

-  **Current Issue**
-  **Browse Issues**
-  **Search**
-  **About this Journal**
-  **Instruction to Authors**
-  **Online Submission**
-  **Subscription**
-  **Contact Us**
-  **RSS Feed**

Acta Medica Iranica
2009;47(4) : 109-113

Original Article

Detection of Fungal DNA in the Middle Ear Effusion of Patients Suffering from Otitis Media with Effusion

MM Jalali ¹, S Rezaie ², A Kousha ¹, F Saadat ³, R Banan ¹

¹ENT-HNS Research Center, Guilan University of Medical Sciences, Iran

²Dept. of Mycology, School of Public Health, Tehran University of Medical Sciences, Iran

³School of Medicine, Guilan University of Medical Sciences, Iran

Corresponding Author:

MM Jalali

Tel: +98 131 2238307, Fax: +98 131 3241842, E-mail: mmjalali@gmail.com

Received: April 25,2008
Accept : December 1,2008
Available online: December 27,2008

Abstract:

Background: Otitis media with effusion (OME) is common in the children. It is proven that pathogenic bacteria as a causative agent of middle ear effusion, however the role of fungal infection in otitis media with effusion remains unclear. Therefore, this study was conducted to assess presence of fungi in OME.

Methods: From January 2005 to September 2006, a number of 62 children with proven otitis media with effusion subjected to the case series study at Amiralmomenin Hospital in Rasht City, Iran. After myringotomy, middle ear effusion was collected. In 48 patients, both ears demonstrated effusion, whereas in 14 patients, only one ear had effusion. Standard mycological culture and polymerase chain reaction (PCR) assay were performed in 110 and 79 samples, respectively.

Results: The growth of fungi was observed in 9 samples (8.8%). The result of our PCR assay showed that 23 samples (29.1%) were positive for fungal DNA.

Conclusion: Middle ear effusion from cases with OME contains fungi and it might play a role in the pathogens of OME. PCR assay is a better indicator in detection of fungus in middle ear effusion, compared with fungal culturing method. However, the estimation of its sensitivity and specificity in detection of fungal agents in these patients needs more molecular epidemiological studies.

Keywords:

Otitis media with effusion . *PCR* . *Fungi* . *Iran*

TUMS ID: 12388

Full Text HTML  Full Text PDF  121 KB

top ▲

[Home](#) - [About](#) - [Contact Us](#)

TUMS E. Journals 2004-2009
Central Library & Documents Center
Tehran University of Medical Sciences

Best view with Internet Explorer 6 or Later at 1024*768 Resolutions