

**PERBEDAAN EFEKTIVITAS DAYA ANTIBAKTERI EKSTRAK DAUN
MIMBA (*Azadirachta Indica A. Juss*) DIBANDING NaOCl 2,5%
TERHADAP *Enterococcus faecalis***

**(THE DIFFERENCE OF ANTIBACTERIAL EFFECTIVENESS OF NEEM
LEAF EXTRACT (*Azadirachta Indica A. Juss*) THAN NaOCl 2,5% AGAINST
Enterococcus faecalis)**

ABSTRACT

Background. *Enterococcus faecalis* is often found in persistent endodontic infection. Its high prevalence, about 24-77%, is due to resistance and virulence of these bacteria. NaOCl is commonly use as irrigation material, but it has toxicity effect and can irritate periapical tissues. Therefore, some studies to find natural materials that have antibacterial properties as an alternative root canal medicament need to be done. Neem (*Azadirachta Indica A. Juss*), also known as wonder tree for centuries has antibacterial properties, proven in the preliminary study which has been done that the MIC (Minimum Inhibitory Concentration) is 65% and MBC (Minimum Bactericidal Concentration) is 70%. **Purpose.** The aim of this study was to compare the effectiveness of antibacterial activity of the Neem leaf extract (*Azadirachta Indica A. Juss*) than NaOCl 2,5% against *Enterococcus faecalis*. **Methods.** This study is an experimental laboratory with post test only control group design using *Enterococcus faecalis* ATCC 29212. Agar diffusion test was used to check the antimicrobial activity of 65% Neem leaf extract, 70% Neem leaf extract and NaOCl 2,5% by measuring the inhibition zone diameter of each treatment. **Result.** Diameter of bacterial inhibition zone formed Neem leaf extract is greater than NaOCl 2,5%. **Conclusion.** The antibacterial activity of Neem extract is greater than NaOCl 2,5% against *Enterococcus faecalis*.

Keywords: *Neem leaf extract (Azadirachta Indica A. Juss)*, NaOCl, *Enterococcus faecalis*