26. Comparison of antimicrobial properties of silver nanoparticles and chlorhexidine in denture base resin- an in vitro study

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Candida-induced denture stomatitis is a common form of oral candidiasis that manifests as diffuse inflammation of the denture-bearing areas. Oral candidiasis appears to be caused by a multiplicity of predisposing factors. Chlorhexidine and silver nanoparticles are widely prescribed in dentistry due to its broad-spectrum antimicrobial activity, including c. Albicans. . The antifungal effect of chlorhexidine has been shown in many studies, and it has been demonstrated that exposure of c. Albicans to chlorhexidine suppresses the ability of candida to adhere to buccal epithelial cells. The use of silver nanoparticles is also important, as several pathogenic bacteria have developed resistance against various antibiotics. A sustained release delivery system for treatment of denture stomatitis using chlorhexidine incorporated into a tissue conditioner has been investigated, and it has been confirmed that there was a gradual release of the drug from the tissue conditioner and inhibition of candida growth in vitro. The purpose of this study is to compare the antifungal activity against c. Albicans when silver nanoparticles nad chlorhexidine powder is incorporated in denture base resin.

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