

Far too many patients have pain after an operation, even though good help and sufficient knowledge are available.

## Postoperative pain – underestimated and undertreated

Every year about one in ten Norwegians undergoes a surgical operation. Surgery always involves damage of tissues and nerve fibres, but the subsequent pain serves little purpose. Extra pain connected with the onset of postoperative complications will usually break through good measures to relieve pain and will also be accompanied by other more reliable clinical signs.

In this issue of *The Journal of the Norwegian Medical Association*, Fredheim and co-workers show that pain relief is insufficient in as many as 38 per cent of adult in-patients after an operation (1). This is the consequence both of insufficient registration and documentation of the pain, and of non-optimal use of the medication and methods available. Registration and documentation of pain intensity should be just as natural as recording for example heart rate, blood pressure, body temperature and natural functions. Our routine visit mantra «And how are we today?» is definitely not good enough. The patients must be observed and questioned specifically about pain, so that we are aware of its occurrence, intensity and duration, as well as triggering or relieving factors.

The main problem in pain treatment, as mentioned in another article by the same authors (2), is weighing benefit against risk and side-effects. Benefit, i.e. relief of pain, is regarded as subjective and non-specific, while the fear of very rare, though objective and serious, complications may be exaggerated. This often leads to under-treatment. Multimodal treatment is recommended – i.e. use of several different methods that all help to relieve pain without a corresponding increase in the risk of developing side-effects. One important objective is less frequent use and lower doses of opioids, partly because these often give rise to fatigue, nausea, constipation, sleep disturbances and potential risk of respiratory depression. For example, patients who had been recently operated for breast cancer were given a combination of paracetamol, non-steroidal anti-inflammatory drugs (NSAIDs) of the COX-2-inhibitor type, glucocorticoid and local anaesthesia. As many as 40 per cent said that they had no pain during the first three days – without opioids (3). However, we must be prepared to use opioids when they are needed.

Research on postoperative pain is mainly concerned with four questions related to patients in whom relief has not been adequate: Can we improve the situation by adjusting the selection of multimodal components and adapting better to the individual surgical procedure? Can we start to use still more types of medication and methods? Can we predict which patients will develop severe postoperative pain? Can we prevent chronic pain? We know today that genetic and psychosocial factors affect postoperative pain, the efficacy of medication and possibly also the development of chronic pain (4). We also know that pain before an operation, either connected with the disorder in question or with other disorders, is important in this context. In the future we hope for better scoring systems that will help to predict which patients will develop particularly troublesome pain.

Both articles by Fredheim and co-workers are concerned with surgery in adult in-patients. In Norway today, more than 50 per cent of all surgery is carried out as day-surgery and it is likely that the conditions here are slightly different. NSAIDs, including COX 2 inhibitors, will for example be used in most cases (5), and of necessity there will be more emphasis on oral treatment (6). Immediately after

major surgery there is often risk of haemorrhage and unstable circulation, which leads to avoidance of potentially renotoxic NSAIDs, although potential renal failure is usually reversible. Instead, titrated intravenous opioids, in adequate and often large doses, are considered to be safe because in a postoperative intensive care ward it is possible to intervene rapidly if respiratory depression occurs. These considerations should be revised when the patient has entered a stable circulatory phase in a ward or has been sent home. Fear of delayed bone healing after orthopaedic surgery, which is well documented in experimental animals though not in humans (7), may also lead to avoidance of NSAIDs. It may be that the marginal risk of NSAID side-effects with short-term therapy is exaggerated and leads to increased use of opioids and, in the worst case, to serious side-effects. In Norway there have recently been several media reports of deaths and near lethal outcomes in the ward in recently operated patients. These patients had been given large doses of opioids under unsatisfactory monitoring when non-opioids were sparsely used (8).

This problem should not be solved by letting patients lie with pain, but by developing good routines for optimal non-opioid pain relief. If necessary, this should be supplemented with opioids, but in titrated doses and only until the desired effect is obtained – and under adequate monitoring. A technical aid in this context could be the new wireless technology that enables monitoring of breathing and oxygen saturation in patients lying alone in a normal ward (9).

We must help patients who are in pain after an operation. We have both the knowledge and good tools available. Much can be done by simply recognising the situation and implementing the tools. Good basic routines should be adapted to the conditions in the individual hospital, the surgery in question and the individual patient.

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### Litteratur

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