Abstract: Foreign bodies although they are often found throughout the body, to a lesser degree in the face, still constitute a diagnostic challenge for the trauma surgeon. Its removal means in danger of damaging anatomical structures important facial, even if it is known the exact position from image data. So the object is to describe a clinical case of a patient with 42 years of age, male gender, falling victim to the ground, attended by the Department of Surgery and Traumatology Bucco-maxillo-facial surgery, Faculty of Dentistry of Araçatuba - UNESP two days after the trauma reporting difficulty in mouth opening and pain. After clinical evaluation, we observed the presence of injury in the left preauricular region already in the process of healing. Physical examination intra-oral, it was noted limitation of mouth opening. Radiographic posteroanterior and profile of the face showed two radiopaque foreign bodies in the left side, lying apparently at the region of the mandibular condylar process. Was carried from there to foreign body removal under local anesthesia with access to it through the pre-existing facial injury. Further clinical examinations showed improvement in mouth opening, absence of pain complaints and / or functional.
FOREIGN BODY IN PREAURICULAR REGION: UNUSUAL CASE REPORT

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ABSTRACT
Foreign bodies although they are often found throughout the body, to a lesser degree in the face, still constitute a diagnostic challenge for the trauma surgeon. Its removal means in danger of damaging anatomical structures important facial, even if it is known the exact position from image data. So the object is to describe a clinical case of a patient with 42 years of age, male gender, falling victim to the ground, attended by the Department of Surgery and Traumatology Bucco-maxillo-facial surgery, Faculty of Dentistry of Araçatuba - UNESP two days after the trauma reporting difficulty in mouth opening and pain. After clinical evaluation, we observed the presence of injury in the left preauricular region already in the process of healing. Physical examination intra-oral, it was noted limitation of mouth opening. Radiographic posteroanterior and profile of the face showed two radiopaque foreign bodies in the left side, lying apparently at the region of the mandibular condylar process. Was carried from there to foreign body removal under local anesthesia with access to it through the pre-existing facial injury. Further clinical examinations showed improvement in mouth opening, absence of pain complaints and / or functional.
Key-words: Face; Wounds; Injuries; Foreign Bodies.
INTRODUCTION

Foreign bodies are frequently found by oral maxillofacial surgeons (EGGERS; HAAG, 2005); even thus, they can represent a diagnosis challenge for the surgeon (KRIMMEL; CONELIUS; STOJADINOVIC, 2001) due to several factors, such as object size, accessibility difficulties and a close anatomic relation with vital structures (HOLMES; MILLER; GUTTA, 2005; MAHMOOD; LELLO, 2002). Usually, they are a consequence of accidents or unsuccessful surgeries resulting in broken instruments or they are even an entire tooth or its fragments dislocated during exodontics (MAHMOOD; LELLO, 2002; PAOLI; DEKEISTER, 2001; THACH, WARD, DICK II et al, 2005).

The removal of foreign bodies occurs in approximately one third of the cases, once they are not always diagnosed with accuracy in clinical and radiographic exams (ROBINSON et al., 1997). There are several ways to detect foreign bodies: radiographies, computed tomography, magnetic resonance and even ultrasonographies can be used depending on the foreign body localization and composition (KRIMMEL, CORNELIUS, STOJADINOVIC et al., 2001 e KIM; RYU; JANG et al, 2008).

Facial surgical procedures implies in a risk of damaging important anatomic structures. Even if the exact foreign body position is known from image data, the accurate reproduction of this position in the patient body can be difficult if this object is not adjacent to a definitive anatomic landmark (EGGERS; HAAG; HASSFELD, 2005).

The occurrence of a foreign body retained in the face is a condition that deserves attention due to the diagnosis challenges. Thus, the purpose of this study is to elucidate the importance of the anatomic knowledge as well as the appropriate treatment.

CLINICAL CASE

A 42 years old male, victim of a fall from his own height, was attended by the Oral Maxillofacial Surgery and Traumatology Service of the Aracatuba School of Dentistry – UNESP, two days after the trauma, reporting pain and difficulties to open the mouth. The patient only looked for medical assistance after an aggravation of the clinical symptoms, reporting pain and bleeding in the moment of the trauma. After clinical evaluation and anamnensis, it was observed the presence of a wound in the left preauricular region already in cicatrization. During the intra-oral exam, a limitation of
the oral opening was noticed. Anteroposterior and facial profile radiographs evaluation showed two radiopaque foreign bodies at the left side, apparently situated at the same level of the mandible condylar process. (Figures 1 and 2).

