



Buccal Fat Pad Injury—Delayed Presentation

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Abstract

COVID-19 pandemic has been a major challenge for health care services all around the world. With increasing COVID-19 cases and lockdown enforcement, there has been a significant delay in the presentation of patients in the emergency department; also the fear in people of contracting COVID-19 from the hospital is an additional factor. The following case report describes such an incidence of delay in presentation of buccal fat pad injury patient to the emergency department.

Keywords Buccal fat pad injury · COVID-19; Oral injury · Pediatric trauma · Plastic surgery · Trauma surgery · Oral surgery

The buccal fat pad (BFP) also called “sucking/suctorial pad” is a specialized adipose tissue located in the face [1]. An 8-year-old boy presented to the trauma emergency department (ED) with swelling on the left side of the face for 2 days. An iron rod pierced his sub-mental area and injured left oral mucosa leading to herniation of BFP. As there were travel restrictions due to lockdown enforcement and parents feared contracting COVID infection at the hospital, the child was not brought to the emergency straightway. Gradually herniation of fat increased leading to difficulty in chewing. On arrival at our center, primary survey as per ATLS protocol was done, it was unremarkable. Secondary survey revealed intra-oral herniation of

buccal fat pad covered with superficial slough (Fig. 1). Mouth opening was adequate with minimal pain and normal occlusion. CT scan of the head and cervical spine showed no other injury. After adequate gastric emptying time and negative COVID RTPCR report, the patient was shifted to the operating room.

On examination under GA-3cm×1.5cm yellowish, pedunculated mass was seen projecting from left buccal mucosa at the level of primary molars, through 2 cm mucosal laceration indicating BFP (Fig. 2). Parotid duct papilla was identified and cannulated with 2-0 proline thread and duct’s patency confirmed (Fig. 3). The mass was partially debrided and sent for histopathological examination (HPE), and a healthy portion of mass was replaced back. Chin laceration was explored, and no vital structure was injured. Postoperatively, analgesics and antibiotics were given as per institute protocol. COVID safe behavior was observed. The swelling subsided, and the healing was uneventful. A six-month follow-up image showed a normal cheek contour and healed oral mucosa without any complication and recurrence (Fig. 4). HPE confirmed the provisional diagnosis of BFP herniation. On the early presentation, prolapsed mass must be repositioned into the cavity [2]; however, in case of late presentation, debridement of necrotic part is warranted. In 2019 COVID-19 pandemic hit the world compromising care for even non-COVID patients. The incidence of household injuries increased exponentially [3]. Significant delay was reported in the presentation of patients to the hospital due to lockdown enforcement and fear in patients

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Fig. 1 Preoperative images of the child showing (A) diffuse left cheek swelling and (B) buccal fat pad herniation in intraoral view



Fig. 2 Intra-operative image showing mucosal laceration and buccal fat pad herniation (arrow)

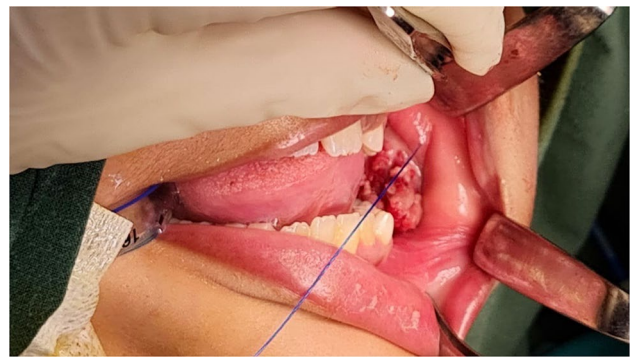
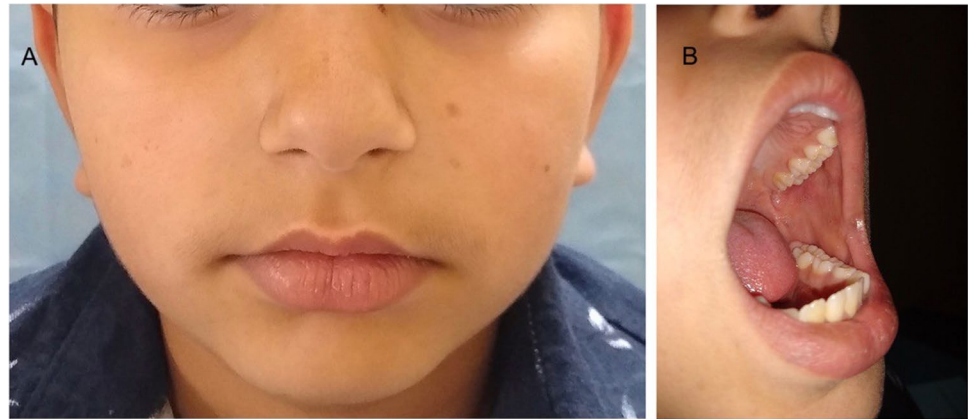


Fig. 3 Parotid duct papilla cannulated by a Prolene 2–0 suture to confirm the patency

Fig. 4 Postoperative 6-month follow-up image showing (A) normal cheek contour and (B) healed mucosa



of contracting COVID infection from the hospital [4], as described here. During surgery one must try to save as much of the buccal fat pad as possible to prevent contour deformity of the cheek as done in this case.

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Declarations

Conflict of Interest The authors declare no competing interests.

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