Non-vital bleaching

PART 1: an audit of practice in the Belfast and Cork restorative departments prior to the release of the 2012 European Cosmetic Directive

PART 2: an audit on the perceived clinical impact of the 2012 European Cosmetic Directive in the Belfast and Cork restorative departments

Précis: An audit of clinical practice in the Belfast and Cork restorative departments before the release of the 2012 European Cosmetic Directive. The findings led to the introduction of a clinical protocol and pro forma to the restorative departments to improve compliance with the gold standard. These could be used in any dental setting. An audit on the perceived clinical impact this Directive has had since its release found that the greatest perceivable impact was the inability to treat patients under 18 years of age.

Abstract: Intrinsic discolouration of teeth often requires bleaching to improve the aesthetics. There are three techniques available for non-vital bleaching: chairside; walking; and, inside/outside. Before the 2012 Cosmetic Directive was released, an audit of non-vital bleaching practice in the Belfast and Cork restorative departments was undertaken (Part 1). Results showed a variation in clinical procedures from the gold standard and therefore the latter was used to develop a clinical protocol and pro forma for use in the restorative departments. These were designed to be useful in the hospital and general dental practice settings, and should hopefully increase compliance with the gold standard and therefore improve both the consent process and record keeping.

With the change in the European Cosmetic Directive Guidelines on October 31, 2012, dentists were confined to using a maximum of 6% hydrogen peroxide in tooth bleaching products provided the first application was by a dentist or under their direct supervision. A high proportion of audit responses in Part 1 involved concentrations of hydrogen peroxide, in both the walking and chairside techniques, that no longer complied with the new Directive. This suggested that the new Cosmetic Directive could significantly impact the practice of non-vital bleaching in the Belfast and Cork restorative departments. This in turn prompted an evaluation on the perceived clinical impact of the European Cosmetic Directive since its release in 2012 (Part 2). Surprisingly, clinicians found similar clinical outcomes following the restriction in the concentration of bleach, although 50% felt that more treatment visits were required to achieve an acceptable result. Moreover, the results of the audit revealed that clinicians were most concerned that the introduction of a ban on treating patients under 18 years of age might exacerbate psychological issues in this vulnerable age group if discoloured teeth were left untreated.
Early orthognathic surgery in response to bullying due to malocclusion

Abstract: Unfavourable dental and facial features can have a psychological impact on patients. Orthodontic treatment can have a positive impact on the psychosocial well-being of patients who are bullied about dentofacial features. The use of orthognathic surgery in growing patients to correct dentofacial deformity is a controversial topic. This case report describes the treatment performed for a 13-year-old girl who presented complaining of a “different bite and prominent chin”, which was attracting insults at school. Insults regarding her teeth and jaw caused symptoms such as anxiety and stomach pains prior to school in the morning. As a result of the negative psychological effects of the serious bullying, it was decided to proceed with early orthognathic surgery for psychological reasons. As orthognathic surgery is usually timed in the late teens or early twenties when growth is near completion, the risks of further growth and relapse were discussed at length with the patient and her parents, especially when informed consent was being obtained. Treatment included orthodontic alignment of the arches, early orthognathic bimaxillary surgery and post-surgical orthodontics to detail the occlusion. There was a dramatic improvement in the patient’s self-esteem, with return to school and extra school activities only weeks after the surgery. This case demonstrates that early intervention may be appropriate for some orthognathic patients in exceptional circumstances. The patient and her parents were very happy with the outcome but post-treatment growth was unfavourable as expected.