Chronic pain after surgery: how common is it?

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Pain is an **expected outcome** of surgery. Some pain is inevitable after any surgical procedure. However, some people experience more pain than expected and for a longer duration. Acute pain is a predictable, physiological response to tissue damage.

Pain after surgery is considered to be chronic if it lasts for **longer than three months**. In some cases, however, patients undergoing common surgical procedures report of persistent or intermittent pain of varying severity at one year postoperatively. Here, pain management specialist Dr Sarah Aturia explains more.

How is chronic post-surgical pain (CPSP) defined?

A working definition of chronic postsurgical pain (CPSP) was proposed by Macrae and subsequently refined by Werner as:

- Pain persisting at least three months after surgery.
- Pain not present before surgery or that has different characteristics or **increased intensity** from preoperative pain.
- Pain is localised to the **surgical site** or a referred area.
- Other possible causes of the pain are excluded.

How common is Chronic Post-Surgical Pain?

The incidence in major operations is quoted as 10% to 50% and severe in 2 -10%. In addition to the type of surgery, **risk factors** include having pre-operative pain, psychological factors, demographics (e.g. female gender and younger age), surgical factors (e.g. open approach and length >3 hours), and the intensity of pain in the immediate postoperative period (i.e. first few days). The identification of high-risk individuals is important because focused interventions may be beneficial to these patient populations.

How is CPSP diagnosed?

Patients first presenting with CPSP should undergo a thorough **clinical assessment** to confirm the suspected diagnosis and identify underlying mechanisms of pain. It is common, as tissue and a degree of nerve damage are unavoidable in any surgical procedure. CPSP can be expressed as a combination of different clinical types of pain, such as neuropathic, nociceptive, visceral and referred.

Nociceptive pain is from tissues. Neuropathic pain originates from nerves and is described as **stabbing pain**, **skin irritation** and sensitivity, **numbness**, tenderness, tightness and pulling sensations. Visceral comes from the internal organs. Referred pain, where pain from one part of the body is felt in a different location, is another type of pain which might be encountered.

In addition, the typical comorbidities of chronic pain often develop, such as **sleeping and mood disorders**. As is the case with other chronic pain syndromes, CPSP, once entrenched, maybe multifaceted and challenging to reverse.

How is CPSP treated?

Early postoperative follow-up and management are recommended for patients presenting with the first signs of new or recurrent pain. A targeted multidisciplinary approach to CPSP management is driven by the underlying mechanisms and the comorbidity of the pain and includes:

- With the upper or lower limbs, it is vital to concentrate on **maintaining mobility** and function by performing a regular regime of **exercise**.
- Topical application of Lidocaine creams and patches.
- Capsaicin cream and Qutenza (capsaicin patch 8%). The latter can only be used in a pain clinic for the management of neuropathic pain. The patch performs the function of delivering a high dose of capsaicin through the skin to the nerves targeted.
- Medications for neuropathic pain like **antidepressants** and antiepileptic drugs.
- **Strong opioids** and Tapentadol, which should only be prescribed with great caution and under supervision after evaluation of the risk-benefit ratio and discontinuation criteria.
- Appropriate interventional approaches such as scar injections, nerve blocks, pulsed radiofrequency techniques and other neuromodulation and stimulation techniques.
- Physical therapies, patient education and supported self-management and psychologically-based interventions, such as cognitive behavioural therapy (CBT), multidisciplinary pain program and vocational counselling.

To minimise progression to a chronic state, early intervention and referral to a multidisciplinary pain clinic are advisable.

Dr Aturia specialises in the management of low back pain, neck pain, chronic post-surgical pain and whiplash. You can book an appointment with her now via her Top Doctor's profile here.

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