Short Communication

Fungal flora in external ear canal in chronic otitis media

Ebrahimzadeh A (Ph.D)*1, Mousavi M (M.Sc)2

1Associate Professor, Department of Mycology and Parasitology and Research Center of Infection Disease and Tropical Medicine, Zahedan University of Medical Sciences, Zahedan, Iran. 2M.Sc in Parasitology, Faculty of Medicine, Zahedan University of Medical Sciences, Zahedan, Iran.

Abstract

Background and Objective: Fungal ear infection is a common disease in tropical areas with manifestation of acute and chronic clinical symptoms in external ear canal. This study was done to compare the fungal flora in external ear canal in chronic otitis media and subjects without otitis media.

Method: This case-control study was done on 63 patients with chronic otitis media and 63 subjects without otitis media. Samples were taken from external ear canal with a sterile swab and were placed in the sterile tubes containing normal saline. The direct smear was prepared and samples were cultured in S, SCC and CMA (corn meal agar) media. Identification of genus and species were established using slide culture method and Germ-tube assay.

Results: Positive fungi culture in external ear canal was seen in 77.78% and 17.46% of case and control groups, respectively (P<0.05). The most common type of fungi was Saprophyts (57.33%) followed by yeast (20.59%) and dermatophytes (17.32%). The most prevalent fungi in the subgroup of Saprophyts and dermatophytes was Aspergillusnigra (41.66%) and Trichophytonmentagrophytes (36.37%), respectively. The most common subgroup in yeast was Candida SPP with 53.85%.

Conclusion: This study showed that the positive fungi culture in external ear canal is more prevalent in patients with chronic otitis media.

Keywords: Otitis media, Fungaei, Aspergillusnigra, Candida SPP, Trichophytonmentagrophytes

* Corresponding Author: Ebrahimzadeh A (Ph.D), E-mail: adel1336@yahoo.com

Received 9 Apr 2013 Revised 22 Sep 2013 Accepted 8 Oct 2013