

## Kimura's disease: a rare disease with cervical lymphadenopathy

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### Abstract

Kimura's disease is a very rare disorder and causes swellings and lymphadenopathy, especially in neck and axillary region. The aetiology is still unknown but allergic reactions or an alteration of immune system should be taken into consideration.

Here, we report a 45-year-old Turkish male patient who presented to the Uludag University Medical Faculty Emergency Medicine Department with complaint of enlarged lymph nodes in the neck region and pruritus. His leukocyte count and eosinophil rate were found to be elevated in the emergency laboratory results. During his follow up the nodes were removed and histopathologically evaluated as Kimura's disease.

In conclusion, one can say that the diagnosis of Kimura's disease can be very difficult and histopathological features play an important role. However, this diagnosis should not be underestimated in young male patients with lymph nodes in cervical area especially in the emergency department.

**Keywords:** emergency department, glomerulonephritis, Kimura's disease

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### Introduction

Kimura's disease is a rare disorder with an unknown aetiology which is still being studied. However, allergic reactions or immune system disorders may be responsible in the aetiology of this disease.<sup>1</sup> This rare condition is found mostly in the Asian region, among males in the 20-40 age group.<sup>2,3</sup>

In this disease, involvement of the salivary glands, lymph nodes and skin can be found frequently; however, other organ systems are rarely involved. The eyelid, eye, oral cavity, chest and extremities may also be involved in some cases in addition to glomerulonephritis.<sup>4</sup>

Differential diagnosis is made with histopathological features such as follicular hyperplasia and elevated eosinophil levels. We present this rare case that came to the emergency department with the aim to emphasise that this disorder should always be kept in mind in patients with lymph nodes in the neck and cervical region.....

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### Case Report

A 45-year-old male patient presented to the Uludag University Medical Faculty Emergency Medicine Department in December 2018 with complaint of lymph nodes on the right side of his neck and pruritus. He claimed that these nodes appeared and disappeared periodically during the last six months. He had had no infections or operations in recent time and no chronic disease. He also denied taking any medication. On physical examination two nodes about 2×3 cm in size could be seen on the right side of the posterior neck. He denied any pain in the nodules. Also, there were signs of itching on his arms and abdominal region. No other pathologic findings were detected on physical examination.

Laboratory tests were performed; leukocyte count and eosinophil rates were found to be slightly elevated. The patient was given antihistaminic drugs intravenously for his complaints and discharged from the emergency department. The next day other tests were conducted and his Ig E levels were found to be elevated in serum analysis.

For this, he a biopsy was done. Histopathology revealed a lymph node with follicles and reactive germinal centres. Also, there were inflammatory cells, mostly eosinophils and as well as dendritic cells and immunoblasts. These histological features were matched with Kimura's disease description.

The patient was recommended consultation with internal medicine department and was followed up by them for three months as glomerulonephritis.

### Discussion

Kimura's disease is an inflammatory condition presented as painless nodules under the skin, mostly in the head and neck region. Nodules can be typically found in pre-auricular, submandibular, and popliteal regions. Other areas such as eyelids, lacrimal glands, orbit, axilla, groin, forearm, and kidneys are rarely involved.<sup>5-7</sup>

Kidneys may be affected in up to 60% of patients and can present as glomerulonephritis.<sup>8</sup>

Malignant disorders may be mistaken because of a localised mass accompanied by lymphadenopathy. Because of this, differential diagnosis should be performed very carefully.<sup>9</sup>

On radiological examination, Kimura's disease can be mistaken with other malignant diseases such as lymphoma. Despite similar radiological characteristics, in case of Kimura's disease, histological confirmation should be made.<sup>10</sup>

For the management of this disease there is still no agreement within departments such as nephrology, reconstructive and ear-nose and throat surgery. Surgery can be performed in some cases. Steroids which are reported to decrease the size of the enlarged lymph nodes can be used. In addition to this, steroid treatment may decrease renal symptoms.<sup>9,10</sup>

### Conclusion

From this case we conclude that in the patients who present to the emergency department with lymph nodes in neck region and elevated leucocyte counts the chances of Kimura's disease should always be taken into consideration.

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in this case.

### References

1. Armstrong WB, Allison G, Pena F, Kim JK. Kimura's disease: two case reports and a literature review. *Ann Otol Rhinol Laryngol.* 1998; 107:1066-71.
2. Li TJ, Chen XM, Wang SZ, Fan MW, Semba I, Kitano M. Kimura's disease: a clinicopathologic study of 54 Chinese patients. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 1996; 82:549-55.
3. Ranka SR, Rajput A, Kantharia CV. Kimura's disease. *Indian J Otolaryngol Head Neck Surg.* 2004; 56:43-5.
4. Kuo TT, Shih LY, Chan HL. Kimura's disease. Involvement of regional lymph nodes and distinction from angiolymphoid hyperplasia with eosinophilia. *Am J Surg Pathol.* 1988; 12:843-54.
5. Varshney MK, Kumar A, Khan SA, Yadav C. Kimura disease of extremity: unusual manifestation in a long bone. *Joint Bone Spine.* 2008; 75:492-94.
6. Chan KM, Mok JS, Ng SK, Abdullah V. Kimura's disease of the auricle. *Otolaryngol Head Neck Surg.* 2001; 124:598-99.
7. Kanazawa S, Gong H, Kitaoka T, Amemiya T. Eosinophilic granuloma (Kimura's disease) of the orbita: a case report. *Graefes Arch Clin Exp Ophthalmol.* 1999; 237:518-21.
8. Rajpoot DK, Pahl M, Clark J. Nephrotic syndrome associated with Kimura disease. *Pediatr Nephrol.* 2000; 14:486-8.
9. Abuel-Haija, Hurford MT. Kimura disease. *Arch Pathol Lab Med.* 2007; 131:650-51.
10. Iwai H, Nakae K, Ikeda K, Ogura M, Miyamoto M, Omae M, et al. Kimura disease: diagnosis and prognostic factors. *Otolaryngol Head Neck Surg.* 2007; 137:306-11.