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Managing chronic pain in the primary care setting

Module 2: Improving outcomes

This programme is based on a consensus statement developed by a selected group of South African experts representing multiple disciplines, including pain, anaesthesiology, neurology, psychiatry and primary care practice.

Dr Shaquir Salduker
Psychiatrist
Director: Durban Pain Clinic
Durban

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Introduction

In many instances chronic pain is still managed in the same way it has been for decades – by prescribing painkillers only. The greatest challenge to improving pain management is understanding the concept of chronic pain, as discussed in Module 1 (click here). Secondly, these insights must be applied via a biopsychosocial approach, with management provided by an interdisciplinary team and early referral to specialist centres if needed (Table 1).[1]

The challenge of addressing pain holistically is not unique to South Africa; it is similar all over the world. Globally, 160 people die every day as a result of opioid painkiller overuse. This is the result not only of addiction, but also of poor pain management.

KEY MESSAGES

- Chronic pain management requires a biopsychosocial approach provided by an interdisciplinary team
- Development of chronic pain syndrome is influenced by genetic predisposition and early life experience
- Tapering and discontinuation of opioids form the cornerstone of treatment
- Non-pharmacological management approaches include psychoeducation, healthy sleep hygiene habits, and healthy nutrition and lifestyle choices
- Hypersensitisation of the nervous system is effectively treated with a combination of antidepressant and gabapentinoid agents
- Short-term, limited pharmacological sleep management may be helpful during the initial stage of pain management.

Table 1. General principles for biopsychosocial management of chronic pain of uncertain aetiology

• The management approach is primarily non-pharmacological with pharmacological modalities if necessary. Unnecessary medication should be avoided
• Assess pain and its impact on functioning
• Assess and manage risk factors for chronic pain, including mood and sleep
• Discuss realistic expectations of treatment outcomes (i.e. improvement in function)
• Validate the patient's experience and empower them to take responsibility for self-management
• Involve other health professionals from the outset (e.g. biokineticist, physiotherapist, psychologist)
• Avoid unnecessary additional special investigations
• Assess and rationalise current medication, including an assessment for analgesic-induced pain (e.g. rebound, withdrawal)
• Opioids (including codeine-containing formulations) should be tapered and preferably discontinued
• Pharmacological management should be carefully considered and may require rational polypharmacy
• Encourage increased movement, healthy nutrition and socialisation
• Encourage early return to normal daily activities and work.

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Assess pain and its impact on function

When assessing a patient with pain, the primary question is whether it is an acute or a chronic pain syndrome. A quick guide to making this distinction is to note how the patient communicates the nature of their pain. If the patient says, "I have been in pain for a short period of time following an injury or due to any particular reason," this is typical of acute pain where treatment of the cause manages the symptoms. Suspicion is high for chronic functional pain syndrome if a patient has been in pain for long periods of time, has tried multiple treatments that have failed and yet they are returning to try another form of treatment. It is important to realise that if the patient continues with further painkillers at this stage, the problem will be perpetuated.

When assessing a patient, it is important to investigate their history as numerous studies show that in the absence of a genetic predisposition, the first thousand days of life are influential in developing chronic pain syndrome. This is referred to as sensory deprivation or rejection sensitivity. Patients who experience pain in early life, or who have at a young age seen a family member who was very ill, may well be more prone to developing chronic syndromes later in life. It is important to ask about these early life experiences, which can be challenging for the general practitioner who doesn't have a lot of time.

At a minimum, find out how long the patient has been living with pain and the nature of their pain. Is it consistent? Does it affect their day-to-day functioning? Is it such that they need to take medication daily? The World Association of Pain regards the taking of more than 12 painkillers a month as significant. In Dr Salduker's experience, "We have patients who take 20-30 painkillers a day. Clearly these individuals are more than likely suffering from a chronic pain syndrome."

It is also essential to ask the patient how pain has affected their relationships with family members and their productivity at work. "We tend to view decreased productivity only in terms of absenteeism, but the concept of 'presenteeism' - where a patient has to work but is in pain and unable to carry out their duties to the best of their ability – is equally relevant."

