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Pathology

# Traumatic Eosinophilic Granuloma: A Malignant Appearing Benign Lesion

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Abstract Case Report

Traumatic eosinophilic granuloma is a rare and self-limiting benign oral mucosal lesion. We present a case of 95-year male presented with an ulcer on the right lateral border of the tongue. Lesion was painful. No lymph node was palpable. Patient was a chronic smoker for 30 years. Routine blood tests were normal. Histopathological diagnosis of traumatic eosinophilic granuloma/ TUSE was made showing normally oriented hyperplastic keratinized stratified squamous lining epithelium ulcerated and replaced by granulation tissue at places. There is dense inflammatory infiltrate rich in eosinophils and few benign mononuclear cells present together with dilated vessels in the sub epithelium. The infiltrate is extending into muscle bundles. No evidence of malignancy seen. Patient was advised to be on follow up.

Keywords: Eosinophilic granuloma, ulcer, tongue.

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#### **INTRODUCTION**

Traumatic eosinophilic granuloma also known as Traumatic ulcerative granuloma with stromal eosinophilia (TUGSE) is a rare and self-limiting benign oral mucosal lesion [1]. Pathogenesis remains disputed but trauma by accidental bite, sharp tooth and hard food may be an etiological factor [2]. CD30+ mononuclear cells with in the traumatic eosinophilic granuloma raises the possibility of CD30+ lymphoproliferative disorders in few cases [3].

#### CASE REPORT

A 95 years old male presented with an ulcer measuring 0.5 cm in diameter on the right lateral border of the tongue for last 2 months. Lesion was painful. No lymph node was palpable. Patient was a chronic smoker for 30 years. Routine blood tests were normal. Jaw X-ray was unremarkable. Biopsy from the ulcer was sent to the department of pathology AIMSR with a provisional diagnosis of Squamous cell carcinoma. Histopathological diagnosis of traumatic eosinophilic granuloma/ TUSE was made showing normally oriented hyperplastic keratinized stratified squamous lining epithelium ulcerated and replaced by granulation tissue at places. There is dense inflammatory infiltrate rich in eosinophils and few benign mononuclear cells present together with dilated vessels in the subepithelium. The infiltrate is extending into muscle bundles. No evidence of malignancy seen. Patient was advised to be on follow up.

#### **DISCUSSION**

Traumatic eosinophilic granuloma is a rare, benign and unique entity. It was first described clinically by Riga in 1881 and histologically by Fede in 1890 [4]. The most common etiology is trauma/ chronic irritation due to ill-fitted dentures or sharp tooth. Other school of thought has immune dysfunction related etiology [5]. It is frequently seen in early childhood and fifth decade. Females are more commonly affected than males [6]. Tongue is the commonest of the

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sites affected. Oral mucosa, lips, gingiva, floor of mouth and palate are also affected [7]. Based on clinical and histopathological features diagnosis of Traumatic eosinophilic granuloma is made with presence of an ulcer showing dense chronic inflammatory infiltrate comprising of abundant eosinophils, lymphocytes and scattered atypical histiocytes like cells extending upto deeper muscle layer. Differential diagnosis includes angiolymphoid hyperplasia with eosinophilia, atypical histiocytic granuloma, squamous cell carcinoma and kimura's disease [8].

#### **CONCLUSION**

As traumatic eosinophilic granuloma is a benign and self-limiting lesion, it should be considered as a differential diagnosis in oral ulcers to avoid aggressive surgical treatment.

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