There’s no dentistry like no dentistry

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The title sounds arrogant coming from a dentist by any means. What if it came from one of the premier dental schools in the United States or from two of the most noted caries researchers, University of Pacific’s Dr Doug Young or Dr Kim Kutsch? That’s the message from the World Congress of Minimally Invasive Dentistry (WCMID), and it doesn’t mean there’s no reason for dentists to be around. It means there’s just nothing like an intact tooth, and everything we do to repair it comes in at a distant second place.

For clinicians to understand the true meaning of the phrase, they have to really own a few things—such as germs are small, so small that a margin is not a margin, it’s a canyon. Finding out why enamel breakdown is occurring must come first; the time of watching and waiting before taking action is over. Remineralisation therapies have made it easier to digest the idea that any prosthesis is inferior to the natural tooth.

Novamin, Recaldent and xylitol are adjuncts to fluoride and allow clinicians to follow the science of fluoride workings. For instance, fluoride works best on the broad or smooth surfaces of the teeth, although a hefty majority of decay starts in the pits and fissures, and clinicians continually use fluoride as the only topical to lessen decay incidence.

No longer.

At the WCMID meeting last summer, a new paradigm was offered. Dental decay is not a bacterial disease, it is a pH disease. Bacteria will not survive in an alkaline environment, so it’s no wonder they’re only found in mouths with low pH—the chicken/egg dilemma. The chemical reaction that occurs in a low pH can be altered by forcing the pH upward. Remineralisation does this by releasing amorphous calcium and phosphates during an acid challenge.

Xylitol can increase pH when used as a sweetening agent in gum and candies, over and above the pH increase of chewing paraffin, as shown in a group session of a hands-on workshop. This does not include the damaging effects of xylitol on biofilm construction, cell walls and strep metabolism.

The science of Novamin also challenges clinicians to follow the science of xylitol. It is possible to marry the two so the toothbrush, the C of the floss and more fluoride.

Call a cavity a hole, call a filling a prosthesis and call on all of your education to help those who can be taught and take the burden off those who cannot. 

Editorial note: A list of references is available from the publisher.