

'Safety' of Formocresol Contested

I am responding to recent articles on the "safety" of formocresol in dentistry. Having started the debate in 1981, I have had the benefit of reviewing the literature as it has developed, without bias and with consistent regard for scientific principles and protocols. My concern is for your readership, well-meaning clinicians who might be confused by position papers that distort the overwhelming body of evidence that cite the genotoxicity, mutagenicity, carcinogenicity, and toxicity of formaldehyde.

It is ludicrous to suggest that because other medicaments and prescribed medications in dentistry might also have deleterious effects it is therefore "safe" to use formocresol. It is a "tad" unscientific to further tell dentists that it is OK to add formaldehyde to their patients' systems since its ingestion/inhalation is a

part of life. Repeating the nearly 100-year-old archaic notion of how to deliver a safe dose by squeezing a soaked cotton pellet is surprising in today's sophisticated technology-based world. Hand-picking studies that have aberrant or inconclusive results when weighed against the accepted evidence become self-serving while simultaneously destructive to clinicians seeking the best for their patients.

Much of the research about formaldehyde was firmly established as far back as 30 years ago. Alternative medicaments have been proposed for many years with mixed results. Equal or better clinical outcomes have been demonstrated with some non-aldehyde compounds; ferric sulfate, white mineral trioxide aggregate, white Portland cement and beta-tricalcium phosphate.

Systemic distribution after formocresol polpotomy is irrefutable. Formocresol

interferes with healing. As recently as March 2008, research has shown that formocresol causes genetic damage.

I urge dentists to rethink their use of formocresol. In 1981 (*Journal of the American Dental Association*) and again in 1998 (*Journal of Clinical Pediatric Dentistry*) I concluded, "If a medicament like formaldehyde is clearly not a necessary adjunct, then it may be wondered why it is used at all."

Children should not be exposed to formocresol since there isn't any conclusive evidence warranting its use.

BRADLEY B. LEWIS, DDS

Dr. Lewis is the former postdoctoral endodontic coordinator at St. Luke's-Roosevelt Hospital Center, New York, attending at Columbia University, School of Dental and Oral Surgery, and associate at Cedars-Sinai Medical Center, Los Angeles.