

An audit of the caries status of patients about to start orthodontic treatment

Précis

An audit of the caries status of patients taken off an orthodontic treatment waiting list demonstrated that 42% required restorative intervention before orthodontic treatment.

Abstract

Statement of the problem: All dental caries needs must be addressed before orthodontic treatment in those deemed eligible for orthodontic treatment under HSE (Health Services Executive) guidelines.¹

Purpose of the study: To evaluate the prevalence of carious lesions in permanent teeth requiring restoration in patients from the North Cork area of HSE South taken off the Cork University Dental School and Hospital postgraduate orthodontic treatment waiting list.

Materials and methods: A data collection form was designed and applied to 100 consecutive patients taken off the postgraduate orthodontic treatment waiting list from October 2009. A gold standard based on a similar audit carried out in the UK² was adopted.

Results: Carious lesions in permanent teeth requiring restorative intervention were found in 42% of patients (48.9% of males and 35.3% of females). Sixty carious lesions requiring restorations were detected on posterior bitewings and 34 on DPTs, in patients where both forms of radiograph were used. Caries were detected in one-third of the 6% of patients who had attended a primary care dentist in the previous six months.

Conclusions: A total of 42% of this patient cohort failed the adopted gold standard by exhibiting caries requiring restoration in permanent teeth, with males showing a higher prevalence. A total of 43% of carious lesions detected by posterior bitewing radiographs were not detected on DPTs of the same patients. Six patients had attended a primary care dentist in the six months before being taken off the orthodontic treatment waiting list and two patients were diagnosed with carious lesions that required restoration.

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