

TRENDS IN TOOTH BLEACHING TECHNOLOGIES

While many dental offices reported rising interest in tooth whitening well before the onset of COVID-19, the pandemic may be driving additional demand — and in unexpected ways. Lending unique perspective is bleaching expert Van B. Haywood, DMD, a professor at the Dental College of Georgia at Augusta University who coauthored the first paper on nightguard vital bleaching more than 30 years ago. Haywood, who has more than 145 publications on bleaching technique and esthetics, notes that while whitening was not expected to be as popular during mask-wearing times, an additional facet of pandemic life may explain renewed interest.

“Some dentists have reported an increase in whitening and esthetic treatment requests from patients working from home who see their Zoom smile as not being what they want,” he says. “The resulting ‘smile awareness’ may be fueling new demand for esthetic care.”

Considering that tooth whitening services are a staple in most offices, Haywood points to a wide variance in practice, as some clinicians offer a variety of treatments, while others provide only one approach. Patients can also choose from numerous over-the-counter (OTC) therapies, as well as a combination of in-office care and take-home bleaching technologies.

“The OTC market seems to be growing, with more and varied claims for simple, easy options — although there’s little proof they work,” he says. Haywood also makes a distinction in clinical terminology, preferring “bleaching” for systems that change the color of the tooth, and “whitening” for products (such as toothpastes and rinses) that remove surface stains, but do not change the tooth’s intrinsic color.

Asserting the “downside of OTC bleaching is greater than the upside,” he raises clinical concerns over pathology and esthetics. “If an OTC product works to change the color of the tooth without an oral examination, the patient may mask pathology — such as an abscessed tooth, internal resorption or caries — that could allow the condition to worsen. The esthetic concern is that if the individual has restorative work, such as composite bonding or crowns that will not change color, the patient may wind up with mismatched teeth.”

The greatest service the clinician offers, he says, is a proper exam and diagnosis of the cause of discoloration, followed by recommendation of the best treatment for the patient’s specific situation and goals.

Commenting on professional, tray-based therapies, Haywood notes there have been recent improvements in trays, fabrication techniques, and the formulation and viscosity of bleaching materials. When assessing outcomes, he advises patients and practitioners to wait at least two weeks after treatment to determine the final bleached shade. This allows the oxygen



introduced during bleaching to dissipate, which would otherwise make the tooth appear lighter due to the lingering effects of dehydration and also reduce the bond strength of composite restorations.

“All forms of bleaching based on acceptable agents and techniques will yield similar outcomes, as the final color is dependent on the tooth, not the product,” he observes. In addition, whitening toothpastes may prove helpful in maintaining the lightened shade following professional treatment.

Ultimately, the most important consideration in bleaching is not the technique used. Rather, Haywood suggests it’s the dentist’s thorough examination and diagnosis of the cause of discoloration and recommendation for treatment that best fits the clinical situation. Patients should be presented with both cost/benefit and risk/benefit analyses of the various therapeutic options so they can select the best solution for their lifestyle, desires and finances. **D**

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