PUTTING PAIN ON THE CURRICULA IN MEDICAL SCHOOLS IN EUROPE

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ENGLISH PAIN SUMMIT: A YEAR ON

More and more countries are adopting national strategies to tackle chronic pain; Dr Martin Johnson reports on the English experience

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MANAGING SURGICAL PAIN IN LONG-TERM OPIOID PATIENTS

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A clinician presents a case of chronic pain management. Two European specialists provide their perspectives on the treatment.

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The risk of addiction following medical opioid treatment was formerly believed to be extremely low. However, in recent decades, both prescriptions of, and addiction to, opioids have increased substantially. These developments highlight the importance both of tapering strong opioids when they are no longer clinically indicated, and ensuring unused medications are properly disposed of.

When guided by the hospital or primary care physician, tapering is at best uneventful. However, weaning off analgesic drugs is often left to the patient’s judgement. This can work well, but may also lead to inadequate pain control, abstinence or – as shown by Carroll et al – long-term opioid use.

A related issue is ensuring patients safely dispose of their unused opioid medication, which research suggests may be a concern. For example, in a pilot study of patients prescribed opioids at the emergency department, only one of 25 patients disposed of their unused medication, and none stored their analgesics safely. In another study, the majority of patients stopped taking pain medication shortly after urological surgery, but kept the unused opioids. Such ‘leftover’ opioids may cause inappropriate use and/or accidental overdose.

Good medical practice following surgery and trauma should therefore include valid routines for tapering of opioids and clear instructions to the patient and significant others on how to discard the medication and who to contact in case of unexpected situations. Unused opioids should not be left unaccounted for.

from the Joint Editor, Dr Dagmar Westerling, head of pain unit, Centralsjukhuset i Kristianstad and associate professor, Lunds Universitet, Sweden

References

2012;6:521-534.

Diabetic peripheral neuropathy (DPN) is a prevalent disorder and a common reason for patients to attend pain clinics. Indeed, DPN is often used as a model for researching antineuropathic drugs. It is often a distal symmetrical polyneuropathy, but many patterns of nerve injury can occur. So it is important to investigate diabetic patients carefully when assessing neuropathic pain. Treatment involves careful control of blood glucose that substantially decreases the development of neuropathy in people with type 1 diabetes. However, the effect is probably much smaller in those with type 2 diabetes and these are the most common pain clinic attenders. Although evidence supports using specific anticonvulsants and antidepressants to manage pain in patients with DPN, the lack of disease-modifying therapies makes identification of modifiable risk factors essential. There is growing evidence to support an association between components of the metabolic syndrome, including pre-diabetes, and neuropathy, although studies to further explore this association are needed, say the authors.


Low back pain and radicular leg pain form an important part of the work of most pain clinics. The most likely reason for a patient to present with referred leg pain is a lumbar disc or nerve root problem. However it is vital that pain clinicians are aware of and can assess extra-spinal causes of sciatica. These authors detail the main extra-spinal pathologies causing this symptom.

They clearly outline new approaches for the study of structures such as the lumbosacral plexus (LSP). The normal anatomy of the LSP, its different extra-spinal pathologies such as tumours, trauma, infection and gynaecological or other pathologies and differential diagnoses are presented.


The Special Interest Group of the Canadian Pain Society has generated a guideline for interventional neuropathic pain treatments. Sufficient literature existed on four therapies: spinal cord stimulation, epidural injections, IV infusions and nerve blocks. IV infusions are not routinely used for neuropathic pain as the evidence base is not strong. A comprehensive search was conducted and a modified United States Preventive Services Task Force tool was used for quality rating and grading of recommendations. They found sufficient evidence to support recommendations for some of these interventions for selected neuropathic pain conditions. This evidence is, at best, moderate and is often limited or conflicting. This work shows how much more there is left to do in finding evidence-based treatments for neuropathic pain!


Antiepileptic drugs have been employed to treat pain since the 1960s, and some have shown efficacy in treating neuropathic pain conditions. Phenytoin has been used occasionally to treat intractable trigeminal neuralgia. There was also a vogue for intermittent IV infusions of this drug to manage neuropathic pain. The authors, experts in on tapering and disposing of unused opioid medications

Dr Dagmar Westerling on tapering and disposing of unused opioid medications

Dr Karen H Simpson reviews the latest research in pain, including papers on diabetic neuropathy, sciatica and irritable bowel syndrome

systematic reviews, assessed the analgesic efficacy and adverse effects of phenytoin in neuropathic pain and fibromyalgia. They uncovered no evidence of sufficient quality to support the use of phenytoin in chronic neuropathic pain or fibromyalgia. This is an important message as this drug carries risk and no proven benefit; it is especially important to avoid its use if pregnancy is possible.

