

## Short Communication

# Fungus paranasal sinusitis in non- immunocompromised patients in Tehran, Iran (2006-07)

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## Abstract

**Background and Objective:** Incidence of fungal infections particularly fungal sinusitis is increasing in Iran and identification of causative agents is essential for its control and treatment. This study was carried out to determine the fungus paranasal sinusitis in non-immunocompromised patients in Tehran, Iran.

**Materials and Methods:** This cross – sectional study was done on 108 patients (73 males, 35 females) with chronic sinusitis ranged from 9 to 68 years, admitted to Amir Alam and Emam Khomeini hospitals in Tehran, Iran during 2006-07. Sinusitis in patients confirmed by radiologic images. Complementary information were obtained using questionnaires which including gender, job, presence of disposing disease diabetes and consumption immunocompromised drugs. Sinus samples were collected by washing and biopsy were carried out by two methods of fenestration and Cald-wel luc operations. Subsequently they were cultured on Sabouraud dextrose agar (SDA), SDA+chloramphenicol and blood agar (BA) media at 30°C and 37°C. Direct examination and fixative sample for histologic evaluation was done and for colonies confirmation the slide culture method also was used.

**Results:** 8 cases (7.4 %) were positive for fungal sinusitis with following sub type: 6 cases (*Alternaria Spp*), 1 case (*Paecilomyces*) and 1 case (*Aspergillus flavus*). The most fungal sinusitis (5 cases) were observed in 30-39 years patients.

**Conclusion:** Considering the prevalence of 7.4 % fungal sinusitis and isolation of *paecilomyces* which is a rare subtype complementary investigation is recommended, in the field of research.

**Keywords:** Fungal sinusitis, Paranasal sinuses, Fungal agents

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