

METHODS OF ASSESSMENT OF DIMENSIONAL STABILITY OF ELASTOMERIC IMPRESSION MATERIALS AFTER DISINFECTION: A LITERATURE REVIEW

Enis Sabanov¹, Marija Dostinova³, Sašo Elencevski^{1,2}, Sanja Pancevska^{1,2}

Precise and dimensionally stable impression materials are crucial for a good impression. Still, the precision of the impression and the accuracy of the reproduction depend on several factors, of which the most important one is the method of disinfection and the duration of the same. The purpose of this review article was to look at different recommended procedures for the disinfection of elastomeric dental impressions and the most commonly used methods and equipment for evaluating their dimensional stability after disinfection. To prepare this paper, we performed an electronic search of databases MEDLINE (Pub Med) and Google Scholar for articles published in the period from 2011 to 2022. Thirty-nine papers were selected for being the most current, relevant and focused on the disinfection of elastomeric materials for impressions as well as on methods and equipment applied to the evaluation of dimensional stability of elastomeric impressions after their disinfection. Our analysis showed that the most commonly used disinfectant materials were glutaraldehyde as well as sodium hypochlorite. Disinfection usually lasted for 10–15 minutes. Regarding the methods used to assess dimensional changes, the microscope was used in 26 papers out of a total of 39 papers. The review of the literature confirmed the non-standardization of the methodologies applied in the research and their great variety.

Acta Medica Medianae 2024; 63(3):80–89.

Key words: *elastomeric impressions, disinfection, dimensional stability, tests*