Feng B, La JH, et al.
Neural and neuro-immune mechanisms of visceral hypersensitivity in irritable bowel syndrome.

Irritable bowel syndrome (IBS) is characterised as functional because a pathobiological cause is not readily apparent. However, a growing body of research is showing that there is much more to IBS than psychological aetiologies. Sensitising proinflammatory and lipotoxic lipids, mast cells and their products, tryptases, enteroendocrine cells, and mononuclear phagocytes and their receptors are increased in tissues of IBS patients with colorectal hypersensitivity. Research to date shows the importance of afferent drive in IBS. The colorectal afferents are the focus of this review. Contributions from immune-competent cells resident in and recruited into the colorectum are discussed. This is a fascinating paper that should be read by all clinicians who treat visceral pain of whatever type.

Blægestad T, Pallesen S, et al.
Sleep in older chronic pain patients: a comparative polysomnographic study.

The link between chronic pain and sleep disturbances is well known to clinicians but very poorly researched. In this study, the authors compared sleep variables in older chronic pain patients with healthy older persons using polysomnography, the gold standard for measuring sleep architecture. The chronic pain group spent significantly longer time in bed and had poorer sleep than the control group. These findings are in accordance with the idea that sleep quality in chronic pain is characterised by difficulties with the wake-sleep transition and a lower intensity of the deep restorative sleep throughout the night. The next step is to work out what we can do to improve sleep quality – apart from manage pain better!

Dirckx M, Stronks DL, et al.
Effect of immunomodulating medications in complex regional pain syndrome: a systematic review.

We know that inflammation plays a pivotal role in the pathophysiology of complex regional pain syndrome (CRPS). Immunomodulating medication reduces the manifestation of inflammation by acting on the mediators of inflammation. This paper reviews current empirical evidence for the efficacy of administering the most commonly used immunomodulating medications, namely glucocorticoids, TNF-alpha antagonists, thalidomide, bisphosphonates, and immunoglobulins in CRPS. The authors conclude that immunomodulating agents could theoretically counteract the ongoing inflammation and therefore might be an important step in improving a disabled hand or foot, leading to further recovery. However, more high-quality studies are required, they say.

Dr Karen H Simpson is a consultant in anaesthesia and pain medicine, Leeds, UK.
The importance of putting pain on the curricula in medical schools in Europe

Professor Hans G Kress argues that pain education should be included as a core part of the curriculum

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While acute pain may reasonably be understood as a symptom of an underlying disease or injury, chronic and recurrent pain is a specific healthcare problem that should be considered a disease in its own right in most cases. Not only is it a cause of suffering and reduced quality of life among the estimated 80 million Europeans – or one fifth of the adult population – with chronic pain, it also places a huge medical, economical and societal burden to developed countries.

Although chronic pain affects more people than heart disease, diabetes and cancer combined, it continues to be an under-recognised and under-treated epidemic in Europe, not least because we spend only an inadequately small portion of healthcare and research budgets and resources on its prevention and adequate treatment.

As a result, patients have to experience avoidable pain, their acute pain is not always optimally treated and may unnecessarily progress to chronic pain, which in turn is also often inadequately managed.

Given the burden of pain on human lives, on healthcare systems and societies, action to improve pain medicine and prevent the development of chronic pain is overdue and should be undertaken as a national priority in our European countries.

An obstacle to optimal pain management

Much of the gap between obvious needs and all-too-frequently poor professional performance in general pain management results from the lack of expertise of physicians who, having not been adequately trained in pain medicine, may not therefore be able to recognise, properly diagnose or treat chronic pain conditions.

This lack of training about the complex mechanisms and best practice therapeutic options of chronic pain has been identified as a key barrier to optimal pain management, such as by the signatories of the Declaration of Miami.

In particular, adequate training in at least the basic rules of proper pain management for medical undergraduates inevitably manifests in the clinical practice of the new breed of doctors.

