

# Kimura Disease of the Parotid Gland in Late Adulthood: Diagnostic and Surgical Insights

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A 60-year-old male presented to the ENT outpatient department with a gradually enlarging, painless swelling in the left parotid region over the past six years. There was no history of trauma, infection, facial nerve weakness, or systemic symptoms. The patient had no significant past medical history and denied any tobacco or alcohol use.

On examination, a solitary, diffuse, firm, non-tender, and mobile swelling measuring approximately 10x6 cm was noted in the left preauricular region, as shown in [Table/Fig-1]. It extended superiorly to the lateral canthus and inferiorly to the angle of the mandible. The overlying skin appeared normal, and there was no facial nerve involvement. A Computed Tomography (CT) scan of the neck with contrast revealed an ill-defined soft tissue lesion in the subcutaneous plane of the left parotid and temporal region, measuring 6.3x3.4x9.5 cm. The lesion exhibited multiple vascular channels and calcification foci, but did not infiltrate the parotid gland. Multiple enlarged lymph nodes were noted adjacent to the lesion in the left cervical levels Ib, II, III, and IV, with the largest measuring 20x10 mm located inferior to the lesion [Table/Fig-2]. The clinical differential diagnoses include lymphoma, metastatic tumour nodes, eosinophilic granuloma, Mikulicz's disease, and scrofula, with primary consideration given to Hodgkin and non-Hodgkin lymphomas. It may also be mistaken for Angiolymphoid Hyperplasia with Eosinophilia (ALHE). The differential diagnosis also

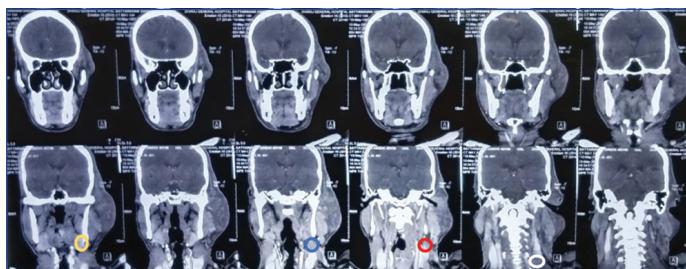
included Warthin's tumour, lymphoma, chronic sialadenitis, and pleomorphic adenoma.

With patient informed consent, the patient underwent surgical excision of the mass under general anaesthesia via a modified Blair incision [1]. A superficial parotidectomy was performed with identification and preservation of the facial nerve branches, as seen in [Table/Fig-3]. The adjacent enlarged lymph nodes in cervical levels Ib to IV were also excised during the procedure. Histopathological examination revealed lymphoid follicular hyperplasia, dense eosinophilic infiltrate, angiomatoid hyperplasia, and eosinophilic microabscesses, confirming the diagnosis of Kimura disease [Table/Fig-4]. At the one-week postoperative follow-up, the suture site was well healed, with no signs of recurrence [Table/Fig-5].

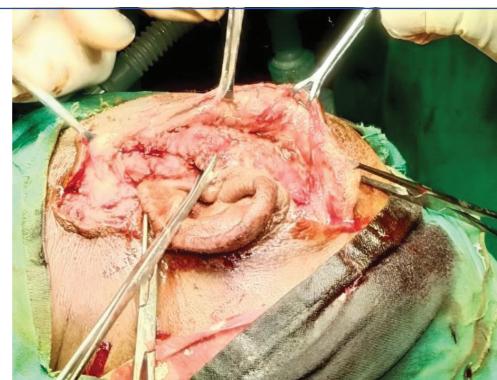
Kimura disease is most commonly seen in Asian males between the ages of 20 and 40 years, with a lower occurrence in children [2]. It is a benign, chronic inflammatory disorder of unknown aetiology that primarily affects Asian males. It typically presents as painless soft tissue swelling in the head and neck region, often with associated lymphadenopathy, peripheral eosinophilia, and elevated serum IgE levels [3]. The condition is frequently misdiagnosed as a neoplastic



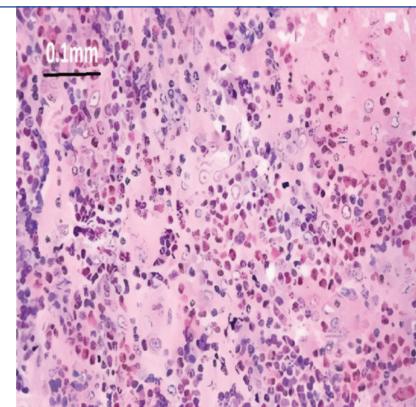
[Table/Fig-1]: Pre-operative photograph showing left parotid region swelling.



