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Marble in the buccal mucosa: A rare finding of foreign body impaction in the cheek

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ABSTRACT

A rare case of marble being impacted in buccal mucosa is presented. A 25 mm by 25 mm sized marble was found impacted in the buccal space of a 9-year-old male child preoperatively. The boy was originally suspected for a benign swelling and planned for the excisional biopsy under general anesthesia. The case presentation and management of the case are discussed here.

Keywords: Fall, Foreign body, Marble, Oral cavity, Trauma

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INTRODUCTION

The incidence of foreign body impaction in oral, nasal, and oro-digestive tract is commonly reported [1, 2]. Oral mucosa has been commonly reported to be impacted with foreign bodies such as, tooth fragments, dental filling materials, glass pieces, root canal treatment (RCT) materials, broken instruments, and metals [3]. Foreign bodies may be embedded in the oral cavity either by traumatic injury or iatrogenically [4]. Foreign bodies ranging from fish bones, coins, small toys, and many others are quite common especially in younger age groups [5].

Foreign bodies in the oral cavity are usually implanted traumatically, iatrogenically, or inadvertently [6]. The impacted foreign bodies in the oral soft tissues are generally symptomatic and show signs of inflammation pain and purulent discharge [7]. The traumatic intraoral foreign bodies occur commonly when an individual falls with the foreign body in the mouth resulting in implantation of the objects [8]. Assaults and motor vehicle accidents are also reported to be common causes for traumatic foreign body impactions in oral cavity [9].

The foreign bodies once impacted gets localized and ensues fibrosis with host response. They are mostly presented with swellings and other related complications. The foreign body impactions in oral cavity are routinely reported from dental outpatients.

Here we report an unusual case of sizeable marble being embedded in buccal mucosa with incidental finding when treated for suspected benign lesion.

CASE REPORT

A 9-year-old male child with complaints of firm swelling in the right buccal mucosa was brought by the mother to the local hospital and then was referred to Oral and Maxillofacial Unit of the Department of Dentistry.

The patient gave a history of fall injury while playing marbles with his friends. He reported that he had a marble in the mouth when he fell down. On impact it was reported that he had profuse bleeding but was managed without in hospital care. At the time of accident, the child did not realize that the marble got embedded inside his

buccal mucosa. The boy did not tell his parents about the accident. Two weeks later, the mother is reported to have noticed the swelling on right side of the cheek exhibiting gradual increase in size.

The extra-oral examinations revealed swelling over the right buccal mucosa. On palpation, firm swelling on the right cheek with approximate size about 25 mm × 25 mm was palpable. The overlying skin appeared normal with a scratch mark over the right cheek (Figure 1). No localized surrounding induration was noted. It was minimally compressible and mild tenderness was felt with well-defined margins. The boy had normal opening of the mouth without signs of trismus or impeding restriction of mouth opening.

Intraorally, no breech in anatomy was noted. No signs of inflammations were presented intraorally except for a palpable swelling. The intraoral palpation revealed mild tenderness over the swelling. The nodule was mobile and fluctuant. It tested positive for trans-illumination test. These findings made us believe it to be a lipoma or sebaceous cyst and was planned for excisional biopsy.

Figure 1: Case presentation with mild extra-oral swelling.

Investigation

Routine Complete Blood Count was advised as a part of pre-surgery screening. No radiographic examinations, neither intraoral nor extra-oral X-rays were advised as the swelling clinically presented to be like simple lipoma or sebaceous cyst for which it is not usually advised.

Surgical procedure

The case was planned for excisional biopsy under general anesthesia (GA). The GA was opted upon patients' option. The surgical approach was done intra-orally. A 10 mm incision was made over the buccal mucosa through buccal fat pad and approached toward the nodule. The nodule was explored with artery forceps by means of blunt dissection through buccal fat pad. On careful exploration a glass like-round object which turned out to be marble was seen to be embedded deep in the cheek muscle buccinators (Figure 2). It was scooped out by using a curette. The wound was closed with 4-O vicryl.

Analgesics and prophylactic antibiotics were prescribed and discharged the following day without any complication. The recovery was uneventful.

Figure 2: Preoperative encounter of marble embedded in buccal mucosa.

DISCUSSION

In the present case, the radiographic examinations were not done owing to suggestive lipoma or sebaceous cysts upon the clinical examinations. This was further supplemented with trans-illumination test of the nodule being positive. This case presents an interesting fugitive glass foreign body which escapes the clinical tests. The glass marbles (Figure 3), seemingly refracted the lights and was presented being positive for trans-illumination test. Intraoral foreign bodies are common in children because they often place objects in their mouth as a way of exploring and playing with toys [10]. These foreign objects can be implanted accidently in any part of the oral cavity, especially in the buccal mucosa (cheek) and deeper structures of the floor of the mouth and periodontium [11].

Figure 3: Post-surgical removal, approximately 25 mm × 25 mm.

Often times, children do not report to their parents for fear of being punished and scolded. In this case, the patient also denied initially but later admitted to falling down with marble in his mouth. The care givers of the children are usually unaware of asymptomatic foreign bodies and are discovered incidentally through radiographs or during the procedures [12]. The mother of presented patient in this case noticed the swelling and slight disfigurement of the boys' right cheek. And she wasn't told about the accident until after the surgery.

This case presents a suggestive dilemma among clinicians to suspect foreign body when non-painful swelling or lump is presented, even though the child patient does not admit to placing the foreign body in the mouth. The detect glad foreign bodies, conventional radiographs have been reported to be efficient methods [13]. However, in current case no radiographs were advised due to the case being clinically suggestive of lipoma. The foreign body impaction in this case was only confirmed preoperatively upon physical detection of glass marble in the place of swelling. The implantation of foreign bodies as a result of children playing is common second only to iatrogenic implantation through dental outpatient care services [14, 15]. Timely removal of impacted foreign bodies is important to prevent ensuing complications such as fibrosis, cellulitis, and abscess.

CONCLUSION

This case documents a rare case of impacted foreign body in buccal mucosa which alerts clinicians to consider the possibility of a foreign body when confronted with an unusual swelling in the orofacial region. The glass foreign bodies especially marbles being embedded/impacted in soft tissues can mimic some benign lesions such as lipoma or sebaceous cyst with positive trans-illumination test. This could construe diagnostic dilemma among the treating clinicians and lead to a false diagnosis and management. Confirmatory radiographic examinations maybe supplemented for confirmation of the diagnosis.

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Author Contributions

Karma Tobgyel – Conception of the work, Design of the work, Acquisition of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Tshewang Gyeltshen – Conception of the work, Design of the work, Acquisition of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

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Conflict of Interest

Authors declare no conflict of interest.

Data Availability

All relevant data are within the paper and its Supporting Information files.

ABOUT THE AUTHORS

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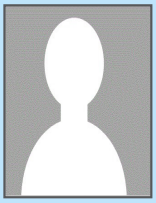

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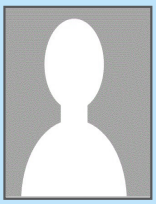

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