FDI POLICY STATEMENT

Dental Bleaching Materials

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INTRODUCTION

For the purpose of this statement, dental bleaching materials are peroxide-containing materials which are intended to remove intrinsic and/or extrinsic tooth discolourations. Professional in-office tooth bleaching products have been used in dentistry for more than a century. In contrast, at-home tooth bleaching products intended for patient use under limited professional supervision were introduced in 1989. There are two types of professional bleaching systems currently available for treating natural teeth: 1) in-office bleaches prescribed by dentists; 2) products that are issued to patients for in-home use under the dentists' supervision. Currently, the most commonly used professional formulations are gel preparations of hydrogen peroxide or carbamide (urea) peroxide.

In recent years a variety of over-the-counter (OTC) products, formulations and delivery systems have been introduced to the profession and general public. There is ongoing controversy and confusion as to whether bleaching products should be regulated as cosmetic or therapeutic devices, or if dental bleaches should be sold over-the-counter or used without direct professional supervision.

STATEMENT

FDI supports the appropriate use of dentist-prescribed and supervised tooth bleaching procedures. Dentists must complete a comprehensive examination to assess the patient's oral health conditions, treatment needs and desires prior to initiating any tooth-bleaching treatment. Peer reviewed studies indicate that peroxide-containing tooth bleaching products are safe and effective when used under the supervision of a dentist and according to the professional directions for use. This technique is the practice of dentistry and should not be performed by those who are not dental professionals. On the grounds of public safety, the over-the-counter sales of these products is not supported.

Dentists and patients should consider the following:

- products vary in formulation, concentration, dosage and the method of treatment
- to maximize benefits and minimize risks, individuals should seek professional guidance to determine if bleaching is suitable for their specific condition(s)
- the most common side-effects from tooth bleaching are transient tooth sensitivity

and soft tissue irritation during or immediately following treatment
- high concentration hydrogen peroxide products should not be used without gingival protection
- for nightguard home vital bleaching, the use of minimal amounts of low-dose hydrogen/carbamide peroxide is preferred, which is facilitated by the use of custom made trays which reduce both the amount used and swallowed
- activation of bleaching agents by heat, light or laser remains controversial and dentists should continue to review the evidence base for these procedures, as they may have an adverse effect on pulpal tissue
- the long-term effects from higher concentrations (>6% H_2O_2 or equivalent) of bleaching agents on the dental pulp, dentine, enamel and oral soft tissues are not fully understood – they have the potential to cause harm and should be used with caution only in the dental surgery.

KEYWORDS

Aesthetics, bleaching, dental materials

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