New perspectives for adhesion improvement: Chances and hopes

The most current restorative dentistry requirement is to achieve the best possible bond between restorative materials and tooth structures, in order to develop the great aesthetic potential of the new materials today available. Often, problems and discussions were focused a little simplistically only on adhesion. In fact the problem is much more complex. There are many other factors to improve the bonding of materials to the tooth. For example, in the restoration of endodontically treated teeth it has been understood that there is a delicate engineering problem in the coexistence of materials with mechanical characteristics to be carefully assessed.

The best adhesive bond is possible only if a good coupling of different materials in mechanical terms is created. Furthermore, the management of the retention of the prosthetic crown is accomplished efficiently preparing the remaining tooth structure (cervical cerclage as a protection for the adhesion).

So for the direct and indirect restorative techniques, the focus should be placed in parallel on the materialadhesive cement combination and on the technical and practical knowledges.



Giovanni Cavalli

Graduated in Medicine and Surgery in 1985 at the University of Brescia.

Since 1989 is active member of the Italian Academy of Conservative Dentistry (AIC) of which is currently Member of the Cultural Commission.

Since 1991 is an active member of the Italian Society of Endodontics (SIE) of which he has been member of the Active Members Accepting Commission and, in the last three years, Vice President.

He believes in interdisciplinarity: he has published engineering studies applied to the restoration of the tooth and has collaborated with many international researchers for the development of reconstructive techniques.

He is author of the chapter of the Italian Academy of Conservative Dentistry text-book on the subject of post endodontic restoration and has published numerous articles in various journals.

