

Buccal Space Infection- A Case Report

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ABSTRACT

Space infections have become a very common scenario in the rural areas, due to the poor education and awareness of management of dental infections. When ignored for a long time, a simple dental decay can turn into a painful and life-threatening space infection. Here, we present a case report on buccal space infection, its diagnosis and management.

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I. INTRODUCTION

Space infections of the head and neck region stand for one of the basic problems for general practitioners' everyday practice (1). They can develop as single-space or multiple-space infections (2). The most frequently involved are the submandibular, buccal, sublingual, submental or canine spaces (2, 3). The crucial step is the right diagnosis enabling to assess the risk of purulent changes, which would further determine the proper treatment protocol: ambulatory treatment or the need of specialist surgical procedure (4, 5). Below we would like to present a case report of our patient, who developed left-sided buccal space infection that required surgical intervention due to the emphasized local complaints.

II. CASE REPORT:

A 29-year-old patient, had come to our department with chief complaint of pain in the lower left back teeth region. Pain was sudden in onset, intermediate type which aggravated during the night and on mastication. Patient had no previous medical history. Patient had undergone surgical extraction of 38 under

local anesthesia. She had undergone suture removal after 7 days. Post – suture removal, she had noticed mild post operative swelling. Patient did not report to the department when the swelling had initially started. Patient reported back to our department with complaints of swelling in the lower half of face (10 days post extraction). Patient was admitted under OMFS in Adhiparasakthi Hospital, Melmaruvathur. She had noticed that the swelling that increased in size after suture removal. Patient gave an history of difficulty in mouth opening. A diffuse swelling of size measuring 3x3x3 cm present over the left half of face which was tender on palpation, erythematous, hard in consistency and glistening of overlying skin was present. An active pus discharge was noted from the socket. The patient was under antibiotic and analgesic coverage with Taxim which was given 1 gm intravenously twice daily; Metronidazole which was given 500 gm intravenously thrice daily; Paracetamol which given 650 mg per oral twice daily. Mouth opening was limited. Incision and drainage was performed under local anesthesia, 2mm above the angle of the mandible, which was the most fluctuant region. This was followed by re- exploration of the incision and attachment of a rubber glove drain. The swelling had substantially decreased 2 days post operatively. The post operative medications given were Cefixime 200 mg, twice daily; Metronidazole 400 mg, thrice daily; Paracetamol 650 mg, twice daily; Pantaprazole 40 mg, once daily, for three days.

III. DISCUSSION:

The buccal space consists anatomically of a few layers, namely (from the outside) skin, the adipose tissue (called buccal pad of fat), the buccopharyngeal fascia, the masseter muscle (infiltrated by the duct of the parotid gland), buccal glands (mucoserous) and finally, the inner layer of the mucous tissue of the oral cavity. Anteriorly, the cheek sticks to the mimic muscles of the face and their fascia, laterally borders with the parotid gland and its fascia, medially with the maxillary alveolar ridge and posteriorly with the zygomatic fascia. Fascial coverings separating the buccal space from the surrounding tissues are not complete, which promotes local spread of the inflammatory processes in this region (6).

Dental infections stand for a predominant causative factor (carious lesions, dental or gingival abnormalities, post-intervention state) of all space infections of the head and neck region (2, 7), especially for the inflammatory changes incorporating the buccal space (almost 1/3 infections of dental origin) (2, 3, 6, 8, 9). The correct diagnosis and its proper treatment are very important so as to prevent further spread of the inflammation to the deeper spaces, among which there is a risk of infiltrating the natural blood-brain barrier (9).

IV. CONCLUSION:

The space infections of the head and neck region stand for an essential clinical problem, both from the patient's perspective connected with intensive pain and its impact on eating, speech quality or esthetical issues, as well as doctor's perspective who is conscious of the possible consequences of the hazardous spread to deeper spaces and structures of untreated or improperly treated cases. Therefore, it is very important to diagnose the patient quickly and provide the correct treatment protocol, sometimes combined with surgical intervention.



PICTURE 1: PRE OPERATIVE PROFILE OF THE PATIENT

PICTURE 2: DRAINAGE OF PUS FROM THE INCISION SITE

PICTURE 3: POST OPERATIVE OF THE PATIENT SHOWS SIGNIFICANT REDUCTION OF SWELLING

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