

عنوان مقاله:

Antimicrobial Activity of Cold Plasma Treatment on Acrylic Denture Bases : An In Vitro Evaluation

محل انتشار:

مجله لیزر در علوم پزشکی، دوره 10، شماره 0 (سال: 1398)

تعداد صفحات اصل مقاله: 5

نویسندگان:

Mohammad Asnaashari

Salar Motamedi

Negin Asnaashari

Saranaz Azari-Marhabi

خلاصه مقاله:

**Abstract Introduction :** Cross-contamination between dental office and prosthetic laboratories is of utmost importance. The dental prosthesis could harbor tones of microorganisms harmful to health staff. It has been estimated that more than 60% of the prostheses delivered to clinics from laboratories or vice versa are contaminated with pathogenic microorganisms. Several disinfection methods and chemicals have been proposed for sanitizing prostheses. Cold plasma, or nonthermal plasma, has been introduced as a new method in medical equipment disinfection. The current study aimed to compare the antimicrobial effect of cold plasma and the routinely used alcohol-based impression disinfectant ASEPTOPRINT® on disinfecting dentures. **Methods :** In this experimental study, 30 maxillary complete dentures were used as the microbial source. Dentures were randomly divided into 3 groups : (1) cold plasma treatment for 30 seconds, (2) cold plasma for 60 seconds, (3) ASEPTOPRINT® spray. Microbial culturing was taken before and after disinfection in each group on both Blood Agar plates and Soborou Dextrose Agar (SDA) plates. After 48 hours incubation at 37°C, the number of colonies was counted using a digital colony counter and differences between the groups were analyzed. **Results :** A significant reduction in microbial colonies was observed after using all disinfection methods. ASEPTOPRINT® spray showed more antimicrobial effects comparing to cold plasma. **Conclusion :** The antimicrobial effect of ASEPTOPRINT® spray solution is more than cold plasma application on both microbial and fungal microorganisms. The time of plasma application was not accompanied by any significant differences in the results. **Keywords :** Acrylic dentures Disinfection Cold plasma ASEPTOPRINT® spray

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/2055800>