[Table/Fig-2]: CT scan of the neck showing cervical lymph nodes at level-Ib (yellow circle), level-II (blue circle), level-III (red circle) and level-IV (white circle).



[Table/Fig-3]: Intraoperative gross appearance of the swelling.



[Table/Fig-4]: Hematoxylin and Eosin (H&E) staining (magnification-40x) revealed lympho-eosinophilic infiltrates with secondary germinal center formation, angiomatoid hyperplasia, and patchy eosinophilic micro abscesses in the parotid gland and surrounding tissue.



**[Table/Fig-5]:** Postoperative photograph of the surgical site on follow-up.

or infectious process, especially when presenting in older adults or with atypical features.

This case is significant due to the patient's advanced age, the unusually large size of the lesion, and the prolonged course of the disease without systemic involvement. The lesion was confined to subcutaneous tissue, with adjacent lymphadenopathy, without parotid gland infiltration on imaging. Surgical excision remains the mainstay of treatment, although recurrence is possible [3]. The inclusion of lymph node dissection helped ensure comprehensive disease clearance and facilitated a definitive histopathological diagnosis.

Recent literature supports the variability in presentation. Yorita K et al., reported a young female with a parotid nodule exhibiting squamous metaplasia, complicating the diagnosis [4]. Ghafar MHA et al., described a middle-aged male who presented with a painless parotid mass, peripheral eosinophilia, and elevated IgE levels—classical features of Kimura disease—and who was managed with

systemic steroids followed by parotidectomy [5]. Meanwhile, Kim H et al., documented an atypical presentation without eosinophilia in an elderly female [6]. Bouanani O et al., described a rare case of Kimura's disease with intraparotid localisation, emphasising the atypical anatomical presentation and highlighting the diagnostic challenges associated with its non-specific symptoms. Their review of the literature also pointed to a broad clinical spectrum, suggesting that Kimura's disease can mimic other parotid and lymphoid pathologies, making accurate diagnosis reliant on histopathological confirmation [7]. Similarly, Alanazi F et al., reported cases that reinforced this variability in presentation and clinical course, supporting the view that Kimura's disease does not follow a uniform pattern and that treatment responses may vary depending on disease location and immune profile [8].

This case underscores the importance of including Kimura disease in the differential diagnosis of parotid swellings, regardless of patient age. Histopathology remains the gold standard for diagnosis.

## REFERENCES

- [1] Flint PW, Haughey BH, Lund VJ, Niparko JK, Richardson MA, Robbins KT, et al. Cummings Otolaryngology: Head and Neck Surgery. 6<sup>th</sup> ed. Philadelphia (PA): Elsevier Saunders; 2015. p. 1530-45.
- [2] Sah P, Kamath A, Aramanadka C, Radhakrishnan R. Kimura's disease- an unusual presentation involving subcutaneous tissue, parotid gland and lymph node. *J Oral Maxillofac Pathol.* 2013;17(3):455-59.
- [3] Kim WJ, Kim HK. Current concepts of Kimura disease: Pathophysiology and evolution of treatment. *Arch Craniofac Surg.* 2022;23(6):249.
- [4] Yorita K, Fujii T, Nagao T, Murakami I, Hashida Y, Higuchi T, et al. Kimura disease forming a human polyomavirus 6-negative parotid gland nodule with prominent squamous metaplasia in a young female: A case report. *Radiol Case Rep.* 2023;18(5):1933-38.
- [5] Ghafar MHA, Oon A, Mohammad NMY, Mohammad I. Kimura disease of parotid gland. *Int J Hum Health Sci.* 2019;4(1):63-66.
- [6] Kim H, Kim S, Lee J, Lee SH. A case of Kimura's disease without eosinophilia. *Korean J Head Neck Oncol.* 2020;36(1):21-23.
- [7] Bouanani O, Habimana A, Benazzou S, Boulaadas M. Rare intraparotid localization of Kimura's disease: A case report and literature review. *Sch J App Med Sci.* 2020;8(1):3906-09.
- [8] Alanazi F, Alabaid A, Alahmadi RM, Alghamdi FR. Kimura disease: An unusual presentation of parotid mass in a sickle cell disease patient. *Cureus.* 2022;14(4):e24787.

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