

Application of the Donabedian model of evaluation to assess an organisational development project to introduce a nitrous oxide inhalation sedation service in a community dental setting

Statement of the problem: Dental anxiety is a barrier to dental treatment. HSE Primary Dental Services in Cavan/Monaghan had limited options for treating anxious children.

Purpose of the study: Evaluation of an organisational development project to introduce a nitrous oxide inhalation sedation service for the provision of dental treatment to children with dental anxiety in a community dental setting, HSE Cavan/Monaghan.

Methods: This organisational development project was guided by the Health Service Executive Change Model, which focuses on the service user and stakeholder engagement. The project was implemented to enhance the treatment options available for anxious paediatric patients. Nitrous oxide sedation is the gold standard for treating anxious dental paediatric patients versus general anaesthesia; it facilitates the provision of dental treatment in a calm and relaxing environment, reducing anxiety or eliminating it altogether. The evaluation of this organisational development change project was investigated by applying the Donabedian model of evaluation.

Conclusion: The aim of this project was achieved; a new clinical service to provide dental treatment to anxious children using nitrous oxide inhalation sedation was introduced. This organisational development was assessed by the Donabedian model of evaluation. This quality improvement project illustrated how quality structures and processes of healthcare services can lead to positive outcomes, improving patient safety and resource use within a community dental setting.

Journal of the Irish Dental Association December 2018/January 2019; 64 (6): 318-323.



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Langerhans cell histiocytosis presenting as mandibular pain

Précis

Case report: first presentation of Langerhans cell histiocytosis with mandibular pain. Discussion of oral presentation, diagnostic issues and importance of prompt referral.

Abstract

Introduction: Langerhans cell histiocytosis (LCH) is a collection of three idiopathic disorders categorised by the proliferation of specialised Langerhans cells (immature dendritic cells) and mature eosinophils.

Case report: In this paper, we demonstrate a case of a 22-year-old male patient with a complaint of persistent pain in the mandible.

Discussion: The purpose of this paper is to present a brief summary of the existing diagnostic and treatment strategies for LCH relevant to the oral and maxillofacial region, and to analyse the differential diagnosis and evaluation of these patients.

Conclusion: This case is an important reminder of the potential clinical and radiographical presentation of LCH with oral involvement, and highlights the role of the general dental practitioner in early diagnosis and prompt referral.

Journal of the Irish Dental Association December 2018/January 2019; 64 (6): 324-327.

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