For example, these professionals may unwittingly hinder pain patients from being adequately treated, particularly when experiencing chronic pain syndromes with mixed nociceptive/neuropathic or neuropathic pain that cannot be sufficiently relieved by simple painkillers. Or again, as a result of this knowledge gap, primary care physicians and other healthcare ‘gatekeepers’ may not initiate timely pain management, including referrals to specialist pain clinics, which are relatively few in number.

A central problem is the fact that in Europe – with very few exceptions – mandatory, systematic training in state-of-the-art pain management and research does not exist at any level of standard medical education.

With the exception of those who intend to specialise in pain management or a related field, this lack of expertise can hardly be compensated for at later stages of their professional education, when they are practising physicians.

Towards better training in pain

Having identified this primary educational gap, the goal becomes very clear: to place high-quality training about pain and state-of-the-art pain management on the undergraduate core curricula of medical schools across Europe.

<table>
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<th>Table 1. Undergraduate initiative - proposed process</th>
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<tr>
<td>1 Convene a task force of multidisciplinary experts and organisations</td>
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<td>2 Generate the evidence by means of robust and in-depth research</td>
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<td>3 Develop consensus and recommendations for change for implementation across Europe</td>
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<td>4 Disseminate findings of the report and engage with medical schools and other relevant organisations</td>
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Making pain medicine a core component of the undergraduate medical curriculum should help ensure that future generations of clinicians are more knowledgeable about pain and its management

Giving more prominence and room to training in pain management at undergraduate level would be expected to give future generations of physicians increased awareness and knowledge of pain and pain conditions. It would improve their diagnostic and therapeutic skills, and ensure benefits in terms of improved pain patient care, reduced burden of suffering, and prevention of the development of chronic pain.7-9

To achieve this, several preconditions have to be fulfilled:
- First of all, better evidence is needed to ascertain more clearly the training gaps.
- Secondly, there is a need for a structured development of recommendations to enable the implementation of pain management into undergraduate curricula most effectively.
- Last but not least, to address these challenges requires a broad multidisciplinary approach from all participants, namely academia/medical education, expert clinicians and policy-makers.

An initiative for education
The European Federation of IASP Chapters (EFIC), a multidisciplinary professional organisation which represents 36 national pain societies across Europe, aims to guide such an approach, alongside a taskforce of experts (Table 1).

It is believed that the goals of such an initiative can be achieved by convening a pan-European task force involving a leading organisation in pain such as EFIC and other associations, which bring expertise and political influence in medical education and knowledge of academic structures on a national level.

The intention is that the taskforce of experts will provide an overview report of the current status quo, and allow benchmarking based on the level of standard undergraduate pain education currently provided in different countries. The report should become the basis for practical recommendations for implementation across Europe to ensure that pain receives adequate attention as an integral part of the undergraduate medical curricula in the future.

Emphasis can be put on the already available medical curricula in pain, such as the one developed by EFIC, which could be used as reference framework for national medical schools.

Conclusion
Ultimately, besides the misdiagnosed or inadequately treated individuals with chronic pain, healthcare systems and societies have to pay the price for the unmet needs of systematic academic undergraduate education in essentials of pain medicine.4 And yet, if this is so, then they could equally be expected to reap the benefits of better education in pain for clinicians, especially from the earliest stages of their training.

- Professor Hans G Kress is president, European Federation of IASP Chapters (EFIC) and full professor of anaesthesiology, intensive care and pain medicine at Medizinische Universität Wien, Austria

References
English Pain Summit: a year on

The English Pain Summit was held in Westminster, London on 22 November 2011. paineurope joint editor Dr Martin Johnson explores its background, the meeting itself and subsequent outputs

At the heart of numerous projects involving the organisational infrastructure of the British pain medicine community in the recent past have been two very significant planned programmes of work, both linked by the future development of a commissioning strategy for chronic pain. Firstly, the creation of five pathways of care by the British Pain Society – pain assessment, spinal pain, musculoskeletal pain (non-inflammatory), pelvic pain (male and female) and neuropathic pain. Secondly, the work associated with the English Pain Summit, held in Central Hall, Westminster, London in November 2011.

The possibility of an English Pain Summit had been considered for many years. However, it was the publication in 2009 of the chief medical officer for England’s annual report for 20081 that laid the foundation for several clear recommendations for chronic pain, including the development of pathways of care with clear standards.

