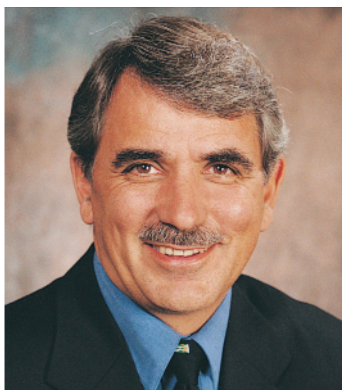
President's Column

THE CASE FOR FLUORIDE



Dr. John Diggens

Fluoride and dentistry have long been friends. As dentists, we know that fluoride works, because we've seen the results in our patients. The benefits have been quite clear. When we were in dental school, we learned that fluoride worked most effectively when taken systemically and incorporated into the developing dentition. Currently, the scientific evidence suggests that fluoride is most effective when applied topically. Regardless, it still works and we want our patients to get the protection from caries fluoride provides. As a parent, I want my children to have this protection.

Recently, the press has raised questions about overall exposure to fluoride. Fluoride is more readily available (from a variety of sources) than it used to be. There is evidence that dental fluorosis is on the rise among children. There are even indications that some adults may be getting more fluoride than they need for protection against dental caries. Research is underway to determine if overexposure in adults contributes to serious bone fragility. With the jury still out, we should take into account a patient's overall exposure to fluoride before prescribing more.

As a healing profession, we naturally want to support the best course of action for our patients. We want to practise evidence-based dentistry. We rely on scientists and researchers to develop (and to continually update) the scientific foundations of our clinical practice. We need to be aware of the results of reviews of the scientific literature. We need to consider, and to reflect in our practice, available guidance from dental regulatory authorities and from government agencies such as Health Canada. It's not an easy task.

CDA has recognized an obligation to help find some answers. In 1992, following the national workshop on fluorides in dentistry, the value of water fluoridation and of fluoridated dentifrices was reconfirmed. However, CDA's Guidelines on Fluoride Supplementation were amended to reflect evidence suggesting that systemic administration was less important than topical. A footnote was added to the guidelines making it clear that clinicians could still prescribe supplementation in high-risk cases. Our policy changed from "supplementation for those aged 0 to six" to "supplementation only for those at risk, and at reduced levels."

As a result of this change, CDA encountered some strong criticism. Clinicians working in high-risk areas were seriously concerned and noted that supplementation could still be necessary for patients under the age of three. They wanted a stronger endorsement. The guidelines of the American Dental Association still included a recommendation for fluoride supplementation for children under three. Canadian organizations representing pediatric dentists and physicians expressed their concern about the existence of "two sets of guidelines."

In 1997, another national workshop on fluoride supplementation produced an agreement on recommendations that would restore "under three" supplementation when a patient was at special risk. However, the conference emphasized that the level of evidence supporting supplementation for this age group was lower than that supporting supplementation in the three to six age group. Generally speaking, the lower the level of evidence supporting a procedure, the greater the need for professional justification.

You should also be aware that current Health Canada *Guidelines On Preventive Dental Care/Fluorides*, published by the Medical Services Branch, do not recommend any supplementation for children aged 0 to six. While dentists and physicians may continue to prescribe supplementation (provided it continues to be supported by their professional regulatory authority), once again it is clear that solid professional justification is required.

Major reviews of the related literature have been conducted in Australia and the United States. A special review commissioned by Health Canada emphasizes the need for further evidence-based research on fluoride supplementation. The results of these detailed reviews are generally positive. CDA's own study of the reviews suggests that the use of fluoride is still important and scientifically justifiable, under specified conditions, in both dentistry and public health. CDA is looking at revising its current guidelines to ensure they remain consistent with developments.

In the midst of this debate, our patients may have questions and we need a convenient resource to be able to provide accurate and balanced responses. CDA has developed an information bulletin and patient information sheet which summarize the issue and provide guidance from a number of current sources. The resource material was sent to CDA members in November by means of a president's letter.

I would appreciate hearing from you about the value of these resource materials and how they help you maintain an ongoing dialogue with your patients. You can send me your comments or feedback directly at **president@cda-adc.ca**.

John Diggens, B.Sc., DMD, MSD

President of the Canadian Dental Association