

# A pain control study after dento-alveolar day surgery

*Pain control after routine dento-alveolar day surgery: a patient satisfaction survey* by A. Joshi, A. T. Snowdon, J. P. Rood, and H. V. Worthington *Br Dent J* 2000; 189: 439-442

## Objective

An audit study which examines patient's opinions on the efficiency of two analgesic regimes prescribed to them following dento-alveolar surgery in our Day Unit.

## Design

Single centre prospective study.

## Setting

Oral Surgery Day Case Unit

## Subjects

One-hundred-and-seventy-four adults undergoing routine dento-alveolar surgery under general anaesthetic were asked to assess their pain control (on a five point scale) 1 hour after surgery, at discharge from hospital and at 24 and 48 hours post-operatively. Post-operatively, patients received ibuprofen 400 mg three times daily for five days or two tablets of paracetamol 500 mg with codeine 30 mg six hourly for 5 days if they were allergic to aspirin or were asthmatics sensitive to aspirin. Patients were not given local anaesthesia intra or post-operatively.

## Results

Completed records were obtained for 161 (93%) patients. Ibuprofen was apparently adequate in controlling pain for 147 out of 161 patients but on further questioning 42 of these patients took supplemental analgesics and self-prescribed paracetamol or a paracetamol combination. Thirteen patients who were prescribed paracetamol with codeine had adequate pain control

and did not take supplemental analgesics. One patient did not require any analgesics post-operatively

## Conclusion

Telephone contact with patients 24 and 48 hours post-surgery provides a valuable assessment of pain control following discharge from a day surgery unit. Ibuprofen offered satisfactory control of pain for 65% (95) of patients who underwent routine dento-alveolar surgery. Discharge prescriptions must be given with verbal and written instructions to ensure that patients take the correct dose and self-prescription is within safe doses.

## In Brief

- Valuable information on pain control after a dento-alveolar surgical procedure can be obtained by contacting patients on the telephone following discharge from a day surgery unit.
- This study shows that analgesia is helpful after such procedures.
- Auditing patients' opinions on the efficiency of take-home drugs assists in improving the quality of care provided to them.
- This study highlights the importance of giving verbal and written instructions to patients in order to ensure that they take the correct dose and that self-prescription is within safe limits.

## Comment

This paper answers some pragmatic questions about appropriate analgesia for dentoalveolar surgery. There have been many prospective studies on pain relief for third molar surgery but the regimes and drugs chosen are mainly experimental.

In this study 147 patients were prescribed ibuprofen 400 mg TDS for 5 days and 13 patients were prescribed paracetamol 500 mg with codeine QDS for 5 days (if a contraindication to NSAIDs existed eg asthma) after dentoalveolar surgery under general anaesthesia (77.6% third molar surgery, 16% surgical extraction of other teeth and 4% apicectomy). Pain assessment was done via a 'McGill type' questionnaire with five variations of the degree of pain, answered by the patient at 1 hour after surgery, at discharge, at 24 hours and 48 hours (latter both by phone).

Of interest was that ibuprofen provided adequate relief (< 2 score) for 65% of patients and although 85% of patients reported adequate pain relief, 20% had taken supplemental analgesics including; paracetamol – 64%, Solphadeine – 10%, Tylex – 7%, Co-codamol – 7%, other parac-

etamol/codeine preparations – 3% and Voltarol suppositories – 1%. None of the paracetamol group took adjunctive analgesics. Pain relief with ibuprofen occurred in 83% of the patients at 24 hours and at 48 hours this had risen to 96%, compared with 100% for the paracetamol group.

Overall the paracetamol/codeine combination appeared to be a more effective analgesic than ibuprofen with a lower risk of the patient self prescribing analgesics, a practice highlighted in this study, thus avoiding the inherent dangers of drug toxicity and addiction. However 38% of these patients reported significant side effects (including drowsiness, nausea and vomiting), compared with 2% of patients taking ibuprofen (including indigestion and nausea). The side effects of codeine are generally underestimated and coincides with previous reports.<sup>1</sup> Indeed combination analgesics are not recommended as they have not been shown to be advantageous.<sup>2</sup>

The authors confirm that communication with the patient postoperatively by phone can provide reliable information about the patient's assessment of their pain

and to reinforce analgesic prescriptions and to give further advice on supplement analgesics if required.

As 94% of patients had significant low pain scores at 24 and 48 hours in this study one questions the policy of prescribing these drugs for 5 days, particularly in the current climate where cost effectiveness is continually assessed. As almost a third of the ibuprofen group had inadequate pain relief this must raise further questions about what is the optimum dosage, timing of administration and possibly route of administration for this type of surgery.

## Tara Renton

Senior Clinical Research Fellow, Department of Oral & Maxillofacial Surgery, GKT Dental Institute, King's College London

1. Lysell L, Anzen B. Pain control after third molar surgery — a comparative study of ibuprofen (Ibuprofen) and paracetamol/codeine combination (Citodon). *Sed Dent J* 1992; 164: 151-160.
2. *British National Formulary March 2000*: page 199.