‘The Summit was truly an inspiring vibrant day and was well attended by more than 150 delegates from a variety of backgrounds’

Several countries have published national strategies for pain, including two other parts of the UK, namely Wales2 and Scotland3 (Northern Ireland also held a successful Pain Summit in May 2012). Australia held a landmark National Pain Summit in March 2010 with the subsequent publication of a National Pain Strategy4 and in summer 2010 the first International Pain Summit was held in Montreal, Canada with the publication of the seminal Montreal Declaration5 on pain; the key declaration being that ‘access to pain management is a fundamental human right’.

Spurred on by several different voices, including a government minister, the idea of an English Pain Summit was proposed. The Chronic Pain Policy Coalition (CPPC) took the organisational lead, under the chairmanship of Dr Beverly Collett. The CPPC partnered with the British Pain Society (BPS), the Faculty of Pain Medicine (FPM) and the Royal College of General Practitioners (RCGP) to organise the event, in addition, the main steering committees had vital representation from patient organisations, commercial bodies and the Department of Health. Funding was obtained from educational grants from several pharmaceutical companies.

On the day

After months of emails, meetings and blood, sweat and toil, the big day in November arrived.

The Summit was truly an inspiring vibrant day and was well attended by more than 150 delegates from a variety of backgrounds, ranging from healthcare professionals to commissioners, academics and patient groups. There were speeches by parliamentary undersecretary of state for quality Earl Howe, NHS medical director Professor Sir Bruce Keogh, national clinical director for health and work Professor Dame Carol Black, and former chief medical officer for England Professor Sir Liam Donaldson, along with accounts from patients and professionals as well as two panel discussions.

Workshops took place on the themes of ‘education’, ‘public health: the wider context of pain’ and ‘quality commissioning’. Some of the initial recommendations from the workshops included:

- An educational pain gold standard provision needs to be agreed and the level of variation from this measured.
- Chronic pain should be treated as a long-term condition and undertaking systematic local needs analysis and planning could result in better outcomes.
- Quality and monitoring framework – there should be a National Institute for Health and Clinical Excellence (NICE) quality standard on pain management and this should include self-management principles. It will be key to ensuring that any quality standard is put into practice.
- Training should allow clinicians to make a biopsychosocial assessment of pain.
- To increase community-based specialist-led services where assessments are made to determine how people living with pain are best treated with the fewest number of steps.

An initial report of the day was published in December 2011 and can be found at www.painsummit.org.uk.

Recommendations

Following consultation, the final report, Putting Pain on the Agenda was published at a parliamentary reception on the 4 July 2012.6 Key recommendations in the final report are as follows:

- Clear standards and criteria must be agreed and implemented nationally for the identification, assessment and initial management of problematic pain.
- An awareness campaign to explain the nature, extent, impact, prevention and treatment of chronic pain to the wider general and NHS community should be launched.
- Nationally-agreed commissioning guidance must be developed and agreed, describing best value care in chronic pain to reduce unwarranted variation.
- A data strategy for chronic pain should be agreed through creation of an epidemiology of chronic pain working group.

Work groups are now being established to take all four of the recommendations forward with further meetings planned in 2013.

Dr Martin Johnson is GP with a special interest in pain, Yorkshire, UK and honorary senior lecturer in community pain, Cardiff, UK.

References

Discussion Forum

Pain expert Professor Harald Breivik offers his views on pain management scenarios presented by clinicians

One of my patients is a 25-year-old man who was referred to the pain clinic with a questionable diagnosis of CRPS after an accident causing over-extension of the thumb (digitus 1) of his non-dominant hand while at work as a deliveryman. Initially there was an extremely painful swelling of the radial part of the wrist of the hand. The wrist area remained swollen, warm and sensitive to touch. No fracture, no tendon rupture, no nerve rupture or nerve damage could be documented by orthopaedic and plastic surgeons, or a neurologist at a university hospital. He had clearly reduced muscle strength in the muscles of thumb and index finger (digitus 2). Tremors of the hand and arm were noted. Normal conduction of impulses in the median nerves of thumb and index finger (digitus 2). Tremors of the hand and arm were noted. Normal conduction of impulses in the median and radial nerves was documented a few weeks later.

Two years later the swelling was still present, but the wrist and forearm were periodically cold and clammy. Pain had extended to the area remaining swollen, warm and sensitive to touch. Hypersensitivity was thorough the entire palm of the hand and a glove-like distribution of the hand, wrist and distal 10cm of forearm, all more so on the radial part. Hypersensitivity to touch was more pronounced around the thumb and index finger. Now, five years after the accident, there is no swelling and skin temperature is normal, but there is clearly hypoaesthesia or anaesthesia to most types of stimuli around the thumb and index finger in part of the distal areas of the median nerve (but questionable hypoaesthesia in distal parts of the radial nerve).