The procedure for the foreign body removal was accomplished in an ambulatory, under local anesthesia following the principles of SHINOHARA; HERINGER; de CARVALHO (2001), consisting of antisepsis, anesthesia, access, foreign body removal, wound exploration, irrigation and suture. The patient received antibiotic therapy after the surgery (Figures 3, 4 and 5).

The access to the foreign body and divulsion were done through the own preauricular wound with a hemostatic forceps, in order to explore the surgical wound and visualize the object without injuring vital structures. Thus, it was found and removed, being compatible with an unusual object: a pen cover and its spring.

Seven days after the surgical procedure, the physical exam evidenced a paresthesia at the left zygomatic region and a recovery of the oral opening. After 60 days, the patient was in good general health, without pain and/or functional complaints.

**DISCUSSION**

According to what was reported previously, it is essential that the surgeon know every detail of the local anatomy and the precise application of the surgical technique, specially the foreign body region dissection, in order to have an exact exposition of noble structures from the preauricular region, with an accurate protection, mainly of the facial nerve rami (DAVIS; ANSON; BUDINGER, 1956 and HALL; BROWN; LEBOWITZ, 1985).

The treatment first stage of a trauma patient consists in a detailed analysis of the facial symmetry and function, followed by an adequate antisepsis of the lacerated and/or contused tissues. This evaluation must be corroborated by image exams, such as radiograph, computed tomography with axial and coronal projections, when necessary.

Foreign bodies generally are diagnosed when there is a previous history and corresponding clinical signs. In this case, the history offered a suggestion of an external foreign body. Actually, the patient presented a small lacerated and contused wound in the preauricular region with approximately 1cm, being observed 48 hours after the trauma. This clinical suggestion was confirmed by important radiographic findings, once the signs of the radiographs in several projections showed to be suitable with the clinical findings. Trismus was another clinical sign evidenced, probably due to the
object impaction against the zygomatic arch, restraining the advance movement of the mandibular coronary process during mouth opening, associated to edema of the subsequent hours. According to the correct clinical and image exams, the surgeon chose to accomplish an exploration and a debridement in the wound.

A foreign body can also remain asymptomatic for a long time and, finally, present acute symptoms (BROWN, DENMARK, WITTLAKE et al., 2004; CAMERON; PHILLIPS, 2006). In the case reported here, the reason why the patient searched for assistance was the pain increase associated to a difficulty to open the mouth.

The treatment sequence consisted of the foreign body approach and removal, the wound exploration, irrigation and suture. In order to avoid the wound contamination, it was administered antibiotic therapy and tetanus prophylaxis. (SHINOHARA; HERINGER; de CARVALHO (2001). Thus, the reported case was treated as described previously: the entire foreign body was successfully removed, without any intercurrence. The surgery was accomplished in an ambulatory with good results, and it was fast and efficient, avoiding the long lasting general anesthesia, previous fasting and additional costs for the patient.

CONCLUSIONS

Objects introduced at low speed into the human body may be sometimes fatal. The diagnosis at the proper time is essential to avoid possible complications, such as liquor fistula and bleeding. The combination of clinical suspicions, basic knowledge of diagnosis exams, ability and experience of the surgeon decreases the surgical risk of iatrogenesis, if compared to the intrinsic risk of the foreign body retention. The surgery in ambulatory level showed to be efficient for functional and esthetic recoveries.

REFERENCES


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Covering Letter

In consideration of The Journal of Craniofacial Surgery taking action in reviewing and editing our submission, the authors Ellen Cristina Gaetti Jardim, Pamela Leticia dos Santos, Marcos Heidy Guskuma, Osvaldo Magro Filho, Idelmo Rangel Garcia Junior, Daniela Ponzoni, Alessandra Marcondes Aranega and Elio Hitoshi Shinohara undersigned hereby transfer(s), assign(s), or otherwise convey(s) all copyright ownership to the American Association of Oral and Maxillofacial Surgeons in the event that such work is published in the Journal of Craniofacial Surgery. Permission of original author and publisher must be obtained for direct use of material (text, photos, drawings) under copyright that is not your own.

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