

## Chapter 32

# Chronic Pain Management in Vulnerable Populations

Michael B. Potter, MD, Yeva Johnson, MD, and Barry D. Zevin, MD

### Objectives

- Describe the disproportionate burden of chronic pain in medically vulnerable populations.
- Describe comorbidities that can present challenges in the management of chronic pain.
- Describe a general approach to the evaluation and management of chronic pain.
- Review common treatments, with a special focus on the role of opiates in the management of chronic pain.
- Suggest practical tools to improve the provision and documentation of safe and effective care for chronic pain.

Chronic pain usually serves little or no physiologic role and, in contrast to acute pain, it is perhaps best viewed as a disease state, not a symptom. Nine out of 10 US citizens aged 18 or older suffer pain at least once a month, 42% report experiencing pain every day, and nearly 1 in 10 adults lives in moderate to severe chronic pain.<sup>1,2</sup> Chronic pain affects both physical and mental health and leads people to rate their health as poor;<sup>3</sup> hence, its social and economic costs are considerable. Pain-related problems, particularly chronic pain management, are among the most challenging clinical problems confronted by clinicians.<sup>4</sup> This chapter reviews general principles of chronic pain management, emphasizing special circumstances confronted by clinicians caring for medically vulnerable populations.

## DISPROPORTIONATE BURDEN OF PAIN IN VULNERABLE POPULATIONS

Thuy Nguyen suffers from chronic back and neck pain following an assault that occurred 6 months prior to her visit. Because of the pain, she has lost her job as a cleaning person for a small business in her neighborhood. She has no medical insurance and her landlord is trying to evict her for nonpayment of rent.

The burden of moderate to severe chronic pain is highest among the poor, the uninsured, and those belonging to ethnic minorities.<sup>5,7</sup> Poor individuals may be more subject than others to hazardous and more physically demanding work or living conditions that may lead to physical injury. Chronic pain itself can create economic or social disparities by causing disability or loss of health insurance.<sup>8</sup> Thus, costly evaluations and treatments that could reduce or manage their symptoms are often unattainable. Even living in a poor neighborhood can make it more difficult to obtain some treatments; for example, pharmacies in low-income neighborhoods might be less likely to stock expensive pain

medications. Pain sufferers who are poor or uninsured may have difficulty understanding how to navigate the health care system to obtain proper treatment. Further, mental health conditions such as depression and anxiety are more prevalent among underserved medical populations and may further limit appropriate management of their pain.<sup>6</sup> Finally, personal interaction styles, discordant cultural beliefs, and stereotypes held by both clinicians and patients may impede communication that could lead to effective pain treatment.<sup>9</sup>

## CLASSIFICATIONS OF CHRONIC PAIN

Thuy does not speak English well, but she tells you that her pain is always there, and gets worse when she works. It is “sometimes tingling and sometimes aching.” The only abnormality on physical examination is that her neck muscles are tender to palpation.

The International Association for the Study of Pain (IASP) takes into account that pain is a combined sensory, emotional, and cognitive phenomenon, defining it as “an unpleasant sensory and emotional experience that we primarily associate with tissue damage or describe in terms of such damage, or both.” Pain becomes chronic when it persists beyond the time normally associated with healing from an acute or subacute injury (usually 4 to 12 weeks). It may be constant, intermittent, or related to physical activity. Most pain (acute or chronic) can be further classified as nociceptive, neuropathic, or mixed.<sup>10</sup> Chronic pain sufferers may experience many types of pain. Whatever its cause, pain can be thought of as including three distinct components: a sensory-discriminatory component (e.g., location, intensity, quality), a motivational-affective component (e.g., depression, anxiety), and a cognitive-evaluative component (e.g., thoughts concerning the cause and significance of the pain).<sup>1</sup>

*Nociceptive pain* (i.e., caused by or responding to a painful stimulus) is the most common type of chronic pain. Nociceptors can be found in skin, muscle, joints, and visceral tissue, and the pain is associated with an inflammatory response to tissue damage. The quality of the pain may be sharp, aching, or throbbing, and often worsens with movement or palpation. Common etiologies include arthritis, low back injuries, postoperative pain, or other physical trauma.

*Neuropathic pain* is caused by injury or dysfunction of the peripheral or central nervous system, often from conditions such as diabetic or HIV-related neuropathy, post-herpetic neuralgia, or spinal cord injury. In contrast to nociceptive pain, neuropathic pain tends to cause a sensation of burning or tingling, and it often appears to be severe in proportion to physical evidence of injury. Because of the limited healing potential of nerve tissue, neuropathic pain can be more challenging to treat than nociceptive pain.