In the same area there is hypersensitivity to cold (25°C) and warm (40°C) stimuli, and to light touch (cotton, brush). He now has pain in the forearm, arm and shoulder, as well as in the original location.

Q: Is this a case of complex regional pain syndrome (CRPS), type I or type II? Or is the diagnosis neuropathic pain?

A: Here I refer to the diagnostic criteria of CRPS described in guidelines recently published by the Royal College of Physicians in the UK, and endorsed by approximately 15 other relevant UK bodies (Figure 1).

According to these guidelines, this patient fulfilled all diagnostic criteria of CRPS, (A) to (D), two years after the trauma: he had signs in two of four categories and symptoms in all four categories. However, now, five years after the trauma, he has signs in two of four categories, but symptoms in only two (three are required) of four categories. This is CRPS-NOS (not otherwise specified).

He now has clear negative neurological signs (hypoesthesia/anaesthesia in the area of the median nerve). This qualifies for the diagnosis of peripheral neuropathic pain. I would hurry up and verify or exclude the diagnosis of carpal tunnel syndrome by means of nerve conduction measurements. Carpal tunnel syndrome in most cases will require surgical decompression.

Harald Breivik is emeritus professor of anaesthesiology, Universitetet i Oslo, Norway. He is also editor-in-chief of the Scandinavian Journal of Pain

Reference

Your questions on pain management?

Submit your questions on www.paineurope.com
Managing surgical pain in long-term opioid patients

Pain specialist Dr Silviu Brill outlines some of the challenges and practical steps to take concerning perioperative and postsurgical pain management in patients receiving chronic opioid therapy.

A European survey conducted in 2003 found that 19% of adults report pain of moderate to severe intensity.¹ We also know that the number of patients treated chronically with opioids has increased steadily over the past decades (Figure 1); opioids are no longer being confined to terminally ill cancer patients. For example, in the US, the annual sale of opioids to ambulatory patients increased by approximately 130% from 1999 to 2003, with a two-fold increase relative to the same period in the previous decade.² Similarly, in Israel we found an increase of 96% in total morphine consumption between the years 2000 and 2006, with annual morphine consumption per capita increasing from 15.7mg to 29.3mg in the same period.³

As a result, some 10% of all chronic pain patients are thought to be receiving opioids.² Many of these people with chronic pain will require surgery at some point in their lives. The need to adequately treat the acute pain arising from surgical trauma is clear, for these patients as much as others. Apart from the fact that acute pain control is now considered to be a humanitarian issue and a fundamental human right, unrelieved acute pain has both physiological and psychological consequences that can be associated with complications and impaired healing. Conversely, there is evidence that an improved pain score is a factor in improved outcomes after fast-track surgery.³

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Key learning points

- The number of patients taking long-term opioid therapy for pain is increasing, with opioid-use no longer being confined to advanced cancer patients.
- Challenges to peri- and postoperative pain management in chronic pain patients include complex existing drug regimens and problems arising from tolerance to opioid analgesia.
- Postoperatively, individualised, multimodal pain therapy involving a round-the-clock regimen of NSAIDs, COX-2 inhibitors, paracetamol and regional blocks should be used.
- Other considerations may include patients receiving opioids by intrathecal drug delivery systems, SCS or potential substance abusers.

However, when chronic pain patients are already long-term opioid analgesic users, this can unfortunately pose problems for their peri- and postoperative pain management.

Challenges

Chronic pain patients in general, and specifically those receiving long-term opioid therapy, are a challenge for healthcare professionals involved in their acute and chronic care, especially anaesthesiologists. For example, they are characterised by depression, anxiety, lack of energy and appetite.⁴ In addition, chronic pain patients are frequently taking complex drug regimens, potentially involving:

- Opioids
- NSAIDs
- COX-2 inhibitors
- Antidepressants
- Anticonvulsants
- Muscle relaxants
- Alpha-adrenergic agonists
- Benzodiazepines

All these medications may interact significantly with drugs administered during surgery and anaesthesia, and this should therefore be taken into account. However, an accurate drug history can be difficult to obtain from chronic pain patients, who tend to underestimate and underreport their medication use, especially opioid analgesics.³