The clinician needs to assess the degree to which the patient is affected by pain and to evaluate the amount of medication they are taking. Prior treatment and procedures that have not resolved the problem should be evaluated. At this stage, there should be a clear indication as to whether the patient has a functional chronic pain syndrome and the entire clinical approach needs to change. The pain is no longer a symptom but rather a condition.

Coming off the opiate is the cornerstone of treating these patients

Assess current medication

All medication should be evaluated and discussed; this includes prescribed pharmacotherapy, over-the-counter medicines, alternative treatments, supplements and illicit/recreational drugs (including cannabis).

Analgesic consumption must be carefully evaluated. Frequent use of all types of pain-relieving drugs will be associated with greater pain-related disability.

Tapering opioids and discontinuation

The approach to weaning a patient off opiates is rather complicated. There are several approaches, based on whether this is being done on an inpatient or outpatient basis. If there is significant opiate use and a great degree of tolerance or dependence, then the inpatient approach offers a better outcome, with discontinuation/tapering over a week to 10 days. Intensive substitution therapy is implemented; all medication is stopped and replaced with an agent such as methadone, used traditionally for heroin detoxification. This 'painkiller detoxification' approach is selected based on methadone's long half-life compared to the short half-lives of most painkillers. The withdrawal of drugs with short half-lives leads to quite severe withdrawal reactions, whereas medications with longer half-lives are easier to discontinue.[2]

Tapering and discontinuation as an outpatient is far more difficult. Using a weekly decreasing dose schedule, the process can extend to months depending on the initial dose the patient is taking. The problem with this approach is that their pain continues, and patients will seek other forms of treatment, making the process quite complex.

It is much easier to discontinue these agents if the patient is not taking large amounts of opioids or if levels are not too high. It is critical that they discontinue these therapies, as coming off the opiate is the cornerstone of treating these patients.

Non-pharmacological management

The non-pharmacological approach to managing chronic pain is as important as the pharmacological and these approaches should be implemented simultaneously.

Psychoeducation

There are multiple approaches that one can use in psychoeducation. The first is to empower patients and their families to deal with the process of pain. It is important to give the patient hope, as those who have been living with pain for a long time have become hopeless and feel helpless – often the premise for suicidal behaviour. Patients often think about ending their lives, or inadvertently take too many drugs, which could lead to their ending their lives. It is important to educate people about expectations, but also about the process that they have been through and how their functioning has been affected at various levels.

Sleep hygiene

Non-pharmacological sleep interventions are called 'sleep hygiene'. Sleep hygiene encompasses very simple changes which the patient can implement (Table 2).[1,3]

Table 2. Sleep health recommendations[3]

Advise patients as follows:
• The bed is only for sleep and sex
• Avoid daytime napping
• Avoid caffeine from 14h00 - e.g. drinks; combination medicines such as flu treatments*
• Electronic devices should be avoided for 90 minutes before bedtime
• Enjoy a warm bath or shower before bed
• Eliminate ambient light in the bedroom
• If you are unable to sleep, get up and go to another room
• Do something quiet, calm and relaxing in dim light
• Do not fall asleep anywhere other than your bed
• Do not watch the clock
• Go back to bed when sleepy
• Go to bed at the same time each evening and get out of bed at the same time each morning. Always use the alarm in the morning, set for the same time
• Ensure adequate sleep on weekends to compensate for the sleep debt accumulated during the working week.

*Many over-the-counter cold and flu preparations contain large amounts of caffeine, ephedrine or pseudoephedrine, and codeine. These are stimulants and can increase anxiety, making pain management more difficult.

Healthy nutrition and lifestyle[4]

Diet, weight loss and healthy weight management are an important part of treatment. Reducing sugar and carbohydrate intake and maintaining a moderate balanced diet (anti-inflammatory/Mediterranean diet) is helpful not only for weight management, but also for better bowel function. Patients with long-term painkiller use tend to suffer from chronic constipation.

