



Figure 10: Applying the infiltrant



Figure 11: Light-curing the infiltrant for 40 seconds from all sides.



Figure 12: Removing excess material

### Advantages for dentist and patient

The infiltration therapy is a new treatment concept for which only one product is approved to date, and therefore, a comparison to other products is not possible.

Clinical studies in Germany, Greenland/Denmark and Columbia revealed that the infiltration of approximal and vestibular lesions represents an effective method to reduce lesion progression in vivo. Caries infiltration closes an important gap in the dental therapy spectrum. Until now, the options for smaller carious defects were to wait and administer fluoride or to excavate and fill. An oral hygiene assessment is vital for the decision to wait or to fill. But even with proper oral hygiene, the risk of caries progression remains. With the intent to do the right thing dentists may often be drilling too soon.

The infiltration therapy provides a change. Small carious defects can be filled and thus prevent progression. The advantage is that the tooth form remains unchanged. Possible mistakes in trying to restore the challenging chewing surface and approximal spaces can be ruled out. The treatment time is specified: after placement of the rubber dam, 15 minutes per area to be treated.

### To be innovative and strike out in a new direction

Although the primary goal of dentistry is to maintain the patient's health, economic success is also very important. In order to achieve both goals, today's dental office must be innovative and prepared and willing to strike out in a new medical direction. A company is innovative if it is willing to change. In that regard, infiltration is innovative. However, the dental world is quite skeptical when it comes to new techniques.

If a filling material does not meet the expected requirements, all parties involved are dissatisfied. The failure is felt at the dental office by the dentist because he/she has to make the corrections and perhaps even replace unsuccessful restorations free of charge. He/she is responsible for his/her patients and may lose them. The true ill success, however, is with the patient because he/she will lose even more healthy hard tissue or possibly even the entire tooth.

Therefore, non-invasive therapies are increasingly gaining popularity and acceptance, both from the patient and the attending dentist. This explains the dental world's high level of interest in the infiltration therapy. This new approach is not a non-invasive treatment because the etching process removes up to 40µm enamel, but it can be described as a micro-invasive therapy that differs significantly from other filling restorations for which mechanical substance is removed and excavation performed.

The worst that can occur with the infiltration therapy is that the caries progresses and a filling restoration will be required after all, which, according to the conventional treatment approach, would have already happened anyway. The greatest gain is that the lesion does not progress and the tooth is preserved. I believe that this therapy provides possibilities for dentists that best meet their wishes. **DA**