MINIMUM INHIBITORY CONCENTRATION OF PROPOLIS SOLUTION TOWARDS ENTEROCoccus FAECALIS

ABSTRACT

Background: The existence of microorganisms after root canal treatment can cause the failure of root canal treatment. Root canal treatment failure requiring retreatment, indicate the presence of facultative bacteria in infections, especially Enterococcu s faecalis. The prevalence of infections due to Enterococcu s faecalis ranged between 24% - 77%. The use of propolis in the field of dentistry was reported several years. Propolis has antibacterial, antiviral, antifungal, antiseptic, antibiotic, antioxidant and anti-inflammatory. Flavonoid found in significant amounts in propolis, even compared with most other bee products like honey, royal jelly, etc. Purpose: The aim of this study is to know the minimum inhibitory concentration of propolis solution towards Enterococcus faecalis. Method: This research was laboratory experimental study. Propolis that used in this research is "Melia Propolis" with BPOM RI POM. IT 054 616 861. This propolis solution was examined in Enterococcu s faecalis ATCC 29212. Experimental method is serial dilution. Result: The result shown that propolis solution has ability to inhibit the growth of Enterococcus faecalis on concentration 6.25%. Conclusion: Propolis solution has antibacterial effect toward Enterococcus faecalis. Minimum inhibitory concentration (MIC) Enterococcus faecalis is 6.25%.

Keyword: Antibacterial, Propolis, Enterococcus faecalis