levels.

The management of Kimura's disease is not yet governed by any consensus guidelines. The surgical excision of the mass and a pathological evaluation are the mainstays of treatment for Kimura's disease, which is then followed by post-operative care. We offer the patients oral glucocorticoid medication, demonstrating a stepwise drop, because of the greater levels of eosinophils and IgE in their peripheral blood, even though the tumour has been fully removed.

Although recurrence is common, in this case there was no significant recurrence seen during follow-up. We think systemic medication therapy, which regulates eosinophil and IgE levels, is a key strategy for preventing postoperative recurrence in cases where the mass was entirely excised but the peripheral blood levels of eosinophil and IgE were high

CONCLUSION

Kimura's disease is an uncommon condition that is often diagnosed through histological analysis in addition to physical and radiological evaluation. After systemic therapy, the result is noticeably better. Even though there was no recurrence over the one year follow-up period in the current case, closer observation is needed. Our case report shows that a painless forearm mass should be ruled out as having Kimura's disease, and that the condition responds well to surgery and prednisone treatment without radiotherapy.

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