"Slapping the patient on the face and saying: 'It's all over' is a complete inversion of the truth. As far as the patient is concerned, it is just the beginning." [1].

More than 150,000 patients a year undergo major abdominal surgery in England and Wales [2]. A few receive effective postoperative analgesia, but there is general agreement among doctors who have taken an interest in postoperative analgesia [3–5] and patients who have undergone major surgery [6–8] that the majority do not.

The first five papers in this issue provide a neurophysiological and clinical basis for the management of postoperative pain. Dr Woolf reminds us that physiological pain—Sherrington’s classical noxious stimulus—does not cause tissue damage or an inflammatory response. In contrast, the pathological pain which follows major surgery not only activates the high threshold A delta and C nerve fibres at the site of injury, but also decreases the pain threshold in surrounding, uninjured tissue. In the dorsal horn, a pathological pain stimulus can sensitize and recruit cells which would not respond to a physiological stimulus at the same site, and the resulting central excitability greatly affects the way in which peripheral input is handled by the higher centres. Dr Woolf concludes with two clinically important messages. First, any attempt to obtain total analgesia, which blocks physiological as well as pathological pain, is inappropriate—"the treatment of pain should not simply be the application of techniques that suppress sensation". Analgesia must be more specific than that. For example, local and regional techniques can be very effective in modifying peripheral input, whereas afferent-induced excitability in the dorsal horn is best treated with opioids. Second, prevention is better than relief—"...the dose of morphine required to prevent C fibre induced excitability changes from occurring in the spinal cord is an order of magnitude lower than that required to suppress these changes once they occur". Both these conclusions are supported by clinical experience. McQuay and colleagues [9] showed that opioid premedication, local anaesthetic block and a combination of both increased progressively the time interval from the end of surgery to the first request for analgesia in patients undergoing orthopaedic operations. Morgan, later in this issue, points out that extradural morphine given for the first time on the day after surgery does not produce useful analgesia, but he cites work which suggests that its efficacy might be increased if it is given before the onset of pain.

The papers contain ideas and information which provide a framework for better postoperative analgesia and there will be few readers who do not find some recommendation which will improve the efficacy or the safety of their current practice. Mitchell and Smith make a plea for the routine clinical measurement of acute pain control. They review patient-controlled analgesia (PCA) systems and advocate a continuous background infusion on which the patient may superimpose additional demand boluses. Wildsmith emphasizes that minor as well as major nerve blocks have a significant role and that the type of analgesic method to be used can be matched to the severity of the pain. Morgan sets out the criteria by which spinal and extradural opioids should be judged against conventional methods of analgesia—an area in which anecdotal reports have greatly outnumbered properly controlled trials. He deals in detail with the important subjects of respiratory depression (pointing out that hourly monitoring of the rate of ventilation can be misleading as a measure of respiratory adequacy) and the tabulation of risk factors, such as old age and the concomitant administration of narcotics by other routes.

The reader will also find encouragement for practices which have either become unfashionable or have not yet gained widespread acceptance. Perhaps we can now look forward to the time when opioids once more become the preferred premedicants for major surgery; when the importance of placing extradural drugs at the appropriate dermatomal level is accepted as a
sine qua non; and when it is recognized that total pain control can be achieved, even after upper abdominal surgery, by combining extradural local anaesthetics with an opioid. Only when total pain control is achieved can we hope to fulfil Kehlet's aim of stress-free surgery producing a decrease in operative morbidity and mortality.

With so much information available, we should be able to plan and implement effective post-operative analgesia. Will our patients benefit? History suggests that they may not. Mitchell and Smith point out that “the available techniques of pain relief have changed little in the past 40 years ... despite many advances in the understanding of pain mechanisms”. Many patients would add that attitudes towards pain have also changed little. Colin MacInnes, the author, wrote of “the nonchalant attitude of the medical profession towards quite unnecessary suffering—so much so that the one place in the country where you can get least relief is a hospital itself”. He considered that the management of postoperative pain was “a cruel and callous disgrace” [8].

Why is it that anaesthetists, who have traditionally been innovative, eager to accept new challenges and ready to move into areas of clinical need, have failed to rise to the challenge of postoperative pain? First, it may be because, given time, postoperative pain disappears, so that if we keep out of the way for the first 48 h, we can avoid the problem at its worst and even deny that it exists. Paradoxically, patients sometimes unwittingly encourage this denial. For every patient who voices dissatisfaction, there are many who say: “Of course, you’ve got to expect some pain, haven’t you, doctor?” Second, we may have retained some atavistic empathy with our predecessors. They, having ensured for their patients several hours of sleep during recovery from deep ether anaesthesia, did not need to concern themselves much with postoperative analgesia, which they were content to leave to the nurses. Certainly, this legacy and the rapid recovery produced by modern anaesthesia are root causes of our present difficulties. One reason for the inadequacy of conventional opioid analgesia is that it is prescribed by members of one profession and administered (or withheld) by members of another, to patients who may be too ill or inhibited to demand it.

How can we ensure that the knowledge and techniques now available are applied so that we can select an effective regimen which is safe and appropriate for the different circumstances in which we work? Two problems have to be overcome. The first is one of organization and logistics. Postoperative analgesia should be the responsibility of a small number of designated individuals. Ready [10] has described the development of an acute postoperative pain management service in Seattle. The service is run by the Department of Anesthesiology and consists of a faculty member, an anaesthesia resident and a clinical nurse specialist. It is unlikely that this system could be widely adopted in this country outside the larger centres, but a team consisting of a Consultant Anaesthetist and two junior doctors, either anaesthetists or house surgeons, can be very effective in a District General Hospital provided that it is Consultant-led and not simply Consultant-based. The second problem is arguably the biggest single barrier to truly effective postoperative analgesia, and it concerns our use of words. We are conditioned to think and talk in terms of “pain relief”. Because it is not possible to relieve something unless it has been allowed to occur, our language and thought are misdirected, with the result that we act too late. None of systems of analgesia mentioned in the following papers will yield their full potential unless they are targeted at prevention rather than relief. As well as considerable knowledge of the pharmacological and neurophysiological aspects of pain, we have suitable drugs, equipment and techniques to enable us to control postoperative pain. There are now two immediate needs. First, we should re-assess critically our current practice and, where possible, draw up an improved procedure which is safe and effective in our local circumstances. Second, these changes in organization must be accompanied by changes in thought and terminology so that action is pre-emptive rather than retrospective, and pain prevention* is practised as a routine. It is unlikely that any real progress will be made until we proscribe the use of the term “pain relief” in the context of postoperative analgesia and confine it to areas of practice where we can only respond retrospectively.

E. N. Armitage

*Prevent: pre-venire. To act in anticipation of, ... to act as if the event or time had already come. (Shorter Oxford English Dictionary.)
REFERENCES