Often in the case of mechanical back pain, tension-type headaches or shoulder pain, the muscles around those areas act as splints that keep those joints in place. Core strengthening is a physical activity that can help to relieve stress on these muscle groups.

"In the absence of any contraindications, pregabalin and duloxetine should be the first-line combination treatment to reduce hypersensitisation"

Pharmacological intervention

The three basic principles of pharmacological intervention are to discontinue opiates, reduce hypersensitisation and to ensure adequate good-quality sleep each night. Each of these principles depends on a different pharmacological armamentarium.

Role of pain modulators

Opiate detoxification is necessary for the patient to progress. Medication to decrease hypersensitisation or hyperactivity of the nervous system includes antidepressants (e.g. duloxetine, amitriptyline) and the gabapentinoids, pregabalin and gabapentin (Table 3). An antidepressant/gabapentinoid combination is particularly effective for treating hypersensitisation syndrome, unless there is a specific contraindication such as a pre-existing psychiatric condition. In the absence of any contraindications, Dr Salduker recommends pregabalin and duloxetine as the first-line combination treatment to reduce hypersensitisation.

Table 3. Relative indications for choosing a specific pain modulator

Amitriptyline	Pregabalin/gabapentin	Duloxetine
• Comorbid insomnia	• Comorbid anxiety	• Comorbid depression
• Comorbid headache disorder	• Insomnia	• Neuropathic pain component
	• Neuropathic pain component	

This summary report was compiled with Dr Salduker for *deNovo Medica* by
Julia Aalbers
BSc (Hons) Pharmacology

Practical approach:

- Amitriptyline: Start with 10mg at night and, if necessary, escalate dose weekly up to 25mg.
- Pregabalin: Start low (25mg) and titrate slowly according to tolerability. Increase weekly to 50mg, then 75mg. Dosing is initially *nocte*, then administered in two divided doses to a maximum daily dose of 300mg. Some patients prefer to take only a night-time dose.
- Gabapentin: Start with a low dose (100-300mg at bedtime, or 100-300mg three times daily). Because it has nonlinear pharmacokinetics it requires slow and careful titration; increase the dose by 100-300mg three times daily every 1-7 days as tolerated. The maximum dose is 3600mg per day in divided doses.
- Duloxetine: Start with 30mg and increase to 60mg after one week. The dose may be increased to 120mg/day (60mg twice daily).

Pharmacological sleep management

Short-term use of benzodiazepines or the 'z-drugs' (zolpidem and zopiclone) may be helpful during the initial stage of pain management. However, this should be limited to the shortest time possible (<2 weeks) with withdrawal as pain and function improve. Reasons for choosing these drugs should be discussed with the patient, including that the duration of use will be limited to a specified period of time.

If sleep remains a problem, short-term intermittent use of sedative antidepressants is preferred (e.g. mirtazapine, trazodone). In carefully selected patients it may be appropriate to prescribe z-drugs for intermittent use. Due to potential adverse effects, long-term use of benzodiazepines should be avoided (Table 4).[1,5] Patients who are already taking benzodiazepines should be slowly weaned off of them (over approximately a month) until the medication can be discontinued altogether.

Table 4. Concerns associated with long-term use of benzodiazepines[5]

• Over-sedation	• Poor sleep quality
• Drug interactions	• Depression and emotional blunting
• Cognitive difficulties	• Adverse effects (elderly, pregnancy)
• Neurodegeneration	• Drug abuse/dependence
• Falls and associated trauma	• Socio-economic costs with long-term use
• Reduced mobility and driving skills	

Conclusion

It is critical that the clinician identify whether the pain is acute or chronic, as this is the most important distinction to make upon assessment. Clinical management of patients with chronic functional pain requires the application of three principles - no opiates in the treatment regimen, reduction of hypersensitisation with appropriate medication (antidepressants and gabapentinoids), and ensuring that the patient sleeps well, even if initially managed pharmacologically. In combination with non-pharmacological treatments such as exercise, diet and stretching, a platform for success can be achieved.

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Tel: (021) 976 0485 | info@denovomedica.com