



A NEW METHOD TO REMOVE INFECTED CARIOUS DENTINE WITH BRIX3000®



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The atraumatic removal of the affected dentine using chemical-mechanical preparation is known within the products Carisolv and BRIX3000®. In Bulgaria this method it is still unknown and the researches globally are just a few. BRIX3000® is an enzymatic gel, which major component is the enzyme papain. Papain is an endoproteine, similar to the human pepsine, which has bactericide, bacteriostatic and antiseptic properties. The enzyme is bio-capsulated by the technology E.B.E. (Encapsulating Buffer Emulsifier), which keeps and lends stability and increases the enzymatic activity of the final product. Papain is an enzyme which lysate the collagen fillaments but it acts only on the affected by a carious process dentine tissue. The healthy tissue is conserved because of the absence of plasmatic antiproteasis.

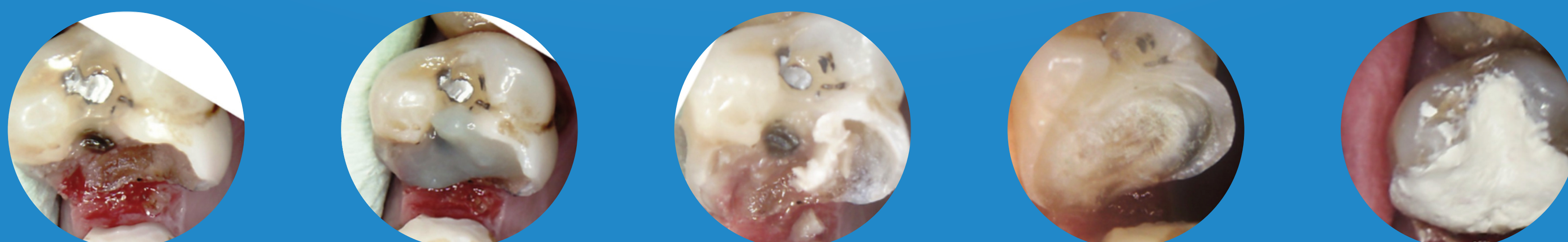


The initial results of appliance the papain gel are encouraging. We have been observing 10 cases where the carious affected dentine is been removed by the papain gel.

Clinical case - Caries profunda: A 17-year old patient with an advanced caries destruction to the approximal and mesial surface of the tooth 46 was diagnosed with caries profunda. The enamel tissue above the lesion was removed with rotating instruments. The dentine tissue was treated with papain gel for approximately 2 minutes and than it was removed only with manual instruments. The dentine wound was treated with distilled water and was ozoned for 24 seconds.



Clinical case - Caries profunda: A 39-year old patient was diagnosed with hyperaemia pulpae of the tooth 26. The carious dentine was bright-yellowed coloured and with soft consistention. The affected dentine was treated for 2 minutes with papain gel and carefully excavated only with manual instruments. The dentine wound was irrigated with distilled water to remove the dentine scraps(left after preparation the cavity with rotating instrument) and ozoned for 24 seconds. Then the cavity was filled temporary with Biodentine.



Patients find this way to remove caries less painful and the like the atraumatic manipulation. The observation of more clinical cases will give us information about the effect of applying the enzyme-technology for caries removal with BRIX3000®. The initial results are encouraging, especially for patients who are afraid of dental treatment.