Antibacterial effects of garlic extract and camphor mono chloro phenol (CMCP) to root canal bacteria of non vital primary teeth

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ABSTRACT

Background : Intracanal medication with antibacterial action is required to optimize the disinfection of the root canal system to obtain endodontic treatment in primary teeth. Strong intracanal antiseptics such as Champhor Mono Chloro Phenol (CMCP) have been used routinely in children, however it has harmfull effect on the connective tissue. Therefore, the research for new substance is necessary, and Garlic (Allium sativum) which has been known as an antibacterial agent is maybe one of the chiose.

Objective: The purpose of this study was to compare the antibacterial effect of garlic extract and CMCP to root canal mix bacteria of non vital primary teeth in vitro.

Method : root canal mix bacteria were isolated from five patients (who would treated pupectomy) in pediatric dentistry clinic of RSGMP Universitas Airlangga. The effectiveness of two material (100% garlic extract and CMCP) againt this bacteria evaluated by using standart agar diffusion assay. The diameter zone of inhibition was measured after 24 hours. The result from each group is statistically annalized using independent t test.

Result : The diameter zone of CMCP grup were 2,386 cm while the garlic extract group were 1,04 cm.

Conclusion : This study showed that CMCP still had greater antibacterial effect than Garlic extract against the root canal mix bacteria of non vital primary teeth.

Keywords : garlic extract, CMCP, antibacterial effect, root canal bacteria

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