

Parotid Gland Tissue Herniation through the Opening of Parotid Duct after Blunt Trauma on the Cheek

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Case Report

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Abstract: Oropharyngeal injuries are common especially in children. The parotid gland contains several vital structures, all of which may have been damaged causing high morbidity. We present infant boy with parotid gland tissue herniation through the site of opening of parotid duct after blunt trauma without any mucosal or other organs injuries. Careful evaluation is important to detect serious and hidden injuries and to exclude foreign body impaction. During the examination keep in mind other diseases which can coexist.

Keywords: parotid gland, blunt trauma, tissue herniation, parotid duct.

INTRODUCTION

The parotid gland is the largest salivary gland. It lies in a deep space below the external auditory canal, behind the ramus of the mandible. The parotid duct emerges from the anterior border of the gland and passes forward over the superficial surface of the masseter. It enters the vestibule of the mouth at a small papilla opposite the upper second molar tooth [1]. The parotid gland contains several vital structures which include the facial nerve, retromandibular vein, external carotid artery, superficial temporal artery, and branches of the great auricular nerve all of which may have been potentially damaged causing high morbidity [2].

Oropharyngeal injuries account for about 1 percent of all pediatric traumas [3]. A common mechanism involves a child falling with an object in his mouth or having an object pushed into their mouth by a playmate or caregiver.

Commonly reported objects include writing instruments (eg, pen, pencil), toothbrushes, lollipops, eating dishes, and drinking straws [4, 5].

CASE REPORT

We present the case of a 7-months-old boy who was referred to our hospital following mechanical blow by his brother's hand on his right cheek one day ago, followed by inability to feed, salivation, and crying. The parents noted that there is a fleshy mass in the mouth so they consult our hospital. Examination in the outpatient department of Al-Diwania teaching hospital, Al-Diwania city, Iraq, demonstrated a flap-like fleshy mass in the right side of the oral cavity with attachment to the upper part of lateral wall of the oral cavity. There were no other associated injuries and no blood in the oral cavity. Examination under general an

aesthesia revealed a 2 × 3cm soft tissue mass arising from the wall of right buccal mucosa. It was vascular on touching. It arises from the site of opening of parotid duct at the upper 2nd molar tooth region, so clinically diagnosed as parotid tissue herniation. We put in mind other possibilities as infection, granulomatous diseases, tumors such as lymphoma, so biopsy was taken which confirm the diagnosis of normal parotid tissue. 1cm incision in the buccal mucosa was done to release the stalk of herniation. The gland tissues reduced to its position and the incision repaired by vicryl suture. Postoperatively he was discharged in the same day, with oral antibiotics cover, and we advised his parents about good oral hygiene, he was examined in the outpatients department every week until the wound healed without any complication.



Fig-1: Picture showing the oral mass, limited mouth opening and salivation during the examination in outpatient clinic



Fig: Picture showing the oral mass (herniation of the parotid tissue) during the examination in operative room

DISCUSSION

Injuries of the oropharynx and palate are common in those under the age of six years old [6]. Most of these injuries will tend to resolve spontaneously with conservative management without complications [3, 7-9]. A small percentage can progress to develop an infection of a deep neck space and/or develop a carotid artery damage that cause high morbidity and mortality [10-15]. The average age of injury is 4 years old, it is two times more common in males. The most common site of injury is the left side of the palate, as the majority of patients are right handed and would hold the offending object in that hand. The presentation of the patient can vary from a obvious history of oropharyngeal injury to dysphagia and bleeding from the mouth [16]. Francis in 2014 described a case of a 20-month-old girl who developed a parotid gland and the associated buccal fat pad having herniated through a discrete 1 cm laceration in the wall of the mucosa caused by a tin whistle trauma

in her mouth [5]. In our case we present infant boy with parotid gland herniation through the site of opening of Stenson's (parotid) duct opposite to upper 2nd molar tooth region after blunt trauma without any mucosal or other organs injuries, which is not reported previously. After surgical reduction it healed without complications.

CONCLUSION

Oropharyngeal injuries are common specially in children, because they put the toys in their mouths .careful and meticulous evaluation is very important to detect serious and hidden injuries and to exclude foreign body impaction. During the examination keep in mind other diseases which can coexist if you notice abnormal finding.

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