More Interest in Fresh Breath than Oral Health

Despite scientific evidence to prevent both caries and periodontal disease, the incidence remains high. According to the American Academy of Periodontology, 47 percent of Americans have some form of periodontal disease. Dental hygienists focus on the importance of oral health as they provide regular oral hygiene instructions. In spite of repeated instructions, the incidence of periodontal disease, even in clinical practice, remains high.

Repackaging of the oral hygiene message was undertaken by an RDH to determine if using an emotional hook was more effective than focusing on science and logic. Patients are not generally motivated to prevent periodontal disease, but they spend over $3 billion dollars on mouth rinse each year. The majority of patients do not floss or clean between their teeth on a daily basis.

For this study, 60 patients participated. When asked if they wanted information to prevent periodontal disease to have fresh breath, 78 percent chose fresh breath over oral health. When information was presented about cleaning between the teeth, with a variety of interdental tools, patients were receptive when it was linked to having fresher breath. Surprisingly, patients had little understanding of the oral or systemic link and did not understand the role bacteria play in the mouth.

Switching from the scientific educational approach about periodontal disease, bleeding gums and tooth loss to providing patients with ways to keep their breath clean all day resulted in better compliance with daily interdental cleaning. The end result was the same: good oral health; but the motivation was fresh breath, not oral health.

Clinical Implications: Linking interdental cleaning with fresh breath leads to better patient compliance with daily oral hygiene.


Cochrane Review of Triclosan/Copolymer Toothpaste: Colgate Total

The Cochrane Collaboration reviewed 30 research studies to determine the long-term benefits of Colgate Total toothpaste compared to a standard fluoride toothpaste. Only randomized, controlled trials were included in the review. A total of 14,835 subjects were included in the 30 published research papers reviewed for this report.

Plaque measurements were compared in most studies after six months. Colgate Total, the only triclosan/copolymer toothpaste tested, showed a 0.5 reduction in plaque using a plaque score of zero to five. This was determined to represent a 22 percent reduction in plaque compared to the fluoride toothpaste group. After six to nine months, gingivitis scores were reduced by 0.3 in the Total group for scores of zero to three. This also represented a 22 percent reduction compared to the fluoride toothpaste group.

Regarding periodontitis, no difference was seen between the Colgate Total toothpaste and the fluoride toothpaste for attachment loss figures after three years of use. For caries incidence, there was a slight reduction in the Colgate Total group, with five percent fewer decayed, missing and filled surfaces (DMFS) after 24 to 36 months.

Adverse effects were not specifically evaluated, but 22 of the 30 studies reported no adverse effects caused by either toothpaste.

The clinical relevance of these findings was not determined for this review paper.

Clinical Implications: Colgate Total toothpaste containing triclosan, a copolymer and fluoride appears to be safe and effective.

Fluoride Varnish Reduces Dentinal Hypersensitivity

The incidence of dentinal hypersensitivity varies between eight to 35 percent, depending on the study. Many products are available to treat sensitivity, but there is no gold-standard product that works for all patients. Approaches being used today include: dentin bonding agents, pro-argin technology, amorphous calcium phosphate (ACP), tricalcium phosphate (TCP) and lasers.

Fluoride varnish is used for caries prevention, but it was first introduced and accepted by the FDA as a product to reduce sensitivity. In this small action research project, four patients, ages 28 to 71 years of age, with dentinal hypersensitivity were treated with 5% sodium fluoride varnish. The varnish was applied at the end of the dental hygiene visit. Subjects were tested weekly for sensitivity to touch, air, cold and tooth brushing at baseline for four weeks. All of the test subjects experienced relief to some degree. Some of the subjects experienced more relief than others.

To address the issue of incomplete reversal of the sensitivity, another product was introduced, a polishing paste using pro-argin technology. This was applied with a rubber cup at slow speed for three seconds on the affected area. This was done at the start of the dental hygiene visit, leading to a comfortable appointment for both patient and hygienist. This application resulted in immediate blocking of the dentinal tubules and therefore immediate relief from sensitivity. The combination of these two approaches to dentinal hypersensitivity may provide more long term sensitivity relief.

Clinical Implications: Both fluoride varnish and pro-argin polishing paste relieve dentinal hypersensitivity. ■


Oral Health Behaviors for Nine-Year-Olds

Elementary schools are the ideal place to implement oral health instructions that will impact the future habit of the children. Parents, especially mothers, play a crucial role in establishing oral health habits for their children.

This three month study included 338 children, all 9 year olds. Two test groups and one control group were formed. Students were enrolled from 12 elementary schools in Iran, including six schools for girls and six schools for boys. Baseline examination included a clinical exam and questions of the children about who influenced their oral hygiene practices and about their last dental visit.

The two intervention groups included a classwork group and a parent guided group. The control group received no intervention. The classwork group used puzzles to convey oral health messages about daily toothbrushing and use of fluoride toothpaste. The parents were given a pamphlet about daily toothbrushing and the use of fluoride toothpaste. They were also encouraged to limit sugary snacks and to model good behavior to their children.

Nearly 90 percent of children reported that their parents were their main source of oral health information. Two-thirds, or 68 percent, reported visiting the dentist within the past year. Girls more often than boys visited the dentist.

At baseline, all the boys expect two had bleeding gums. After three months, 60 percent of those in the two intervention groups and 32 percent of controls had improved gingival health (Hawthorne Effect).

Clinical Implications: Improvement in oral health results from an oral health message presented by either the health counselor or the parent. ■