Furthermore, chronic pain patients taking opioids in the long term may exhibit high-grade tolerance to the antinociceptive effects of opioids. This has been consistently demonstrated in patients receiving methadone as opioid substitution treatment for dependence, who exhibit increased sensitivity during cold pressor and thermal testing.⁷

It has been hypothesised that constant opioid receptor activation produces hyperalgesia, which renders opioid-tolerant patients less capable to cope with acute pain.⁸,⁹

Chronic pain patients receiving long-term opioid analgesics are more likely to complain of severe postoperative pain, but they are also vulnerable to complications arising from opioid overdose. Therefore, the keys to successful postoperative pain management in these patients are individualised pain therapy combined with vigilant clinical monitoring.
Opioid dependency

ICD-10 defines dependence as a cluster of physiological, behavioural and cognitive phenomena in which the use of a substance or a class of substances takes on a much higher priority for a given individual than other behaviours that once had greater value.11

Unqualified, ‘dependence’ refers to both physical and psychological elements. Psychological dependence refers to impaired control over substance use while physiological/physical dependence refers to tolerance and withdrawal symptoms.11

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<th>Definition and features</th>
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<tr>
<td>Physical dependence</td>
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<td>• Normal physiological adaptation with alterations in physiologic response.</td>
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<tr>
<td>• Tolerance develops for analgesia, sedation, respiratory depression and nausea but not miosis or constipation.</td>
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<tr>
<td>• Abrupt discontinuation leads to withdrawal syndrome.</td>
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<tr>
<td>Withdrawal syndrome</td>
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<tr>
<td>• Physiological and mental readjustment accompanying discontinuation of opioid and characterised by increased sympathetic and parasympathetic response.</td>
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<tr>
<td>• Signs and symptoms include hypertension, tachycardia, diaphoresis, abdominal cramping and diarrhea, in addition to physiological and behavioural changes such as shaking and leg-jerking.</td>
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<tr>
<td>• Rarely life-threatening.</td>
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<tr>
<td>Addiction</td>
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<tr>
<td>• Chronic neurobiological disorder defined as a pattern of maladaptive behaviours. Characterised by loss of control, craving, continued use despite awareness of self-harm.</td>
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<tr>
<td>Pseudoaddiction</td>
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<tr>
<td>• Behavioural changes similar to those seen in addicted patients but secondary to inadequate pain control</td>
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Table 1. Patterns of opioid dependency after chronic administration3

Practical issues

The most important step is to identify the chronic opioid user in the first place. If patients are not identified as opioid consumers before the operation, this may lead to opioid withdrawal symptoms and uncontrolled pain both during and after surgery.3

Patients receiving long-term opioid therapy should take their regular dose of opioid on the morning of the operation. Patients who have not received their baseline opioid may be given an equivalent loading dose, administered preoperatively. Those taking transdermal fentanyl should be instructed to maintain their patch into the operating room.3

In the absence of a contraindication, patients should also take their regular morning dose of COX-2 inhibitor or gabapentinoids to augment opioid analgesia and reduce inflammatory response to surgery.8

The surgeon may consider infiltrating the surgical site with a long-acting local anaesthetic.

In addition, expert opinion suggests that opioid-tolerant patients should be offered regional anaesthesia or analgesia whenever possible, particularly when procedures are performed on the extremities.8

In the postoperative setting, a multimodal approach to pain management should be employed, involving a round-the-clock regimen of NSAIDs, COX-2 inhibitors, paracetamol and regional blockade, with individualised dosing regimens to optimise effectiveness while minimising the risk of adverse events.8

Other considerations

Intrathecal morphine or baclofen delivery systems

Intrathecal opioid infusions delivered by internally implanted devices are generally maintained throughout the perioperative period and are used to maintain baseline pain control. For patients receiving intrathecal infusions of baclofen, it may be prudent to discontinue or reduce the infusion rate because central effects and peripheral skeletal muscle-relaxing effects of this medication may enhance neuromuscular blockade and increase the incidence of hypotension and excessive sedation.6

Spinal cord stimulator or motor cortex stimulators

For patients with a spinal cord stimulator, unipolar diathermy should be avoided where possible. If its use is unavoidable, the reference plate should be positioned in such a way that the stimulator components are outside the electrical field of the diathermy.10

Neuraxial block in these patients carries the risk of damage to the leads or of causing infection. Consequently, it is recommended that management should be discussed with the pain specialist.10

Substance-abusers and addicts receiving treatment

Opioid-dependent patients (see box1,11), and substance-abusers in particular, may present with organ damage, infectious diseases and psychological disorders, in addition to opioid tolerance, physical dependence and withdrawal.8 Many opioid abusers may have cross addiction to other substances such as nicotine, cocaine, benzodiazepines, cannabis and alcohol.8 Perioperative management of opioid-dependent patients poses a special challenge emanating from the often-conflicting needs to balance the rights of the patient on one hand and concerns of safety, diversion, and abuse on the other.

