KONSENTRASI HAMBAT MINIMUM KITOSAN TERHADAP BAKTERI
Enterococcus faecalis

MINIMUM INHIBITORY CONCENTRATION OF CHITOSAN AGAINST
Enterococcus faecalis

ABSTRACT

Background. Bacteria is main etiological factor of necrosis pulp diseases. Enterococcus faecalis is one of the bacteria resistant and the mostly found in endodontic infections. Therefore, eliminating bacteria is the important part on root canal treatment. It can be obtained by using an endodontic sterilization agent that has antibacterial effect. Besides of its antibacterial effect, the ideal sterilization agent should has ability to remove necrotic tissue and less toxic. Chitosan is well known as a natural substain that has antibacterial and antifungi effect, biocompatible, biodegradable, and non-toxic. Purpose. The aims of this study is to know the minimum inhibitory concentration of chitosan against Enterococcus faecalis. Method. This research was laboratory experimental study. Chitosan that used in this research is Black Tiger species with acetate acid 1%. This chitosan gels was examined in Enterococcus faecalis ATCC 29212. Experimental method is serial dilution and paper disk diffusion. Result. The result shown that chitosan has ability to inhibit the growth of Enterococcus faecalis on concentration 2%. Conclusion. Chitosan has antibacterial effect against Enterococcus faecalis. Minimum inhibitory concentration (MIC) Enterococcus faecalis is 2%.

Keyword : antibacterial, chitosan, Enterococcus faecalis