## CHALLENGES IN DIAGNOSIS OF CHRONIC PAIN

Since the assault, Thuy has been unable to sleep and has spent most of her time alone. She is diagnosed with chronic musculoskeletal pain exacerbated by depression and posttraumatic stress disorder. Treatment for both her physical and emotional symptoms is necessary for her to feel better.

Clinicians must rely primarily on patient report of the presence pain and its severity. Although at once universal and subjective, pain varies in its expression both among and within individuals.<sup>7,11</sup> The response to pain may be histrionic or stoic, panicked or accepting, help-seeking or highly skeptical of help.<sup>12</sup> Assessing and classifying it can be challenging, but is a necessary step in selecting the right treatment. Often there are multiple potential causes of physical or emotional pain. Patients may have trouble communicating their subjective symptoms or may exaggerate the extent of their symptoms. Hence, a holistic understanding of the patient is often as important as defining pain according to traditional classifications.

Having the patient keep a pain diary (i.e., written record of the pain, when it occurs, how it feels and any drugs he or she is taking) can be helpful in making a more accurate diagnosis. In addition, the treatment of chronic pain is rarely amenable to a “quick fix.” Clinicians or patients must systematically test a variety of therapies to achieve successful pain control.

## **CHRONIC PAIN AND EMOTIONAL SUFFERING**

When added to the daily hardships of living in poverty, pain may make the simple act of living one’s life extremely difficult. Because many causes of pain are incurable, efforts to ameliorate these other hardships may make living with pain more bearable.

Pain can be modulated by a variety of external factors, including the effect of the pain on current life activities; learned behaviors and beliefs from family, cultural, or socioeconomic background; the meaning of the event that caused the pain; and underlying mental health disorders. Pain may lead to anxiety or depression, and primary anxiety and depression often amplify or even cause complaints of physical pain.<sup>13</sup>

## **CHRONIC PAIN AND SUBSTANCE ABUSE**

Chronic pain is common among patients with substance use disorders.<sup>14</sup> Injuries occur more commonly in people who are impaired by alcohol and drugs. Various substances also may cause neurophysiologic changes that make chronic pain more common. Alcohol abuse and chronic stimulant abuse can cause depression and anxiety that is associated with and may exacerbate pain. Finally, chronic opioid abuse may alter pain perception at the level of opiate receptors, lending some truth to the maxim that addicts “hurt worse.”

---

### **Common Pitfalls in the Care of Chronic Pain Patients**

- Because pain is a subjective experience, treatment goals are rarely achieved without a trusting relationship between clinician and patient.
- A narrow focus on the patient’s primary complaint may miss the big picture.
- Unrealistic expectations for symptom relief may interfere with setting and achieving realistic goals.
- Failure to understand the trial and error nature of pain treatment may cause patients and clinicians to give up on their goals prematurely.
- Failure to address associated mental health problems may impede progress in

managing chronic pain.

- Social and medical taboos may limit the selective and appropriate use of opioids for intractable chronic pain.
  - Limited specialty resources and/or failure to refer for specialty help early in the course of chronic pain may impede successful symptom management.
- 

## **GENERAL APPROACH TO THE DIAGNOSIS OF CHRONIC PAIN**

The first steps for the clinician are to obtain a complete history of events that triggered the pain, ascertain how the pain interferes with the patient's daily functioning and quality of life, determine the level of pain, and review prior diagnostic evaluations and treatments.

### **PAIN HISTORY**

Patient history should include questions about onset, quality, duration, and ameliorating or exacerbating factors. The level of pain should be assessed to understand what the patient is experiencing and measure the effectiveness of treatment. The most common assessment tool asks the patient to rate pain intensity on a scale from 0 to 10, in which 0 represents no pain and 10 represents unbearable pain. Pictorial scales have been used and are particularly useful for children, adults with low literacy, and elderly patients.<sup>15</sup> In addition, these scales are helpful for clarifying the relationship between pain and activity, the effectiveness of pain treatments, and the pattern of the patient's pain (Fig. 32-1). More elaborate and comprehensive pain assessment scales have been developed, for example, the McGill Pain Questionnaire. They take longer to administer and some patients who are cognitively impaired or poorly educated may find these difficult to complete.

