

## Reasonable Adhesion

Everyone dealing with adhesion knows that surfaces to be bonded must be free of all contaminants as far as possible. In industrial bonding processes, this is accomplished by thoroughly cleaning the surfaces with all kinds of solvents and subsequent drying to expose the substrate. In dentistry, when dealing with bonding to enamel, “dry and clean” is the requirement, which means cleaning with water-soluble polishing pastes, and then spraying with abundant water and blowing the surface dry. The following step is also very critical: keep the surface free from contaminants!

Unfortunately, there are many contaminants in the oral cavity: saliva, and if the dentist works close to the gingiva, perhaps sulcular fluid or blood. Most dental schools preach the use of rubber-dam to fulfill the above-mentioned objective, and most practitioners do not use rubber-dam. The industry is busy collecting and sifting through data to prove that adhesion works just as well without as with rubber-dam. I think the rubber-dam may not serve its purpose when used improperly – I have seen leaking rubber-dams. I have seen many situations where rubber-dam cannot be placed.

One good example is the request for rubber-dam during fissure sealing. Fissures should be sealed as soon as possible after tooth eruption in order to give good, effective protection against fissure caries. But have you ever tried to place a rubber-dam on a partially erupted tooth and have the kid come back to your office? The reasonable so-

lution to this problem is to place fissure sealants without rubber-dam, by using cotton rolls and good saliva ejection/suction. However, this is still a difficult task, especially if perfection is expected. Therefore, I suggest that the most reasonable approach is to strictly use assistance (4-handed dentistry) to accomplish fissure sealants. Dentists very often delegate the “simple” act of fissure sealing to trained auxiliaries, but they forget that for this treatment, 4-handed dentistry is a prerequisite. It also comes to mind how dentists who work in nations with a paucity of auxiliaries can manage to perfectly seal a fissure in a child, working alone.

Thus, I must praise the ZZQ (Zentralstelle Zahnärztliche Qualitätssicherung im Institut der Deutschen Zahnärzte = Center for Dental Quality, [www.zzq-koeln.de](http://www.zzq-koeln.de)) which explicitly recommends 4-handed dentistry for the placement of fissure sealants.

Perfection pays off! Just a little more effort initially can raise the success rate significantly. Well done, colleagues.

Sincerely yours,



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Editor-in-Chief