ABSTRAK

Latar belakang : Otitis media supuratif kronis (OMSK) merupakan peradangan kronis pada telinga tengah yang muncul dengan otorrhea melalui perforasi membran timpani. Bakteri terbanyak pada pasien OMSK adalah *Pseudomonas aeruginosa.* Toxin yang dihasilkan bakteri ini dapat merusak mukosa dan silia telinga tengah. Penelitian yang menghubungkan bakteri penyebab OMSK dengan perubahan histopatologi mukosa telinga tengah dan derajat otorrhea masih terbatas.

Tujuan : Mengetahui hubungan infeksi *pseudomonas aeruginosa* dengan perubahan histopatologi mukosa telinga tengah dan derajat *otorrhea* pada pasien OMSK benigna

Metode : Penelitian observasional dengan desain potong lintang. *Sampling* menggunakan *consecutive sampling* dengan kriteria pasien OMSK benigna yang menjalani timpanoplasti di RSUP dr. kariadi. Derajat otorrhea dinilai dengan otoskopi. Spesimen mukosa telinga tengah diambil dari promontorium kemudian diperiksa kultur mikrobiologi dan derajat perubahan histopatologinya. Hubungan antar variabel dianalisis menggunakan uji s*pearman*.

Hasil : Didapatkan 43 subjek penelitian dengan infeksi bakteri *pseudomonas aeruginosa* (53.6%) dan non *pseudomonas aeruginosa* (46,4%). Derajat otorrhea kategori berat (39.5%), Sedang (27,9%), ringan (32,6%). Hasil analisis terdapat hubungan signifikan antara infeksi pseudomonas dengan derajat otorrhea (p=0.005 dan *rho* = 0.420).Tidak terdapat hubungan antara infeksi pseudomonas dengan perubahan histopatologi mukosa telinga tengah ($p<0,05$).

Kesimpulan : Terdapat hubungan antara infeksi *pseudomonas aeruginosa* dengan derajat otorrhea serta tidak terdapat hubungan antara infeksi *pseudomonas aeruginosa* dengan perubahan gambaran histopatologi pada pasien OMSK benigna

Kata kunci: Mukosa telinga tengah, OMSK, *Pseudomonas aeruginosa*, Otorrhea, Histopatologi

ABSTRACT

Background: Chronic Suppurative otitis Media (CSOM) is a chronic inflammation of the middle ear that occurs with otorrhea through perforation of the tympanic membrane. The most common bacteria in CSOM patients are Pseudomonas aeruginosa. Toxins produced by this bacteria can damage the mucosa and cilia of the middle ear. The research's relationship between bacteria causing CSOM with histopathological changes of middle ear mucosa and severity degree of otorrhea are limited.

Objective: To determine the relationship between Pseudomonas aeruginosa infection with histopathological changes of middle ear mucosa and the degree of otorrhea in benign CSOM patients.

Method: An observational study with a cross-sectional design was conducted. Sampling was performed using consecutive sampling with criteria of benign CSOM patients undergoing tympanoplasty at Dr. Kariadi Hospital. The degree of otorrhea was assessed by otoscopy. Middle ear mucosal's specimens were taken from the promontory and then examined for microbiological culture and the degree of histopathological changes. The relationship between variables was analyzed using the Spearman test.

Results: A total of 43 study subjects were obtained with Pseudomonas aeruginosa bacterial infection (53.6%) and non-Pseudomonas aeruginosa (46.4%). The degree of otorrhea was categorized as severe (39.5%), moderate (27.9%), and mild (32.6%). The analysis revealed a significant relationship between Pseudomonas aeruginosa infection and the degree of otorrhea ($p=0.005$ and rho = 0.420). There was no significant relationship between Pseudomonas aeruginosa infection and histopathological changes in the middle ear mucosa ($p<0.05$).

Conclusion: There is a relationship between Pseudomonas aeruginosa infection and the degree of otorrhea, while there is no relationship between Pseudomonas aeruginosa infection and histopathological changes in benign CSOM patients.

Keyword: Middle ear mucosa, CSOM, Pseudomonas aeruginosa, Otorrhea, Histopathology