### **FUNCTIONAL ASSESSMENT**

Common functional limitations caused by chronic pain include sleep disturbance, reduced mobility, sexual dysfunction, and decreased ability to perform well in social or work situations.<sup>1</sup> Failure to address functional limitations can lead to declining overall physical well-being, loss of important social and work relationships, and may trigger or exacerbate anxiety or depression. Evaluating work disability caused by pain and providing documentation may qualify a patient for entitlements that could improve his or her living situation. When caring for a patient with chronic pain, advocacy for disability benefits, vocational retraining, and other community services are all appropriate activities.

### **MENTAL HEALTH ASSESSMENT**

Symptoms and their associated distress are real to the patient, and should be taken seriously. Patients with chronic pain should be screened for affective mental health disorders (anxiety, depression, or other affective or psychological disorders), because

treatment of comorbid mental health problems is likely to result in better clinical outcomes.<sup>16</sup>

## **PHYSICAL EXAMINATION**

A thorough physical examination is essential to the evaluation, and should include observations of the patient's appearance, behavior and responses to physical maneuvers that might elicit or relieve pain. Specific attention should be given to the musculoskeletal and neurologic evaluation, as well as potential syndromes of referred pain. However, objective findings on physical examination should not be relied on solely to confirm or disprove the patient's subjective complaint of pain.

## **GENERAL APPROACH TO MANAGEMENT OF CHRONIC PAIN**

Thuy's depression improves with use of an antidepressant and participation in a support group for assault victims. She continues with daily neck pain. She has difficulty taking many first-line medications and asks for something a little stronger or safer (?)

The history also should elicit the patient's broader life experiences with pain. Careful attention may provide insight into what is needed for effective treatment. Pain associated with a psychologically traumatic event may require treatment for the emotional impact of that trauma or loss. Pain that interferes with work may respond to vocational retraining. Pain caused by an underlying chronic disease may improve through education or support groups that bolster coping skills.

A mutually agreed upon treatment plan should address four important factors: the underlying cause of pain, level of pain, functional limitations, and realistic treatment goals. The treatment plan should allow both the clinician and patient to make priorities among treatment strategies and assess the success of treatments that are chosen.

## **FORMING A THERAPEUTIC ALLIANCE**

The clinician should try to form a partnership with the patient (and his or her support people) that is marked by mutual trust and an understanding of the challenges that may lie ahead. Effective pain management—often requiring extensive evaluations and treatments that never fully eliminate pain or completely restore physical function—is one such challenge.

## **NONPHARMACOLOGIC THERAPIES FOR CHRONIC PAIN**

Patients often seek complementary therapies either before or concurrently with conventional medical treatments.<sup>17</sup> Clinicians should elicit information about these therapies and incorporate them into their treatment plan when appropriate, as well as protect patients from potentially harmful side-effects.

Various components of physical therapy, chiropractic or osteopathic manipulation, acupuncture, massage, and biofeedback are promising. Pain experts often advocate

cognitive behavioral approaches to chronic pain management.<sup>18</sup> Treatment may include individual or group psychotherapy, pharmacologic treatment, or combinations. Unfortunately, access to these therapies for vulnerable populations often is lacking because of economic and other barriers.

## **PHARMACOTHERAPY FOR CHRONIC PAIN**

The three-step analgesic ladder, developed by the World Health Organization for the treatment of cancer pain, often guides pharmacotherapy for chronic pain (Fig. 32-2). In this model, mild pain is best treated with analgesics such as acetaminophen or a nonsteroidal antiinflammatory drug (NSAID), with or without adjuvant analgesics. Opioids are reserved for more severe pain, or when there are contraindications to less potent medications. In clinical practice, acetaminophen or NSAIDs are more likely to be effective first- or second-line agents for nociceptive pain, whereas adjuvant analgesics such as anticonvulsants and antidepressants are more likely to be effective first- or second-line treatments for neuropathic pain. Opioids are effective for both nociceptive and neuropathic pain, but because of their side-effects and potential for diversion and abuse, usually they are reserved for moderate to severe pain and/or pain that is unresponsive to other therapies. In practice, combinations of these agents typically are used together and multiple empiric trials often are required to find the best treatment.

