

The role of adhesion in minimally invasive restorative dentistry

Minimally invasive does not (only) mean to drill small cavities. True minimally invasive restorative dentistry includes several important aspects.

1. Excavation: Conventional, way too aggressive excavation leads to unacceptable endodontic collateral damage. Furthermore, although endodontic measures are successful, endodontically treated teeth are under special risk for fracture.
2. Preparation: The pity with minimally invasive cavities in daily dental practice is that it is more time-consuming to preserve sound tooth hard tissues compared to extension-for-prevention-style cavities. But especially in Operative Dentistry, smaller restorations always perform better.
3. Infiltration: Caries infiltration as microinvasive technique is an interesting tool for minimum invasion in general.
4. Longevity: Small restorations with limited lifetime due to inappropriate adhesive techniques are worthless – in the end they sacrifice a bigger amount of tooth hard tissues than larger preparations.
5. Restoration repair. We often think that adhesive restorations are beneficial in general – however, when we remove them completely after their individual lifetime, we often destroy the initially saved tooth hard tissues because we do not see what we really do due to perfect color match of tooth-colored restorations. Only when all five aspects are appropriately addressed, minimally invasive restorative dentistry comes true.



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