ABSTRACT

**Objective**: to explain the correlation between IL-17 expression in granulation tissue with bone erosion in chronic suppurative otitis media (CSOM) without cholesteatoma

**Design of study**: cross sectional

**Method**: We performed prospective collection of granulation tissue during mastoidectomy from CSOM without cholesteatoma patient. The tissue samples divided into two groups, with and without bone erosion. All tissues group processed for all samples were then IL-17 examined with mouse monoclonal antibody anti human IL-17 stated in Intensity Distribution Score (IDS). The expression of IL-17 categorized strong intensity, moderate intensity, weak intensity and negative. Strong intensity if IDS about 276.00 – 300, moderate intensity if IDS about 151.00 – 275.99, weak intensity if IDS about 76.00 – 150.99 and IL-17 negative if IDS about 0-76.99.

**Result**: There were 18 samples, 4 with bone erosion and 14 without bone erosion. Expression of IL-17 in the granulation tissue with bone erosion obtained IL-17 moderate intensity were as many as 3 (75%) tissues and IL-17 weak intensity were as many as 1 (25%) tissues. Expression of IL-17 in the granulation tissue without bone erosion obtained IL-17 negative were as many as 6 (42.86%) tissues and IL-17 weak intensity were as many as 8 (57.14%) tissues. Statistical analysis using the Mann-Whitney test p value = 0.005. That means there were significant correlation between IL-17 expression and bone erosion in CSOM without cholesteatoma patients (p < 0.05).

**Conclusion**: there were correlation between IL-17 expression and bone erosion in CSOM without cholesteatoma patients in CSOM patients

**Key word**: Chronic suppurative otitis media without cholesteatoma, bone erosion, destruction, granulation tissue, interleukin 17.