



## CASE STUDY

### NON SURGICAL TREATMENT OF ANTIBIOMA IN ORO-FACIAL REGION

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#### ABSTRACT

Till date antibioma formed in the oro-facial region has been treated surgically by excision and drainage. In this report an alternative minimally invasive method for the treatment of antibioma has been elicited. This technique involves Triamcinolone acetonide and Amoxiclav in the form of intralesional injections injected directly into the antibioma.

#### Key words:

Antibioma, Intra-lesional injections,  
Triamcinolone acetonide, Amoxiclav

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## INTRODUCTION

It is an established fact that in developing country like India injudicious use of antibiotics is unavoidable. Due to the availability of over the counter drugs there is significant misuse by the patients as well as the quacks advising antibiotics coverage injudiciously. Till date the established treatment of antibioma is to surgically incise and drain it like an abscess under analgesics and sometimes antibiotics also. An interesting case report involving new modality of a minimally invasive technique involving intralesional injections is discussed in this short communication.

#### Case report

A 32 year old female patient reported to oral medicine department with the chief complaint of swelling in the lower right side of the face for the last 2 months. It started as peanut sized swelling which gradually increased to attain the present size. It was associated with dull pain which aggravated on pressing. Patient underwent extraction of lower right quadrant tooth at a local dental clinic two months back. On examination, a diffuse swelling measuring around 2.5 cm x 2cm was present at the angle of the mandible region. The covering skin was erythematous in color with a punctum present at the center of the swelling. Swelling was firm in consistency, movable and tender on palpation. Right side sub-mandibular lymph nodes

were palpable and tender as well. IOPA radiograph with respect to the region of extracted 48 revealed a clean socket of extracted tooth with no evidence of any peri-apical radiolucency. Ultrasound revealed a focal hyperechoic area in the right cheek measuring 21mm x 21mm with a small hypoechoic area within. FNAC of the swelling confirmed it as a suppurative lesion as only pus was aspirated. Culture sensitivity was also done. Investigations showed ESR of 57 mm/hr with normal leucocytes count. Case was diagnosed as an antibioma and the treatment was started for the same. Treatment decided for the patient was primarily medicinal therapy due to her reluctance for surgery and aesthetic concerns. An injection protocol of intra-lesional steroid (Inj Triamcinalone acetonide 10mg/ml) in combination with broad spectrum  $\beta$ -lactam antibiotic (Inj.Amoxiclav 1000/200mg) dissolved in 20 ml of solvent i.e. distilled water was decided. From this composition, dose concentration of 1ml per cm<sup>2</sup> was assumed to be sufficient for the presenting lesion. The injections were given at a regular interval of one week for a period of three weeks. Patient showed appreciable improvement of around 50% after the first week of therapy. After three injections the swelling was completely resolved whereas the external scar was left to a faint spot on the lower cheek region which patient was not concerned about. On the repeated follow – up of 15 days patient was completely relieved in a span of 3 months. A faint scar was visible on the left cheek which the patient was not concerned about. On the follow-up USG no significant abnormality was seen at the site of previous swelling. Comparison with the contra lateral side was also done to rule out any minor changes.

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Fig. 1. Pre – Operative view

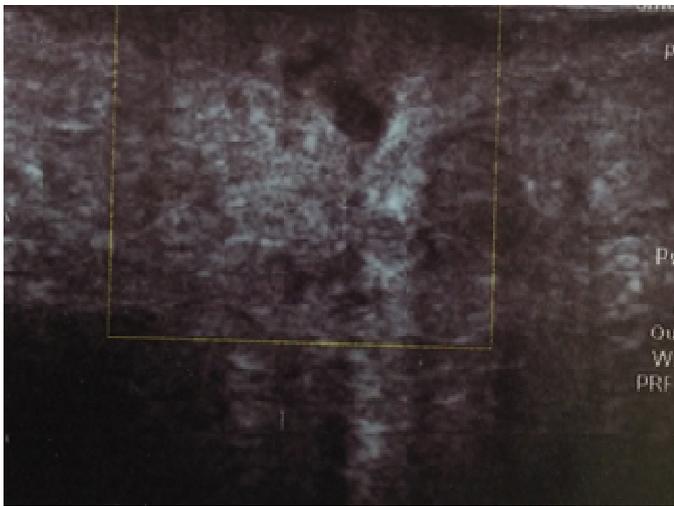


Fig. 2. Pre-operative USG



Fig. 3. Post – Operative Healing

## DISCUSSION

Antibioma is formed in patients with odontogenic abscess who take self medication, the abscess instead of becoming pointing and the draining, it gets organized and fibrous. It develops as a tough fibrous swelling which is accompanied by dull pain and sporadically causes fever and constitutional symptoms. (Bailoor and Nagesh, 2005) If an aesthetic defect is evident, then antibioma must be surgically excised. On the contrary, in our treatment approach it was decided to apply a non surgical and minimal invasive technique to resolve the existing antibioma. It is an established fact that antibioma is an organized and fibrous collection of pus with a thick fibrous capsule outside and pus inside, Triamcinolone was used to break the outer fibrous capsule. It has been documented that Triamcinolone injection can suppress vascular endothelial growth factor, inhibit fibroblast proliferation, and induce scar regression, which can be its primary mechanism of action. (Wu *et al.*, 2006) Corticosteroids mainly act by suppressing the inflammatory process in wounds, by reducing collagen and glycosaminoglycan synthesis, inhibiting fibroblast growth, and enhancing collagen and fibroblast degeneration. Triamcinolone injection alone also is effective in reducing the volume of lesions in the majority of patients. (Wu *et al.*, 2006; Boyadjiev *et al.*, 1995) Previous literature has reported that mean scar volumes are reduced from  $0.73 \pm 0.701$  mL at baseline to  $0.14 \pm 0.302$  mL after monthly intralesional injections of triamcinolone. (Muneuchi *et al.*, 2006; Atiyeh, 2007) Amoxiclav comes across as unique drug with broad spectrum antibiotic and a beta-lactamase inhibitor having activity against many gram-positive and gram-negative micro-organisms. (Spellberg *et al.*, 2004) Thus this double edged sword of steroids in addition with the broad spectrum antibiotics helps to resolve a particular resilient pathology which till date has never been eliminated without surgical intervention.

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