An audit of orthodontic referrals using IOTN as a comparison

Abstract: It is important that resources for orthodontic treatment within the Health Service Executive (HSE) are directed towards those children most in need of treatment. At present, children are referred using existing HSE guidelines.
Objectives: To assess the level of treatment need in a sample of patients on the orthodontic waiting list in the North Eastern division of the HSE using the Index of Orthodontic Treatment Need (IOTN) as an objective comparison. Also, to compare these results with the findings of a similar audit in 2003 and to assess the effectiveness of recommendations from the 2003 audit.
Method: Fifty models from each of two orthodontic units were selected. These were scored for the dental health component (DHC) and aesthetic component (AC) of IOTN by a calibrated examiner.
Results: In the 2005 audit, 100% of patients fell into DHC grades 4 or 5. These grades constitute a great need for treatment on dental health grounds. In the 2003 audit, 97% of patients fell into these two grades. The remaining 3% of children in 2003 were fostered and therefore entitled to orthodontic treatment under HSE guidelines. An average of 63.5% of patients fell into AC grades 8-10, i.e., deemed to be in great need of treatment on aesthetic grounds.
Conclusion: The HSE screening guidelines identify patients in great need of orthodontic treatment using IOTN as an objective assessment of this need. The sensitivity of these guidelines requires assessment by measuring the level of unmet treatment need in 15-year-olds in the region. Recommendations arising from the 2003 audit relating to the filling of referral forms and the improvement of study model quality were found to have been effective.

Journal of the Irish Dental Association Volume 53: 29 - 31, 2007

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First permanent molars with molar incisor hypomineralisation

Precis: Optimal treatment for first permanent molars with MIH should be established on a case-dependent basis, and will often require a combination of preventive and interceptive treatments.

Abstract: Molar incisor hypomineralisation (MIH) is a common enamel defect presenting in the first permanent molars (FPM) and permanent incisors. This article presents the clinical findings and management considerations for the FPM with MIH to the general practitioner. The various treatment options are described with emphasis placed on early diagnosis as the most important prognostic factor.

Journal of the Irish Dental Association Volume 53: 32 - 37, 2007

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Single unit CAD/CAM restorations: a literature review

Precis: This article reviews the literature relating to computer-aided design and manufacture for single unit restorations.

Abstract: Computer-aided design/computer-aided manufacture (CAD/CAM) has been used in dentistry since 1987. Since then, many CAD/CAM systems have been described, which enable the production of chair-side single unit dental restorations. These restorations are of comparable quality to those made by conventional techniques and have some specific advantages, including rapid production, improved wear properties, decreased laboratory fee and improved cross infection control. This literature review investigates the evidence base for the use of single unit CAD/CAM restorations. Materials, marginal gap, aesthetics, post-operative sensitivity, cementation, cost-effectiveness and longevity are discussed.

Journal of the Irish Dental Association Volume 53: 38 - 45, 2007

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