



INTERVIEW



Milena Cadenaro

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Member of Academy of Dental Materials, Ex-director of Content and member of ADM Board. She is the author of several publications of dental materials in international scientific journals and speaker at national and international meetings.

1- Although thousands of papers proposing new strategies to improve dentin bonding have been published in the last decade (for example, modification of adhesive systems with MMP inhibitors and crosslinking agents), few or even none of these ideas have been absorbed by the manufacturers and transformed in available materials for the clinicians. What is your opinion about that?

Unfortunately not all compounds tested in laboratory conditions are suitable for clinical applications, because of their biocompatibility, formulation, application time or concentration required to be effective, but still they can provide important information about the adhesive layer and represent a step forward the development of new materials that can be commercialized. Producing a new material satisfying all the requirements to be marketed and used in clinical practice is a complex and long procedure that goes through several attempts and requires the cooperation of research and industry, because it's also a matter of money investments that are not always available to all researchers.

2- Besides a dental scientist you are also a dentist with an extensive clinical experience. Thus, what do you consider to be most important to increase the clinical longevity of restorative procedures: the use of innovative adhesive materials or well-trained dentists?

Both the material and the operative technique are important. More than innovative materials I think we should use materials that have been proved to be reliable and use them in the correct way, carefully following the instructions for use and all the clinical steps that are fundamental when working with resin materials, as rubber dam isolation.

3- To which direction should we go in looking for adhesive materials actually capable of increasing longevity of our restorative procedures?

The major problem of adhesive systems is that they often are too hydrophilic, so at the moment the use of materials characterized by the separate application of the hydrophobic bonding agent probably represents the best option to guarantee a long-term stability of the adhesive interface and thus of the whole restoration.

4- What can be improved on the dental adhesives to make them better?

Less degradable and more stable materials represent the main goal of current research on adhesive systems. Again, what we can do in clinical practice is to use good materials in the correct way, following the clinical steps necessary for their application, including an adequate polymerization to reach the best properties of the adhesive layer.

5 - Will we achieve a total inhibition of MMPs and Cathepsins in the future?

That's a good question! I'm positive that we will find a way to have more performing adhesive systems. Total inhibition of MMPs and Cathepsins might be one of the ways to obtain it.

INTERVIEWERS

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