

Primum Nihil Nocere – A Basic Principle in Adhesive Dentistry

Primum nihil nocere is Latin for "primarily do not harm" and is fundamental in every medical discipline. This is true for all kinds of surgery and invasive measures in the human body; however, it is especially applicable in operative dentistry.

Have you ever thought about what the main benefit of modern adhesive dentistry really is? It is commonly thought to lie in improved esthetics. Both of us were educated during the era of European "heavy metal dentistry," which was dominated either by amalgam or by cast gold. For instance, Germany was the country with the highest gold consumption worldwide in the 1980s, which was primarily due to dental restorations. Of course, cast gold restorations are characterized by good longevity, even if this is rather more anecdotically substantiated than by scientific evidence. Today, the majority of patients reject the "old" metals in favor of newer resin composite or ceramic restorations; in other words, they are very enthusiastic about receiving tooth-colored dental restorations. So to sum up: adhesive dentistry enables us to satisfy our patients and guarantees better esthetics than was possible in previous decades. But is this the whole story? Definitely not!

We are convinced that there is much more than simple esthetics behind today's adhesive dentistry: the basic principle, which actually arose from adhesive technology, is uncompromising respect for sound hard dental tissues, because adhesive dentistry is the number one fundamental prerequisite for minimally invasive restorative dentistry. Only this kind of biological thinking leads to a minimum extent of bur-cut enamel and dentin. To make a long story short, the main benefit of having adhesive dentistry in our repertoire is not esthetics (although it is definitely nice to have) but biology, ie, as opposed to previous decade, we do not have to cut sound hard dental tissues anymore in order to obtain adequate retention of dental restorations. This means "glue instead of prep" – and less preparation in sound structures causes less endodontic collateral damage in everyday dental practice.

Yet another aspect has to be taken into account: minimally invasive adhesive dentistry does not automatically or exclusively mean drilling small holes and that's it. Besides minimally invasive preparation, true minimally invasive adhesive dentistry equally involves defensive excavation close to the pulp in order to maintain pulp vitality, improve longevity of restorations, and repair restorations. There is no sense in making small, careful restorations if too many fillings are of post-endodontic nature due to aggressive excavation, if restorations fail after only a few years, or if complete replacement instead of intelligent repair techniques follows any previously applied, careful biological preparation.

In this story about real backgrounds of our daily minimally invasive work, it is good to know that the *Journal of Adhesive Dentistry* is centrally anchored in every single question arising in any discussion about thinking biologically in restorative dentistry. At every level, our Journal supports minimally invasive dentistry for a maximum of preserved dental hard tissue and a maximum number of satisfied patients.

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