

# Editorial

## Home bleaching — is there scientific support?

So-called home bleaching has become an extremely popular treatment for patients desiring esthetic whitening of their anterior teeth. The technique has been increasingly promoted to the profession by several manufacturers, and, most recently, it has been heavily promoted directly to the general public by a manufacturer of one particular bleaching material.

The treatment generally involves the use of a nightguard into which the bleaching agent is placed, as first reported in *Quintessence International* by Haywood and Heymann.<sup>1</sup> The nightguard is worn for various periods, and is sometimes used in conjunction with a special toothpaste, depending on the manufacturer's instructions.

There is a big step from a pilot study, such as that by Haywood and Heymann, to going to market with a product. In the case of bleaching agents, there is justifiable concern over whether all the necessary precautionary steps have been taken.

Surely, then, much of the heavy promotion around such agents is premature. Promotion to the profession has been hard sell and, in some instances, unethical by pandering to greed rather than promoting patient benefits.

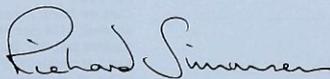
Promotion to the public has put a not-so-subtle form of pressure on dentists to purchase the product in question in order to get on the referral list of the manufacturer. The scenario is this — the patient sees an advertisement in a national popular lay magazine; the patient calls the manufacturer's free telephone number; the patient is referred to a dentist in his or her area who uses the manufacturer's material, ie, a dentist who has purchased the manufacturer's bleaching product. Is this a service to the profession and the public, or simply a service to enrich the manufacturer at the expense of the profession and the public?

What is clear is that with each use of this home bleaching technique, the patient will ingest a considerable amount of the bleaching agent. But how many of the patients being treated with the technique are aware that the materials being used intraorally have not undergone biologic testing, with subsequent scientific publication in refereed journals, for the effects of ingestion?

There is no doubt that the technique of bleaching teeth with carbamide peroxide, or some of the other chemical blends available, works. However, everyone using the technique, or prescribing its use, should have clear and convincing evidence that no harm will come to those using the bleaching materials. Harming patients for an elective treatment would be the ultimate folly.

Who, then, is concerned with the patient, and who is concerned with pure financial gain from premature marketing campaigns? We can only hope that the manufacturers of such bleaching agents have completed the necessary biologic experiments to determine that these agents are completely harmless when ingested in the amounts possible in the case of an overenthusiastic patient. It would be a severe blow to the credibility of the profession if the actions of a few aggressive manufacturers, whose ultimate goal, after all, is financial gain, would lead practitioners in a headlong plunge into a technique that proves to be harmful to patients.

At the present time, it would appear that scientific support for the technique of home bleaching is inadequate to justify treatment without a thorough explanation of the risks by the use of a patient informed consent form. It is simply unacceptable to put patients at risk without full disclosure that the potential long-term risks associated with this nonresidential treatment are presently unknown.



Richard J. Simonsen  
Editor-in-Chief

1. Haywood VB, Heymann HO: Nightguard vital bleaching. *Quintessence Int* 1989;20:173-176.