

10. CLINICAL EXPERIENCE OF USING ICON RESIN IN THE TREATMENT OF POST-ORTHODONTIC AND NON-POST-ORTHODONTIC WHITE SPOT LESIONS



Author: Burdiniuc Ana

Scientific advisor: Stepco Elena, PhD, Associate Professor, „Ion Lupan" Department of Pediatric Oral-Maxillofacial Surgery and Pedodontics, *Nicolae Testemițanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Dental caries is one of the most widespread conditions globally, affecting more than 3.5 million people. Current trends in the treatment of early carious lesions are focused on preserving the integrity of the hard dental structures. An effective method of masking and stopping the clinical evolution of early carious lesions is their infiltration with Icon resin, a preparation of DMG, Germany. Studies in the field demonstrate that starting the treatment as early as possible of early post-orthodontic or non-post-orthodontic carious lesions can have very promising results.

Case statement. Evaluation of the esthetic efficacy of using the Icon resin infiltration method in the treatment of post-orthodontic and non-post-orthodontic white spot lesions. Two adolescent patients: a 17-year-old boy with post-orthodontic white spot lesions on the vestibular surfaces of the incisors, and an 18-year-old girl with non-postorthodontic white spot lesions, also on the vestibular surfaces of the incisors, were treated with resin Icon and were supervised for six months. The treated teeth show an excellent aesthetic result immediately after applying the resin, an effect that is already maintained for six months, and the progression of the clinical evolution in both cases seems to be stopped.

Discussions. Icon resin infiltration, being a non-invasive method, does not require anesthesia of dental hard tissues, is well tolerated by patients and easy to use in dental practice. The treatment of post-orthodontic and non-post-orthodontic white spot lesions has a significantly greater masking effect than other treatment methods, such as natural remineralization or regular application of fluoride varnishes and can be recommended in the treatment of early post - orthodontic or non-post-orthodontic carious lesions.

Conclusion. Although the use of the infiltration method of early post-orthodontic or non-post-orthodontic carious lesions with Icon resin is quite effective on the vestibular surfaces of the teeth, its use for the proximal surfaces is still quite limited and requires further studies.