

# The cyclooxygenase-2 inhibitor celecoxib and alveolar osteitis

## Abstract

**Purpose of the study:** The purpose of this study was to report our clinical experience, in a pilot study, of the use of the selective cyclooxygenase-2 (COX-2) inhibitor celecoxib, pre-emptively, to control pain in patients after surgical extraction of a mandibular molar tooth.

**Patient and methods:** This randomised, double-blind, placebo-controlled, prospective clinical trial was conducted over an eight-month period. Participants were randomly allocated to receive a standard oral dose of 200mg celecoxib, 400mg ibuprofen, or a placebo containing lactose, pre-emptively, one hour before surgery. Each patient was prescribed amoxicillin 500mg three times per day postoperatively for seven days. The participants were given standardised participant information sheets, and written informed consent was subsequently obtained from the participants prior to the commencement of the study.

**Results:** The results showed that 13% of the patients who had ibuprofen had severe pain two to three days postoperatively. This was diagnosed as alveolar osteitis, which is in line with the universally accepted outcome for the surgical extraction of mandibular molar teeth. Statistical analysis (Chi-square test) confirmed that the ibuprofen group had a significantly higher alveolar osteitis incidence than the celecoxib group ( $p \leq 0.05$ ) and the placebo group ( $p \leq 0.05$ ).

**Conclusion:** This is the first reported study to demonstrate that the use of celecoxib resulted in a significant decrease in the occurrence of alveolar osteitis.

**Key words:** Celecoxib, cyclooxygenase-2, COX-2 inhibitor, NSAIDs, ibuprofen, alveolar osteitis.

*Journal of the Irish Dental Association* 2011; 57 (1): 50-53.

Dr Jehad Al-Sukhun PhD MSc BDS<sup>1,2</sup>  
Dr Heikki Penttilä MD<sup>2</sup>

<sup>1</sup>Consultant Oral Surgeon  
Oral Surgery Department  
Euro-Oral Hammaslääkärikeskus  
Fredrikinkatu 41A, 9  
00330 Helsinki  
Finland  
Tel: 0035 8503071886  
Tel: 0035 89643246  
Email: Jalsukhun@hotmail.com

<sup>2</sup>Consultant Plastic Surgeon  
Head of Plastic Surgery Department  
Plastic Surgery Department  
Kotka Central Hospital  
Kotka General Hospital  
Kotka,  
Finland

Address for correspondence:  
Dr Jehad Al-Sukhun  
Apt 18  
The Willow  
Parkview  
Stepaside  
Dublin18  
Ireland

# An audit comparing the discrepancies between a verbal enquiry, a written history, and an electronic medical history questionnaire: a suggested medical history/social history form for clinical practice

**Précis** A comprehensive medical/social history is an essential part of proper patient management.

## Abstract

In everyday practice, dentists are confronted with an increasing number of patients with complex medical problems. There is divergence of opinion among dentists regarding how to obtain a thorough medical/social history.

**Purpose:** The objective of this audit is to produce a standardised medical history in order to identify the medically compromised patient attending the general dental practitioner. At present in the Dublin Dental School and Hospital, there are three different methods: a verbal enquiry, and a written or an electronic questionnaire. This study was undertaken to identify any differences or discrepancies between each of the three methods in eliciting the medical history, and to determine whether one method was superior to the others. The results are used to recommend the most accurate method for obtaining a thorough health history for practitioners, both in a hospital and a general practice setting.

**Method:** One hundred and fifty charts within the Dublin Dental School and Hospital of all new patients at a randomly chosen clinic were selected and then audited: 50 charts from the oral and maxillofacial surgery assessment clinics (written *pro forma* questionnaire), 50 from the oral medicine clinic (consultant verbal enquiry), and 50 from A&E (electronic questionnaire) were compared to determine if an adequate medical history was taken, and to detect differences and discrepancies in patients' medical histories. The records pertained to 91 females and 59 males. The age distribution was 5-87 years for females and 3-85 years for males. The mean age was 45 years for females and 42 years for males.

**Results:** The written patient-administered *pro forma* questionnaire, combined with verbal verification by the clinician/consultant, proved to be the most useful and consistent method for detecting medical problems in dental patients. The consultant verbal enquiry alone showed more inconsistency than the other two methods. Based on these results, a modified questionnaire for use within all departments in the Dental Hospital has been proposed. This may also be suitable for use by general dental practitioners in their practice setting.

**Conclusion:** It is incumbent on the clinician/dentist to evaluate each patient's general health prior to delivering treatment in order to avoid unnecessary and preventable complications. The use of written patient-administered *pro forma* questionnaires is beneficial but must be verified by the examining clinician/dentist and assessed at each new visit (6-12 monthly) to be contemporaneous.

Dr Barbara Carey BDS  
Clinical Attachment in Oral Medicine  
Dublin Dental School and Hospital  
Lincoln Place  
Dublin 2

Professor Leo Stassen FRCS(Ed)  
FDSRCS MA FTCD FSEM(UK) FFDRCSI  
Consultant Oral and Maxillofacial  
Surgeon  
Dublin Dental School and Hospital  
Lincoln Place  
Dublin 2

Email for correspondence:  
leo.stassen@dental.tcd.ie