Patients receiving treatment for drug addiction should be able to provide accurate information about daily opioid consumption. Those maintained on the partial opioid agonist buprenorphine may continue this medication for postoperative pain control.

Dr Silviu Brill is director, Center for Pain Medicine, Sourasky Medical Center, Tel Aviv, Israel

Online only articles can be found on www.paineurope.com

References

Long-term opioid therapy for severe musculoskeletal pain

Prescription of strong opioids for chronic non-malignant pain should meet precise therapeutic goals beyond simply pain relief, as this case presented by Dr Michel Dangoisse illustrates.

Background

Use of opioids for non-cancer pain has always been questioned in terms of risks/benefits for the patient. Clinical practice demonstrates that by following specific instructions, the long-term use of opioids with a clear therapeutic goal can benefit the patient. As regards side-effects, certain combinations allow opioid treatment for long periods, while limiting harmful effects on the patient.

CASE ASSESSMENT

A 67-year-old female patient was admitted to the pain clinic five times between 2006 and 2007 with pain in her lower right limb following a total hip prosthesis in 2004. This prosthesis had, in turn, replaced an earlier one in 2001 because of persistent pain.

The pain was described as a crushing feeling starting in the right hip and spreading to the lower back and thigh, mainly during movement, but which could also wake the patient during the night.

Prior to admission to our clinic, she was taking a WHO step 2 analgesic regimen consisting of either tramadol 50mg up to five times daily or a combination of tramadol 37.5mg/paracetamol 325mg up to four times daily. Progressively, we advised her to initiate step 3 analgesics up to a stable regimen of sustained release morphine 30mg in the morning and 10mg in the evening, in addition to immediate release morphine on demand, limited to 20mg per day.

The patient did not return to the clinic until December 2011, when she presented with pains of the same type and in the same area, which interrupted her sleep and worsened with movement.

The pain was relieved by taking immediate release morphine at a maximum dosage of 10mg four times daily, which was the only analgesic treatment followed. Compared to the pain reported in 2006, however, the new pain sometimes spread further down the lower right limb to the outer side of the foot, giving the patient the sensation that the leg was giving way.

Clinical examination did not show a sensory deficiency, but the right Achilles reflex was absent, and there was reduced strength when flexing and extending the right foot and a positive Lasègue manoeuvre at 60° on the right. No abnormalities were detected in an examination of the knee. An examination of the twice-operated hip showed good mobility in all directions with pain reported when moving from extension to flexion. Mobility of the trunk was reduced in all directions with diffuse sensitivity in the lumbosacral junction.

An X-ray and CT scan of the lumbar column revealed multi-level disc disease without canal stenosis or disc protrusion and a predisposition for osteopenia. A hip X-ray did not show any signs of the prosthesis becoming loose on the right and revealed a relatively severe coxarthrosis on the left. Electromyography did not reveal radicular deficiency but showed what appeared to be chronic irritation of the right S1 root.

The patient was prescribed sustained-release tramadol at a dosage of 100mg increased to 200mg twice daily, along with meloxicam 15mg daily for 10 days. Immediate release morphine (10mg two to three times daily) was continued but the treatment remained inadequate overall. All medications were replaced by sustained release oxycodone 5mg twice daily, plus immediate release oxycodone 5mg on demand, combined with duloxetine 30mg increased after a week to 60mg daily. As a result of malaise reported after taking a tablet of immediate release oxycodone, this medication was stopped and replaced by nefopam 30mg on demand.

The patient reported good pain relief with this therapeutic adaptation but complained of persistent constipation with a Bowel Function Index score of 90. Sustained release oxycodone was replaced by an oral combination of oxycodone 5mg/naloxone 2.5mg, (Targin®) which improves intestinal transit.

In March 2012, following a fall, the patient presented with a vertebral compression in L1 and L2 with no neurological consequences. She was prescribed a corset and the oxycodone/naloxone combination dosage was increased to oxycodone 10mg/naloxone 5mg morning and evening. This provided good pain relief for the painful phenomena without any consequences on the intestinal transit and enabled the patient to gradually regain mobility.

