Maxillary Antrolith

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Maxillary antrolith results from calcification of an endogenous or exogenous nidus within the maxillary sinus. It is an unusual entity compared with the rhinolith that often lodges in the nasal cavity. Presented herein is a study of a woman who experienced unilateral but non-specific rhinological symptoms. The diagnosis of maxillary antrolith was made based on detection of a high-density mass inside her right maxillary sinus by computerized sinus tomography. Endoscopic sinus surgery confirmed the presence of maxillary antrolith. The patient has been free of symptoms since surgery. (Mid Taiwan J Med 2003;8:238-41)

Keywords

maxillary antrolith, rhinolith

INTRODUCTION

Rhinolith is a mineralized mass found in the nasal cavity while maxillary antrolith is a rhinolith located in the maxillary sinus [1]. In a retrospective analysis of 384 rhinolith cases reported since 1654, Polson found that only six cases could be classified as termed antral rhinoliths [2]. Maxillary antrolith is, indeed, a rare disease entity [1].

The mineralization is generally secondary to an object that has lodged in the sino-nasal region. The completely or partially encrusted nasal foreign bodies, either exogenous or endogenous, depend on the origin of the nucleus on which encrustation occurs [3,4].

Maxillary antrolith can cause non-specific symptoms like hemi-facial pain, nasal obstruction, and discharge [5]. Erosion of surrounding bony structure has been reported. Differential diagnosis with other sino-nasal soft tissue tumors is necessary before exploring surgical options to remove the antrolith [6-9].

CASE REPORT

A 48-year-old woman presented with right unilateral hemi-facial pain, intermittent nasal obstruction, and post-nasal discharge for 4 to 5 years. She also complained of a foul smelling and occasionally blood-tinged nasal discharge. The patient denied any dental procedure, foreign body inhalation, or insertion history.

Physical examination was non-specific. Some mucopurulent discharge from the right middle meatus was found. Computerized sinus tomography revealed a 1 cm × 1 cm hyper-density mass in the right maxillary sinus. There was neither bony destruction nor structural deformity (Fig. 1). A panoramic dental plain view film showed that the mass was not associated with tooth roots, even though the mass was lodged on the maxillary sinus floor. Endoscopic sinus surgery was performed to enlarge the sinus opening and to remove the solid mass (Fig. 2). Histopathologic examination revealed a calcified body with an ill-defined laminated structure suggestive of the layer-by-layer precipitation of mineral accumulation. After decalcification, a colloid substance and a scattered crystallization structure were noted. Fungus hyphae were also