A Case of Unspecified Route of Forgotten Entities in Maxillary Sinus

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Abstract

Forgotten entities in nose and paranasal sinuses have different presentations. A 34 years old woman had malodor discharge and unilateral nasal obstruction for long period of time. She had unilateral rhinosinusitis and obstruction of osteomeatal complex confirmed by Paranasal computed tomography (CT) scan which was unresponsive to medical therapy. The case underwent functional endoscopic sinus surgery under general anesthesia and nasoantral polyps and unexpectedly 2 pieces of wooden stick were taken from the right maxillary sinus.

INTRODUCTION

Forgotten entities in nose and paranasal sinuses have different presentation which are rarely in the maxillary sinus and usually have a dental origin such as tooth roots, fragments of broken parts, or dental implants. Unilateral maxillary sinusitis can be presented as a consequence of various diseases, such as those affecting the teeth, fungal infections, trauma, tumors or foreign bodies [1]. Foreign bodies lodged in the maxillary sinus impair the mucocilliary function and can cause potential complications, mainly acute or chronic maxillary sinusitis [2]. Only a few cases of non-dental paranasal sinus foreign bodies have been reported in the literature. A rare case of maxillary foreign body with no sign of site of inoculation into sinus is presented. A 34 years old woman had malodor discharge and unilateral nasal obstruction and rhinosinusitis unresponsive to medical therapy. The case underwent functional endoscopic sinus surgery under general anesthesia and nasoantral polyps and unexpectedly 2 pieces of wooden stick were taken from the right maxillary sinus.

CASE PRESENTATION

A 34-years old woman with seasonal rhinitis, had malodor discharge and obstruction at right side of her nasal cavity for many years. She denied having any history of trauma, foreign body insertion, and dental problem oro-antral fistula, but only falling in a forest in childhood. She had minimally nasal bleeding and somehow pain which disappeared soon. In recent 2 years her symptoms such as rhinorrhea, PNS, nasal obstruction unilaterally appeared and received antimicrobial therapy, symptoms were deteriorated. The skin was normal with no evidence of erythema, fistula or tenderness at right maxillary sinus or alveolar ridge abnormality or extracted tooth. Endoscopy revealed polypos with no abnormality in the ipsilatral choana. Paranasal computed tomography scan (CT scan) without contrast showed calcified densities within opacified right maxillary sinus and anterior ethmoid sinuses (Figure 1).

Under general anesthesia endoscopic sinus surgery, uncinctomy, antrostomy, and anterior ethmoidectomy were done. White curd discharge and Polypt was resected from maxillary sinus with two pieces of wooden stick embedded in (Figure 2). The patient was given antibiotic and corticosteroid nasal spray after surgery and discharged without any problem. Symptoms dramatically improved after surgery and also 6 months office based endoscopic follow up.

Figure 1
Coronal CT without contrast revealed calcified densities within opacified right maxillary sinus and anterior ethmoid sinuses, which could be in favour of foreign body or fungus ball.
DISCUSSION

Foreign bodies in the maxillary sinus are rare entities and difficult to estimate their frequencies. Foreign bodies produce chronic physical and chemical irritation of the mucosa, leading to a degree of ciliary insufficiency and secondary infection [3]. Maxillary sinus foreign bodies usually have a dental origin. Foreign body less than 0.5 mm or plastic ones may be overlooked by computed tomography whereas organic wood may have false negative results [4]. Wooden foreign body in maxillary sinus is a very rare entity. MRI is useful for intra orbital wood location that characteristic aspect of wood is the hypodense signal related to orbital fat and T1 sections are more useful than T2 as they provide a better contrast between wood and orbital fat. In this unique case woods lodged in maxillary sinus with no history of oroantral fistula or trauma. She denied remembering putting these things into her nose which might be migrated to her middle meatus or maxillary sinus. There are some reports of wood in orbit or sinus due to trauma [5], but there is no case report resembling this one in literature. Caldwell-Luc approach was the usual procedure for removal of foreign bodies from maxillary sinuses but endoscopic one has an advantage of better visualization and illumination with less morbidity. This technique is useful for detecting and removing relatively small foreign bodies if lodged in the paranasal sinuses in an emergency department, especially when it has feted odor or it is unilateral.

CONCLUSION

In differential diagnosis of paranasal sinus lesions in an emergency department, foreign body should be considered and be removed whether it can cause acute or chronic rhinosinusitis or not.

REFERENCES