Actinomycosis of the Paranasal Sinus

Hyun-Jae Woo1; Heung-Man Lee2; Yong-Dae Kim3

1Dept. of ORL-HNS,CHA university, Gumi, Korea, 2Dept. of ORL-HNS, Korea university, Seoul, Korea, 3Dept. of ORL-HNS, Yeungnam university, Daegu, Korea

ABSTRACT

Cervicofacial actinomycosis: a diagnostic and treatment challenge

OBJECTIVE: to report clinical characteristics and treatment outcomes of actinomycosis of the paranasal sinus.

STUDY DESIGN: Retrospective review.

SUBJECTS AND METHODS: The medical records of six patients with actinomycosis of the paranasal sinus between 1998 and 2006 were reviewed.

RESULTS: There was no immunocompromised patient and all lesions were unilateral. Only one patient had a history of an oroantral fistula due to facial trauma. On CT scan, all patients had unilateral total obstruction or partial obstruction of the involved maxillary sinus filled with soft tissue densities and calcified densities. All patients underwent endoscopic sinus surgery followed by relatively long-term antimicrobial therapy. There was no recurrence in any of the patients.

CONCLUSIONS: Chronic unilateral maxillary sinusitis, a calcified density in the involved sinus, and the restoration of sinus ventilation seem to be important factors for treating the disease.

METHODS AND MATERIALS

Six patients who were diagnosed with PNS actinomycosis from 1998 to 2006 were retrospectively analyzed. The diagnosis of actinomycosis was based on the clinical, histopathological, and radiological features. The patients had unilateral total obstruction or partial obstruction of the involved maxillary sinus filled with soft tissue densities and calcified densities. All cases underwent endoscopic sinus surgery followed by long-term antimicrobial therapy. There was no recurrence in any of the patients.

RESULTS

- The patients included one male and five females, and mean age was 51 years. The clinical symptoms were non-specific (Table 1). There was no immunocompromised patient, and one patient had a history of an oroantral fistula due to facial trauma.
- All lesions were unilateral. Only one patient had a history of an oroantral fistula due to facial trauma. In addition to this process, we suggest that another possible process can cause PNS actinomycosis, although PNS is usually caused by anaerobic organisms.
- All of the isolated reports of maxillary sinus actinomycosis have showed focal central calcified densities on CT.