Key learning points

- The long-term prescription of opioids requires a strict therapeutic framework in which the precise goals of the treatment are determined with the patient.
- Regular assessment of analgesia and potential side-effects is needed.
- The oxycodone/naloxone combination is an elegant alternative in the event of constipation, rather than using laxatives.
- As regards severe osteoarticular pain, the need for opioids remains mostly moderate and stable.
Discussion

The prescription of opioids for chronic non-cancer pain continues to be a controversial subject and must meet precise therapeutic goals (such as pain relief, mobility, rehabilitation, patient autonomy, quality of life) within a strict framework to avoid abuse. In our experience, when a good therapeutic relationship is established and the conditions of the prescription are understood and respected, the need for opioids remains moderate and stable. Long-term cognitive consequences of opioid therapy are not significant, while GI side-effects do not improve with time.

Oxycodone/naloxone prevents this discomfort and improves quality of life, as measured by the EQ-5D instrument. However, prescribing powerful analgesics should not respond to a single demand to reduce the risk of abuse. This patient was treated with oxycodone/naloxone resulting in adequate pain relief and reduced bowel dysfunction. This preparation’s favourable analgesia/bowel dysfunction ratio might be preferred by patients and can be titrated to higher dosages with the potential of better pain control and improved quality of life.

Case review: The Netherlands

Dr Jan H Vranken
Anaesthesiologist and coordinator, pain relief unit, Medical Center Alkmaar, Alkmaar, The Netherlands

Patients with low back pain often experience a mixture of neuropathic and nociceptive pain, demanding a combined analgesic approach. Constipation is a common adverse effect occurring in up to 81% of patients treated with opioids. Because constipation may be a more frequent cause of distress than pain, aggressive management is mandatory.

Several strategies to address opioid-related constipation may be considered. Opioids differ in terms of opioid receptor interaction, which may explain the variability in analgesic response or adverse effects with different opioid analgesics. Therefore, sequential therapeutic trials with different opioids, known as opioid rotation, can be useful in identifying the most favourable drug; that is, obtaining a balance between analgesia and side-effects.

Case review: Ireland

Dr Paul Murphy
Consultant pain specialist, St Vincent’s University Hospital, Dublin, Ireland

This interesting case represents a number of common dilemmas facing the pain physician. Osteoarthritis (OA) pain is a major contributor to disability and has a negative impact on motor function, sleep and mood. In many cases there is no long-term role for interventional therapy and a pharmacological approach to control pain becomes an important goal.

In the absence of a disease-modifying drug, pain control may be achieved with a range of pharmacological agents including paracetamol, NSAIDs or combination therapies consisting of weak opioids with paracetamol and so on. Use of non-opioid analgesics to treat moderate-to-severe OA pain is limited by a number of issues including a ceiling effect for analgesia and potential adverse effects at high dosages, with the GI, hepatic and renal side-effects of NSAID-use a particular concern in the elderly population.

Controlled-release oxycodone is effective for severe OA pain. However, all studies of efficacy are associated with opioid-related side-effects, particularly bowel dysfunction. It has been clearly demonstrated as in this case that oxycodone/naloxone is effective in OA-related severe pain with significantly reduced incidence of opioid-induced constipation, thereby reducing the need for co-administration of often ineffective laxatives.

References

Kan du se att den här mannen har cancer?

Kan du se att han får en opioid mot svår smärta?

Kan du se att han har fått förstoppning och att laxantia inte räcker?

Nu när du vet det. Vad gör du då?

Targiniq® (oxikodon/naloxon) innehåller en opioid.

Indikation: Svår smärta där endast opioider erbjuder tillräcklig analgetisk effekt. Med opioidantagonisten naloxon motverkas opioidinducerad förstoppning genom att oxikodonets lokala effekt i tarmen blockeras.

N02AA55. Beroendeframkallande medel. Iakttag största försiktighet vid förskrivning av detta läkemedel.

Targiniq® depottabletter 5 mg/2,5 mg, 10 mg/5 mg, 20 mg/10 mg och 40 mg/20 mg, 28 och 98 st. Rau [F].


Begränsning av subvention: Begränsas till patienter som redan behandlas med oxikodon och trots pågående laxativ behandling har besvärande förstoppning.