### **Adjuvant Analgesics**

Adjuvant analgesics include muscle relaxants, antidepressants, tricyclic antidepressants, anticonvulsants, and alternative medications such as glucosamine sulfate, topical analgesics, and intraarticular steroids. Muscle relaxants (e.g., baclofen, carisoprodol, cyclobenzaprine, and others) are used primarily as adjuvant therapy for musculoskeletal pain, especially back pain and muscle spasm of the neck and shoulders. The efficacy of these agents usually is modest, and they can be sedating or habit forming.<sup>19</sup> For chronic osteoarthritis pain of the knee and hip, glucosamine sulfate appears to be as effective for some patients, with potentially lower risk of side-effects than NSAIDs.<sup>20</sup> Systemic corticosteroids can successfully treat pain resulting from some inflammatory disorders and cancer-related syndromes, but their use for chronic pain usually is limited by the risk of serious side-effects. Intraarticular glucocorticoid injections with or without hyaluronic acid also can be offered for arthritis pain, although relief usually is only temporary.<sup>21,22</sup> For inflammatory arthritis, potent disease-modifying therapies are now available, and early referral for treatment may reduce pain and improve other disease-related outcomes.<sup>23</sup> Tricyclic antidepressants and anticonvulsants frequently are used for neuropathic pain.<sup>24</sup> The analgesic effect of tricyclic antidepressants is independent of their antidepressant effect, although their antidepressant effect may be helpful in patients with comorbid depression. Antidepressants acting on noradrenergic neurotransmitters are thought to have additive effects on the treatment of pain. Selective serotonin reuptake inhibitors do not possess these properties, but they can be effective in managing pain-associated depression with relatively fewer side-effects. Topical therapies such as capsaicin, lidocaine patch, and others may be useful for certain localized pain syndromes, such as postherpetic neuralgia or osteoarthritis. Long-term use of benzodiazepines

usually should be avoided because of the potential risk of adverse effects. A serial trial of different adjuvant therapies is often required.

Some states have passed laws that allow for the use of marijuana for chronic pain.<sup>25</sup> There are plausible mechanisms by which cannabinoids might produce analgesia.<sup>26</sup> However, given the limited data on the efficacy and safety of marijuana and the persistent legal controversies concerning its use, it is unlikely to play a central role for most patients.

## **OPIOIDS**

Opioids are effective treatment for nociceptive or neuropathic pain, as well as pain caused by mixed etiologies, such as cancer.<sup>27</sup> Short-acting opioid preparations can be useful for treating pain that is sporadic or intermittent. Typically, short-acting opioid preparations containing acetaminophen are used for this purpose. Tramadol is a short-acting low-potency opioid with the added benefit of inhibiting the reuptake of serotonin and norepinephrine, although it also has its own unique drug safety issues.<sup>28</sup>

For constant pain, once a stable daily opioid requirement has been established using short-acting opioids, a switch can be made to longer-acting opioids (e.g., sustained release morphine, methadone, fentanyl patch). Because of the unpredictable half-lives of their metabolites, long-acting opioids should be introduced at low doses and tapered up gradually over several days or weeks. Simultaneously, short-acting opioids should be tapered down, and reserved for occasional or episodic breakthrough pain.

### **Opioid Side-Effects**

Constipation is probably the most common adverse effect of opioid therapy, and may lead to bowel obstruction if not treated proactively. When opioids are prescribed, a simultaneous prescription for a gentle laxative, such as senna, in combination with a stool softener, such as docusate sodium, should be part of the regimen. However, fiber-based bowel preparations should be avoided as a sole treatment for constipation in these patients, because they may increase the bulkiness of stools without promoting bowel motility.

Nausea and vomiting also are common opioid side-effects, although these usually can be managed by titrating opioid doses slowly and coadministering antiemetics such as metoclopramide or promethazine when needed.

Sedation is another common side-effect. However, this symptom usually dissipates over time and most patients on a stable dose of opioids are able to engage in their usual activities, including driving or operating machinery after adjusting to a stable dose.<sup>29</sup> Pruritus is a less common side-effect, but when it occurs it can be effectively managed with antihistamines.

Respiratory depression is very uncommon when opioids are begun at low doses and titrated slowly. Overdose or death most commonly occur in the setting of interaction with other sedating medications or alcohol, and patients should be educated accordingly.<sup>30</sup>

Clinicians should be aware of equianalgesic doses of the most commonly used opioids to avoid unwanted side-effects or complications of opioids. At higher doses, opioids may have neurotoxic effects such as hyperalgesia or delirium. Therefore, clinicians should exercise caution when patients seem to require very high doses of opioids to control their pain.<sup>31</sup> When available, a pain specialist should be consulted.

## **Special Considerations When Prescribing Opioids**

Many physicians refuse to prescribe potent or long-acting opioids for chronic nonmalignant pain under any circumstances.<sup>32</sup> An understanding of the true risks and potential benefits of opioids in selected patients with intractable pain should enable physicians to overcome ill-founded barriers to the use of opioids for legitimate pain relief.

For example, physicians often cite fear of medication tolerance or physical dependence as a reason not to prescribe opioids for chronic pain.<sup>32,33</sup> