Rev Port Estomatol Cir Maxilofac. 2010:24-27

Estomatología, Medicina Dentaria e Cirugia Maxilofacial

www.elsevier.pt/rpemd

Caso clínico

Large foreign body removed from the nasal cavity after 28 years

José Luis Dissenha[a], Roberta Targa Stramandinoli[a,], Juliana Lucena Schussel[a], Fernando Luis Zanferrari[a] e Laurindo Moacir Sassi[b]*

[a]*Oral and Maxillofacial Surgery Service of the Erasto Gaertner Hospital, Curitiba, Paraná, Brazil*
[b]*Chief of Oral and Maxillofacial Surgery Service of the Erasto Gaertner Hospital, Curitiba, Paraná, Brazil*

ARTICLE INFO

Article history:
Received: 5/8/10
Accepted: 1/11/10

Key-words:
Foreign Body
Nasal cavity
Fistula

A B S T R A C T

Foreign bodies of the nasal cavity are relatively frequent in pediatric patients, while in the adults, they are usually seen in disturbed persons or at the emergency room. Here we report a case of an unusual long-standing foreign body that passed misdiagnosed for 28 years in a 47 year-old man. The main complain of the patient were a continuous bad breath and presence of drainage of secretions in the posterior right maxilla. The patient related that he suffered a trauma in the face 28 years ago. Panoramic radiography exam showed a triangular radiopaque mass, superimposed on the right maxillary sinus and presence of the root of tooth 17, with a bucosinusal communication A piece of glass of large dimensions was removed by the nasal cavity by general anesthesia. The patient developed well without any complaints after the surgery, showing total remission of earlier symptoms. This case shows the significance of medical history and clinical and radiographic detailed assessment of the nasal cavity and maxillary sinus in any adult patient with unilateral nasal symptoms, especially in cases without improvement after drug treatment.

Corpo estranho de grande dimensão da cavidade nasal após 28 anos

Palavras-chave:
Corpos estranhos
Cavidade nasal
Fístula

R E S U M O

Os corpos estranhos da cavidade nasal são relativamente frequentes em pacientes pediátricos, enquanto que nos adultos, são geralmente vistos em pessoas com distúrbios ou em serviços de atendimentos de emergência. Será relatado um caso incomum de corpo estranho que permaneceu na cavidade nasal, sem ser diagnosticado, por 28 anos, em paciente masculino de 47 anos de idade. A queixa principal do paciente era mau hálito constante e presença de secreção em região posterior de maxila direita. O paciente relatou ter sofrido trauma em face há 28 anos. O exame radiográfico revelou opacidade triangular sobreposta ao seio maxilar direito e presença de raiz residual do dente 17, com comunicação

*Corresponding Author.
E-mail address: robertastramandinoli@yahoo.com.br (R. Targa)

bucosinusal. Um pedaço de vidro de grandes dimensões foi removido da cavidade nasal, sob anestesia geral. O paciente evoluiu bem, sem quaisquer queixas após a cirurgia, com remissão total dos sintomas anteriores. Este caso mostra a importância da história médica e clínica, além da avaliação radiográfica minuciosa da cavidade nasal e seio maxilar em pacientes adultos com sintomatologia nasal unilateral, principalmente em casos sem melhora após tratamento medicamentoso.

Introduction

Foreign bodies at the nasal cavity are relatively rare in adult population, being more frequent children at first decade of life.[1] They are caused mostly by injury in an accident, trauma or coexisting mental disorders.[2] The most common foreign bodies include rubber erasers, paper, beans, safety pins, nuts, coins, bullets, beads and others.[1,3] They may initiate congestion, swelling of the mucosa, ulceration, bony destruction and epistaxis, breathlessness, pain, alteration in the resonance of speech, hypo nasality, headaches, sneezing, nasal discharge and halitosis have also been reported.[3] This can result in a foul stench and rhinolith formation.[1-4] When they become rhinoliths, and diagnosis can be made by radiographic examination, it will appear as a calcified mass.[1]

Complications may include necrosis of tissues and abscess formation with bone destruction. The removal of these objects may cause trauma, extensive bleeding, or pushing the foreign body back further into the nasopharynx, leading to respiratory obstruction. It can be detected by a chronic symptomatology or through radiographic examination. Nasal symptomatology, which is refractory to conservative treatment, should be investigated by additional exams.

Case report

A 47 year-old man presented at the Service of Oral and Maxillofacial Surgery of Erasto Gaertner Hospital complaining of difficulty breathingand and halitosis for years. Clinical examination showed a chronic fistula on the right maxilla, where the patient presented only the root of tooth 17. He reported having been treated by another professional three years ago and that some teeth were extracted in the area. But the fistula persisted and antibiotic therapy had no effect. The patient reported the presence of an edge of bone in his right nostril, which often bothered, since an accident suffered 28 years ago, when he was hit by a bottle on his face with maxillary bone fracture and cornea injury.

Panoramic radiography exam showed a triangular radiopaque mass, superimposed on the right maxillary sinus and presence of the root of tooth 17, with a bucosinusal communication (fig. 1). During endonasal examination, we verified the presence of a foreign body, which extended into the nostril.

Figure 1 - Panoramic radiography showing a radiopacity superimposed at the right maxillary sinus.

By the clinical history, we interpreted as being a piece of the bottle broken in the face of the patient 28 years ago.

The patient underwent general anesthesia for surgical closure of the bucosinusal communication and to remove the foreign body of the nasal cavity. Oral intubation was performed because of nasal obstruction. The foreign body was removed with a hemostatic forceps, in three parts (fig. 2). A piece of glass cylinder with dimensions of 06 × 04 cm had been present in his nasal cavity since the accident suffered 28 years ago (fig. 3). The patient evolved well without any complaints after the surgery, showing total remission of earlier symptoms. The final panoramic radiographic performed 3 months after the surgery showed the absence of the foreign body and of the teeth 23, 24, 44, 45, 46 and the residual root of tooth 17, which were extracted by other professional after the surgery (fig. 4).

Discussion and Conclusion

Nose foreign bodies in adults are rare, although they are frequently encountered among children and special patients. They are often asymptomatic and consequently may remain undetected for many years.[2]

The presence of intranasal objects produces a congestion and swelling of the nasal mucosa, which can produce ulceration, mucosal erosion and epistaxis. The retained secretion and the decomposition of foreign bodies are responsible for stench.[3]

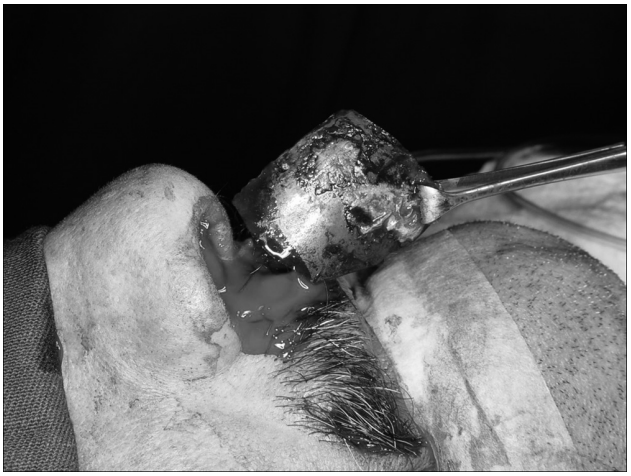

Figure 2 - Foreign body being removed by the nose. It was divided in three pieces.

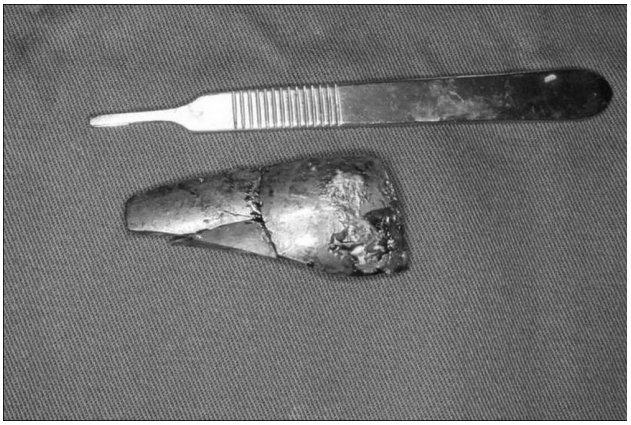

Figure 3 - Foreign body, a piece of glass cylinder that was placed at the nasal cavity since an accident that occurred 28 years ago.

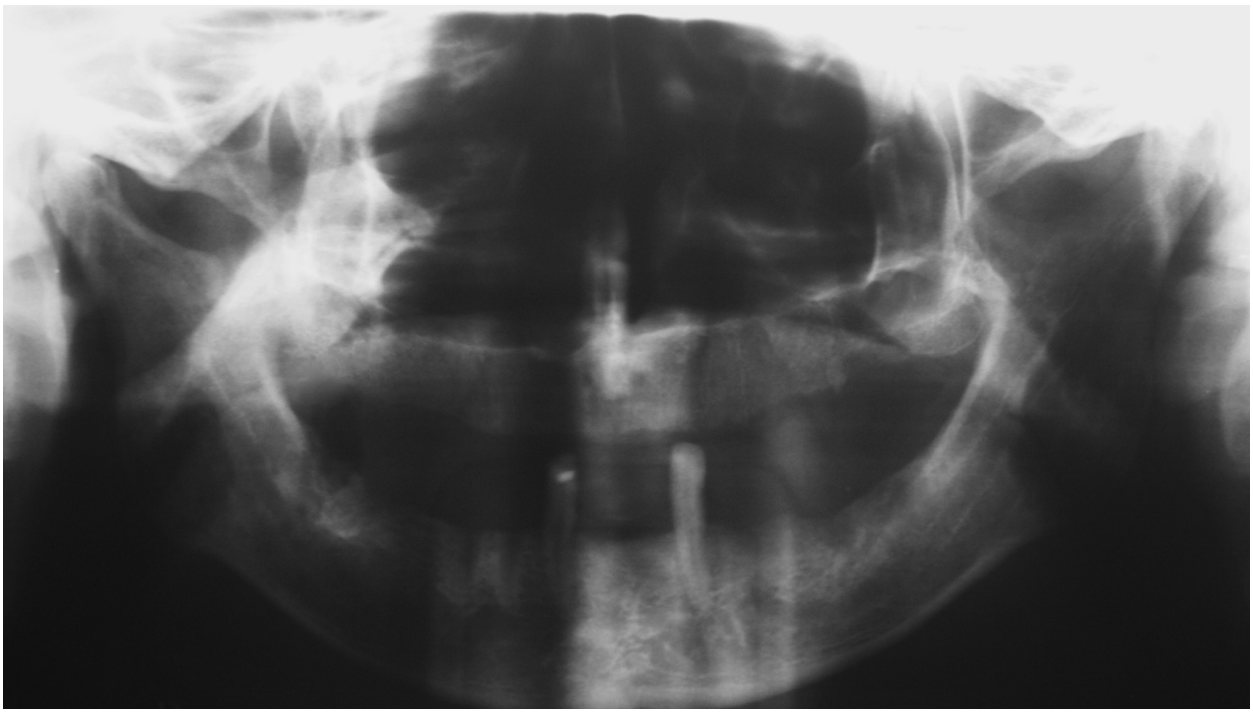

Figure 4 – Final panoramic radiography.

Long-standing intranasal foreign body have been reported to cause infections, including sinusitis, otitis media, facial cellulitis, meningitis, epiglottitis, diphtheria, and tetanus.[5] Certain foreign objects such as button batteries may cause necrosis of adjacent tissues, probably because of leakage of alkaline contents or a weak electric current resulting from contact with moisture.[5,6] The long-standing permanence of objects in body orifices may produce rhinoliths. High concentration of calcium phosphates and others compounds such carbonates and magnesium may induce calculus deposits on foreign bodies. Rhinoliths composition is the same as the calculus deposited on the teeth. Rarely, an intranasal rhinolith may be discovery in the course of the nasal intubation during the administration of general anesthesia.[5]

A foreign sharp body such as the one presented here, must be carefully handled, evaluating criteria such as the integrity of the skin, the number of skeleton interruptions, the involvement of the joints, the gravity of the injuries and of the possible damage to the soft tissues, vascular structures and nervous fibers.[3]

The case reported showed an unusual evolution. The patient consulted several professionals before, with the same complaint, but none professional diagnosed the presence of foreign bodies in the nasal cavity. Several teeth were extracted believing to they were the origin of the infection. Computerized tomography of paranasal sinuses is an important adjunctive diagnostic for foreign body in indefinite cases.[1] In this case, we do not ask a computed topography since it was obvious the presence of foreign body. Once the foreign body was removed, the patient showed no discharges or fétid halitosis. No mucosal necrosis or perforation of bone was observed. Luckily the patient had no serious complication and the upshot was very satisfactory.

This very unusual case of long standing foreign body in the nasal cavity shows the significance of medical history, clinical and radiographic features of nasal cavity in an adult patient with a unilateral nasal symptomatology, which is refractory to conservative treatment.

REFERENCES

1. Dudvarski Z, Pendjer I, Janosevic' LJ, Djukic' V, Dimitrijevic' M, Arsovic' N, Basaric' D. Overlooked nasal foreign body with a 48-year latent period. Acta Chir Iugosl. 2008;55:113-6.
2. Burduk PK, Garstecka A, Betlejewski S. Nasal foreign body in an adult. Eur Arch Otorhinolaryngol. 2005;262:517-8.
3. Pellacchia V, Moricca LM, Buonaccorsi S, Indrizzi E, Fini G. Unusual foreign body in the nasal cavity. J Craniofac Surg. 2006; 17:1176-80.
4. Figueiredo RR, Azevedo AA, Kós AO, Tomita S. Nasal foreign bodies: description of types and complications in 420 cases. Braz J Otorhinolaryngol. 2006;72:18-23.
5. Tay AB. Long-standing intranasal foreign body: an incidental finding on dental radiograph: a case report and literature review. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2000; 90:546-9.
6. Bachmann J, Niewels A, Henschke F, Folz B. A dangerous nasal foreign body: the button battery. Laryngorhinootologie. 2009; 88:116-8.