

Expression of tumor necrosis factor - α (TNF- α) and interleukin 1- β (IL 1- β) in chronic tubotympanic suppurative otitis media

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ABSTRACT

Chronic suppurative otitis media (CSOM) is a common public health problem worldwide and a major cause of hearing impairment. It is also one of the neglected disease especially in developing countries. Cytokines are a group of glycoproteins that play a role in strengthening the immune and inflammatory reactions in various diseases, including inflammation of the middle ear. Some of the important inflammatory mediators found in middle ear fluids are tumor necrosis factor- α (TNF- α) and interleukin-1 β (IL-1 β). Cytokines are thought to play a role in the ongoing inflammatory regulation. The aim of this study was to compare the expression of TNF- α and IL-1 β in tubotympanic CSOM and in healthy control group. The mean of TNF- α serum level in tubotympanic CSOM was $0,553 \pm 1,59$ pg/ mL, and $0,587 \pm 2,13$ pg/ mL in control group. There was no statistically different of TNF- α between two groups ($P > 0,05$). Mean of IL-1 β serum level in the tubotympanic CSOM and control group were $0,633 \pm 0,92$ and $0,302 \pm 0,48$, respectively. Although IL-1 β levels were higher in the patient group, the difference was not statistically significant ($P > 0,05$).

Keywords: chronic tubotympanic suppurative otitis media - tumor necrosis factor- α interleukin 1- β

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