Perioperative pain management.

Pyati S, Gan TJ.

Abstract
The under-treatment of postoperative pain has been recognised to delay patient recovery and discharge from hospital. Despite recognition of the importance of effective pain control, up to 70% of patients still complain of moderate to severe pain postoperatively. The mechanistic approach to pain management, based on current understanding of the peripheral and central mechanisms involved in nociceptive transmission, provides newer options for clinicians to manage pain effectively. In this article we review the rationale for a multimodal approach with combinations of analgesics from different classes and different sites of analgesic administration. The pharmacological options of commonly used analgesics, such as opioids, NSAIDs, paracetamol, tramadol and other non-opioid analgesics, and their combinations is discussed. These analgesics have been shown to provide effective pain relief and their combinations demonstrate a reduction in opioid consumption. The basis for using non-opioid analgesic adjuvants is to reduce opioid consumption and consequently alleviate opioid-related adverse effects. We review the evidence on the opioid-sparing effect of ketamine, clonidine, gabapentin and other novel analgesics in perioperative pain management. Most available data support the addition of these adjuvants to routine analgesic techniques to reduce the need for opioids and improve quality of analgesia by their synergistic effect. Local anaesthetic infiltration, epidural and other regional techniques are also used successfully to enhance perioperative analgesia after a variety of surgical procedures. The use of continuous perineural techniques that offer prolonged analgesia with local anaesthetic infusion has been extended to the care of patients beyond hospital discharge. The use of nonpharmacological options such as acupuncture, relaxation, music therapy, hypnosis and transcutaneous nerve stimulation as adjuvants to conventional analgesia should be considered and incorporated to achieve an effective and successful perioperative pain management regimen.

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