An Inhibition effect of immersion in effervescent garlic ethanol extract (Allium sativum L.) against Staphylococcus aureus growth on heat cured acrylic

Title	An Inhibition effect of immersion in effervescent garlic ethanol extract (Allium sativum L.) against Staphylococcus aureus growth on heat cured acrylic
Author Order	2 of 3
Accreditation	2
Abstract	Denture stomatitis is an infection of the mucosa caused by bacteria such as Staphylococcus aureus (S. aureus) accumulating on the denture. Garlic (Allium sativum) contains antibacterial compounds that can be used as an alternative denture cleanser. The purpose of this study was to determine the inhibition effect of immersion in effervescent garlic ethanol extract (Allium sativum) against Staphylococcus aureus growth on heat cured acrylic dental plate. This research was a laboratory experiment in vitro using 40%, 50%, and 60% effervescent garlic ethanol extract. The samples were 12 pieces (n = 12) of heat cured acrylic plates which were divided into 3 treatment groups then incubated in S. aureus suspension for 24 hours and then immersed in an effervescent garlic ethanol extract for 6 hours. Bacterial colonies were counted using a colony counter and the data were analyzed using the One-way ANOVA and LSD Post hoc tests. The statistical analysis showed that the number of S. aureus colonies decreased along with an increased concentration of garlic ethanol extract. The results of the analysis showed that the 60% effervescent garlic ethanol extract had a significantly lower mean number of colonies compared to the 40% and 50% effervescent garlic ethanol extracts (p Ã¢Â‰Â¤ 0.05). This research concluded that effervescent garlic ethanol extract prevented the growth of S. aureus on the heat cured acrylic dental plate.
Publisher Name	Faculty of Dentistry, Universitas Gadjah Mada
Publish Date	2023-04-01
Publish Year	2023
Doi	DOI: 10.22146/majkedgiind.77132
Citation	
Source	Majalah Kedokteran Gigi Indonesia
Source Issue	Vol 9, No 1 (2023): April
Source Page	67-72
Url	https://journal.ugm.ac.id/mkgi/article/view/77132/36096
Author	Dr Apt EKA PRASASTI NUR RACHMANI, S.Si, M.Sc.