

## Case Report

# Kimura Disease in Infraorbital Region of Face Manifesting with a Huge Mass Lesion: A Rare Case Report

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## Abstract

Kimura disease (KD) is a chronic inflammatory disorder that presents as painless or pruritic subcutaneous lesions with in the head and neck, especially in the parotid and submandibular regions. Peripheral eosinophilia and elevated serum IgE levels are the characteristics of the disease. Here, we present a case of Kimura Disease in Infraorbital region of face manifesting with a huge mass lesion.

**Keywords:** Kimura disease; Infraorbital region; Huge mass

## Introduction

Kimura's disease is a benign chronic condition of unknown cause, which usually presents as a painless swelling of subcutaneous tissue that develops into either single or multiple locations in the head and neck region, especially in the major salivary glands and regional lymph nodes. Other sites such as the oral cavity, axilla, extremity, trunk and groin have also been involved. Peripheral eosinophilia and elevated serum IgE levels are the characteristics of the disease [1]. Surgical resection and low dose radiotherapy are the main treatment methods. Here, we present a case of Kimura Disease in infraorbital region of face manifesting with a huge mass lesion.

## Case Presentation

A 65-year-old Chinese man presented with a huge subcutaneous tissue mass lesion in right infraorbital region of face, which had been repeated growth and contraction for 20 years. Examination revealed that the mass was rubbery, painless, and surface skin of the mass was similar to the orange peel (Supplemental Figure 1). Magnetic resonance imaging (MRI) showing a huge mass with partial low signal intensity accompanied with high signal intensity septum in the right infraorbital and buccal area (T1 Short T2 inversion Recovery) (Figure 1, Supplemental Figure 2). Peripheral blood test showed that the leukocyte count was  $14.2 \times 10^9/L$  with 58% eosinophils.

The patient was operated on under general anaesthesia. First, the huge mass was resected, which was orbicular and about 11cm in diameter (Figure 2). And then an adjacent soft tissue flap of right buccal was used to repair the defect of the infraorbital region. Histological examination of the specimen showed inflammatory cell infiltration consisting of a large number of eosinophils (Figure 3, Supplemental Figure 3).

Kimura's disease is a rare disease entity and the disease manifesting with a giant mass that occur in the infraorbital region is extremely rare. The pathogenesis of Kimura's disease remains uncertain. Many scholars believe it to be an allergic reaction or Parasitic to an elevated

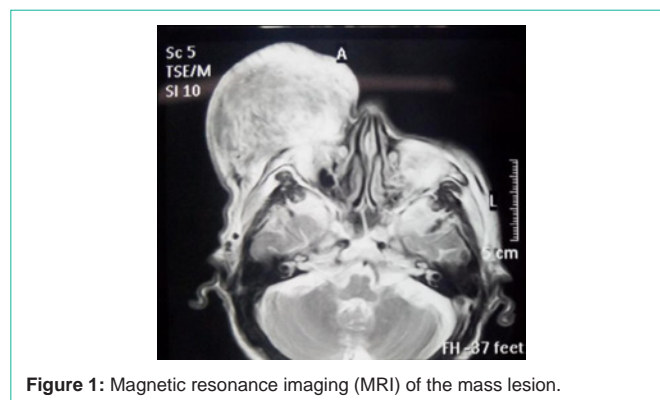


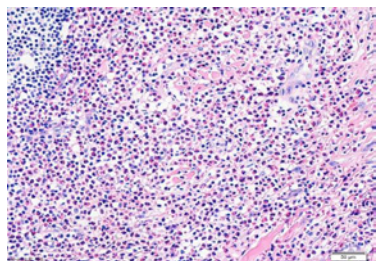
Figure 1: Magnetic resonance imaging (MRI) of the mass lesion.



Figure 2: The huge mass was orbicular and about 11cm in diameter.

serum IgE level and the deposition of IgE in the germinal centre, as well as peripheral blood eosinophilia [2].

Surgical resection and radiotherapy are the main treatment methods [3]. Surgery plays a pivotal role in providing the diagnosis and the remove of giant massed or unsightly lesions. However, recurrence of the disease is high after surgery alone, especially for incompletely excised lesions. A moderate dose of radiation (25 to 30 Gy) achieves excellent local control, especially to recurrent, large or



**Figure 3:** Histopathological examination of the mass.

inoperable disease. In this case, the lesion invaded the right eyeball surrounding tissue and could not be completely removed, so radiotherapy was used after the operation and good treatment results were achieved.

## References

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