

"The Relief of Pain should be a Human Right" was the slogan of the 'Global Year against Pain 2004-2005 Campaign' organised by the International Association for the Study of Pain. Near the turn of the last Century, management of pain after surgery was revolutionised by advances in the field of anaesthesiology, particularly for techniques such as epidural analgesia, and the availability of the patient-controlled analgesia devices.

Before the era of patient-controlled analgesia, postoperative pain management was largely dependent on intermittent intramuscular injection of opioids. Quality of pain relief was often unsatisfactory, due to the fixed intervals of drug administration and the delays associated with checking the administration of opioids. The availability of programmable infusion pumps allowed the patients to titrate the analgesics according to their own needs.<sup>12</sup> The advent of epidural analgesia has further improved the quality of pain management after surgery, as patients could be rendered pain-free even after major surgery. It was especially helpful after upper abdominal surgery and thoracic surgery, where postoperative pain interfered with respiratory function and resulted in respiratory morbidity.<sup>3,4</sup>

In the past two decades, enthusiasm among anaesthesiologists in major hospitals all over the world has led to the establishment of acute pain services to provide pain relief to patients in the postoperative period. The scale of the service varies from institute to institute depending on a number of factors.<sup>5,6</sup> Patients given epidural analgesia or patient-controlled analgesia with opioids require more intensive monitoring for potential complications, including respiratory depression (from opioids) and neurological complications (from neuraxial blockade).<sup>7</sup> The service usually started off as postoperative visits by the anaesthesiologists, which involved sacrificing their own time (between and after busy anaesthetic lists). The increasing demand for the service as reflected by patient satisfaction due to much better quality of analgesia and more referrals from the surgical colleagues led to the deployment of anaesthesiologists dedicated to such a service. Some institutes also employ dedicated pain nurses to help the anaesthesiologists administer drugs and troubleshoot equipment.

This model of the 'anaesthesiologist-led' acute pain service has a number of limitations. First, only a limited proportion of patients undergoing surgery can benefit from the service. It is logical that patients

undergoing major surgery require more sophisticated pain relief modalities (epidural analgesia and patient-controlled analgesia) and are the primary recipients. The remainder are subjected to conventional, less efficacious modes of analgesia, namely intramuscular and oral opioids. Thus, for the majority of patients, surgery pain control still remains not as satisfactory. Second, the duration of service that can be provided to the selected patients is also limited, usually to the first few days after surgery. When the patients can tolerate oral diet, they are discharged from the service and cared for by conventional means like the majority of patients having surgery.

Despite high patient satisfaction and reduced respiratory morbidity associated with the excellent analgesia, the acute pain service does not consistently improve other postoperative outcomes, such as facilitation of recovery and reduction of hospital stay. Apparently, postoperative rehabilitation, which is important for recovery of patients, does not benefit from the limited duration of acute pain service.<sup>8</sup> Thus, in recent years, interest has been aroused in chronic pain after surgery. Studies have shown that chronic post-surgery pain occurs in up to 50% of patients.<sup>9</sup> Characteristically, it ensues after several relatively common minor surgical procedures (inguinal hernia repair, breast surgery, and laparoscopic procedures), in patients who are often excluded from the acute pain service. This type of chronic post-surgical pain has features of neuropathic pain. While it may be explained by trauma to peripheral nerves during surgical dissection, in most reported instances no obvious nerve trauma was found. A process of sensitisation of the nervous system by prolonged painful stimuli during the postoperative period has been proposed as a possible explanation.<sup>10</sup>

To fully utilise the advantage of good analgesia as a means of facilitating recovery after surgery, the acute pain service has to be extended into the rehabilitation phase. To prevent the development of chronic post-surgical pain, the acute pain service has to be extended to cover all patients having surgery. Obviously, such volume of service cannot be provided by the 'anaesthesiologist-led' service, as the costs cannot be justified. In some European countries, a 'nurse-led' acute pain service has been advocated. In recent years there has been a growing interest in the development of pain management as a nursing specialty and 'pain as the fifth vital sign' has been advocated for the assessment of all patients.<sup>11</sup> With more nurses willing to participate in the management

of postoperative pain, anaesthesiologists can step back and assume a supervisory role. In collaboration with the surgeons, postoperative pain management and rehabilitation protocols should be established to facilitate recovery after specific surgical procedures.

Acute pain services should not be confined to the provision of epidural analgesia and patient-controlled postoperative analgesia. Multimodal analgesia targeted at the prevention of chronic post-surgical pain should be advocated.<sup>12</sup> The advent of ultrasound-guided nerve blockade techniques has allowed accurate and safe provision of regional anaesthesia for patients undergoing almost all types of surgery including the minor operations.<sup>13</sup> Surgeons should also participate in pain management by wound infiltration with local anaesthetics.

Acute pain services have been set up in major hospitals in Hong Kong since the early 1990s, soon after their establishment in most developed countries. At present, they remain 'anaesthesiologist-led' and have the attendant limitations and problems already discussed.<sup>14</sup>

In the current issue of this journal, the article by Chan et al<sup>15</sup> on the "Surgeons' attitudes and perception of an acute pain service" represents a move to re-evaluate and plan ahead for necessary changes and improvements. That surgeons are interested in acute pain management is encouraging. Disagreements on the efficacy of acute pain services in facilitating postoperative rehabilitation and patient recovery should be viewed with caution. Collaboration is needed to iron out discrepancies, so that both parties can join hand in hand to pursue an ideal acute pain service for the benefit of patients.

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