

Preoperative Management of Chronic Pain

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Introduction

Chronic pain affects between one third and one half of the UK population. This corresponds to approximately 28 million adults (1). The annual number of surgical procedures in the UK totals between 4- 8 million (2) (3). It is common for chronic pain patients to be found in this population. Therefore, the perioperative management of these complex patients must be considered.

Early identification of complex patients by surgeons and preoperative assessment staff is highly recommended and can facilitate forward planning (4). This allows time to involve the experience of others (e.g. anaesthetists, pain specialists, psychologists, GP, occupational therapists and physiotherapists etc). Communication and involvement of the patient is a central tenet of successful perioperative management.

There is no good evidence to support the prescribing of strong opioids in the management of chronic pain (5). A small number of patients may benefit from a low and intermittent prescription of strong opioid, but the number of chronic patient patients on long-term opioids should theoretically be declining. Nevertheless, patients on long-term opioids still frequently present to preoperative assessment service.

The growing importance of the perioperative management of opioids has been emphasised in both an International Consensus Statement published in *Anaesthesia* and a multidisciplinary guideline endorsed by the Faculty of Pain Medicine (FPM) and the Centre for Perioperative Care (CPOC) (6) (3). A number of recommendations for best practice have been identified.

Preoperative Assessment

This is an opportunity for perioperative planning, which may involve discussion with anaesthetic staff.

Prehabilitation **is possible** in this group of patients.

This may take the form brief interventions to reduce preoperative anxiety and resultant catastrophising. This should be extended to the management of all patients in the preoperative setting, as there is a known correlation between anxiety and post-operative pain intensity (7). Strategies to accomplish this include **providing information on realistic expectations of postoperative pain, assurance that it is a management priority**, and that **multimodal strategies are used to decrease discomfort**.

As per the FPM and the CPOC, it is also an opportunity to **identify of opioid overuse** and potentially involve specialist services for preoperative weaning in selected cases. SIGN 136 identifies a ceiling dose of 90mg oral morphine equivalent as the upper limit of what should be prescribed (8). Hyperalgesia may also be an issue, and tolerance is likely above 60mg oral morphine equivalent (CPOC) (3).

Areas to pay specific importance to, and potentially seek advice regarding include (4) (3) (6):

- Screening for chronic pain and opioid use. An **oral morphine equivalent should be noted**.
 - A useful calculator for doing so is available at: <https://paindata.org/calculator.php>
 - CPOC recommend that opioid weaning should be considered prior to surgery if feasible. This may require the input of a pain specialist.
- Patients taking regular potent analgesics, antidepressants or antiepileptics who the enteral route will not be available for more than 24 hours.
- All patients taking ketamine or methadone.
- Patients with implanted devices.
- Patients anxious about the postoperative control of their acute surgical and background chronic pain.
- Patients with a history of opioid addiction.
- Previous difficult perioperative pain control.

It is common for this group of patients to be treated with multiple analgesics as part of their ongoing chronic condition. The perioperative management of these medications may

present questions for the preoperative assessment service in relation to management of analgesics preoperatively.

More uncommonly, they may have an implanted device for which specialist advice should always be sought.

Advice regarding both scenarios is listed below.

Pre-operative Medication Management

Opioids

Examples include:

Common PO Opioids

- Oxycodone
- Morphine
- Codeine
- Dihydrocodeine
- Tapentadol
- Tramadol

Patches

- Fentanyl
- Buprenorphine

All opioids, including patches.

> Calculate OME.

> If > 90mg in 24 hours, seek advice from referring team regarding possible taper. SIGN 136 recommends specialist advice above this dose.

> **Otherwise, advise to take as usual (4).**

Special Instances

- **Methadone** (mu agonist, NMDA antagonist and MAOi.)

> **Advise to take as usual (9).**

> Perioperative Mx. Treat as any opioid tolerant patient. Dependent on if enteral route available. Continue PO if possible, otherwise switch to PCA with background.

- **Buprenorphine** (partial mu agonist, kappa and delta antagonist. Very slow dissociation.)

> **Advise to take as usual (9).**

> Perioperative Mx. Maximise opioid sparing adjuncts/regional techniques. Use regular full agonist opioids. Dose required may be appreciably higher. Consider HDU post operatively.

> May be prescribed in combination with naloxone as **Suboxone**. The naloxone component is used to prevent parenteral diversion, and has no significant clinical effect when taken sublingually or enterally. Therefore **advise to take as usual**.

- **Naltrexone** (long acting opioid antagonist [48-72 hours] - not typically used in chronic pain. Used in patients who are trying to remain abstinent, but does has important perioperative considerations.)

> **Advise stopping 72 hours prior to surgery** (9).

> Perioperative Mx. Post chronic use, cessation is associated with doubling of mu and delta opioid receptors. Returns to baseline in approximately 6 days. May result in extreme opioid sensitivity. Maximise adjuncts/regional techniques.

Neuropathic Agents

Multiple agents are used in the treatment of neuropathic pain. They can be classified broadly as antiepileptics or antidepressants.

NICE guidance recommends the use of **amitriptyline**, **duloxetine**, **gabapentin** or **pregabalin** as initial treatment, so it is likely that these will be the most commonly encountered (10). However, a number of other treatments may also be encountered including **lidocaine**, **sativa**, **capsaicin**, **lacosamide**, **lamotrigine**, **levetiracetam**, carbamazepine, **oxcarbazepine**, **topiramate**, **venlafaxine** and **sodium valproate**.

> **Advise to take as usual** (4).

Devices

- **Spinal Cord Stimulator** (single or multiple leads containing electrodes that are placed in the dorsal epidural space)

> **Contact tertiary service to arrange deactivation, and plan for reactivation post operatively** (4) (11).

- **Intrathecal Drug Delivery System** (intrathecal catheter connected to a drug reservoir – usually morphine)

> **Continue perioperatively and supplement patient with additional analgesia for the acute event enterally and/or parenterally** (4) (12).

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