THE ADEQUACY OF ANALGESIA FOR PROCEDURAL PAIN IN ADULTS

Patrick A. Ward* Martin M. John Ashwin A. Kalbag

ABSTRACT

Procedural pain is described as an unpleasant sensory and emotional experience associated with actual or potential tissue damage resulting from minor medical or surgical procedures [1]. Analgesia for procedural pain in adults is often overlooked given the limited research in this area and the absence of any guidelines for its management. This study aimed to identify the frequency of procedural pain in post-operative patients, evaluate patients’ procedural pain perception and awareness of analgesic options, and assess the analgesic provision for procedural pain. Questionnaires were distributed to post-operative surgical patients and their drug charts and analgesic regimens were reviewed. Overall, 90% of procedures were associated with pain (24% severe or unbearable), and of those experiencing procedural pain 53% were neither offered nor requested pain relief. This suggests that the significance of procedural pain is not being fully acknowledged and that procedural pain may be better managed by increasing patient awareness of analgesics available to them, and by increasing staff awareness of procedural pain and the importance of providing adequate analgesia. This study highlights the need for further research into adult procedural pain and the need for formal guidelines to improve its management.

INTRODUCTION

The vast majority of post-operative patients will undergo a minor medical or surgical procedure on the wards during their rehabilitation/recovery period. Given the size of the population affected and the frequency of these procedures, a significant area of clinical need clearly exists, but unfortunately the pain associated with these procedures is often poorly recognised and poorly managed. This appears to stem from several key misconceptions that prevail, including that procedural pain is transient in nature, does not require treatment and that it is of little clinical importance. In fact, procedural pain is associated with significant patient distress, and as the extensive literature on procedural pain in the paediatric population shows, poorly treated procedural pain can result in significant long term adverse outcomes, including

* Patrick A Ward Charing Cross Hospital, Imperial School of Anaesthesia, Fulham Palace Road, London, W6 8RF. - patrickward81@hotmail.com
anticipatory anxiety associated with subsequent procedures and even detrimental effects on the course of the disease [2]. The importance of the recognition and management of procedural pain therefore cannot be underestimated, and justifies further research in the adult population. There have been several evidence-based guidelines published for the management of procedural pain in paediatrics, but to date there are no UK-wide guidelines governing the recognition and management of procedural pain in the adult population, and such is the low level of awareness of this issue, local hospital or Trust guidelines rarely exist.

METHOD

The study was registered with and approved by our local institutional research and development department. Data was collected prospectively over a six month period, with pain questionnaires, entitled ‘A service evaluation of procedural pain’, being distributed to post-operative patients on vascular, orthopaedic, urological, general and neurosurgical wards, along with a covering letter explaining the purpose of the study. Patients scored their procedural pain as none, mild, moderate, severe or unbearable, and by reviewing patient drug charts it was determined if and when analgesia was offered or requested.

RESULTS

A total of 64 adult post-operative surgical patients (vascular, orthopaedic, urological, general and neurosurgical) completed the questionnaires (23 male, 41 female, mean age 66yrs) having undergone 82 post-operative procedures. These post-operative procedures included: Dressing change (40%), physiotherapy (34%), drain removal (15%) and other (11%). Unsurprisingly, 90% of procedures were associated with pain (24% with severe or unbearable, Figure 1) and of those patients that experienced procedural pain, 53 % were neither offered nor requested pain relief prior to the procedure (Figure 2). Furthermore, 59% of patients were not even aware that ‘as required’ analgesics were available to them.

DISCUSSION AND CONCLUSIONS

As expected, and in keeping with previous research [3], our findings demonstrate that the majority of post-operative procedures are associated with pain (90%), although worryingly a significant amount of the pain experienced was severe or unbearable in nature (24%). Obviously this is a worrying statistic given the distress associated with such undesirable and preventable negative experiences, and the potential for longer term consequences. The underlying problem seems to be the lack of awareness of both patients and staff members of the significance of procedural pain, with the majority of
patients who experienced pain not being offered and not requesting analgesia (53%). This finding suggests that staff education is crucial in minimising procedural pain. Indeed, these study findings have been distributed to the surgical wards involved as the preliminary part of an educational programme with a view to highlighting the importance of early identification of patients at risk of procedural pain, ensuring that adequate analgesia is prescribed and importantly offered to patients before, during and after procedures. Given that 59% of patients were not informed or aware that ‘as required’ analgesics were available, patient education is also essential to improve awareness of the analgesia available for these procedures. Despite the small sample size, it is clear that further work is required in this area and that the current recognition and management of procedural pain is wholly inadequate. Improved patient and staff education will improve local standards of care, but further multi-centred research is required in order that more formal adult procedure-specific guidelines can be introduced to improve standards more widely.

ACKNOWLEDGEMENTS

No conflict of interest declared.

Figure 1: Patient procedural pain experiences

Many patients experienced pain associated with the on-ward procedure they underwent, and importantly a large proportion of these patients perceived the pain to be severe or unbearable, which has significant implications on the
adequacy of pain recognition and assessment, and the appropriateness of the analgesia that is provided currently.

Figure 2: Current analgesic provision for patients undergoing procedures

![Chart showing analgesic practice in patients experiencing procedural pain]

Despite such a large proportion of patients experiencing pain associated with their procedure, this study found that many of the patients were not offered any analgesia, and also that many patients were not aware that analgesia was available to them on request.

REFERENCES

[1] The International Association for the Study of Pain Subcommittee on Taxonomy. Pain terms: a list with definitions and notes on usage. International Association for the study of Pain Subcommittee on Taxonomy 1979; 6(3):249-252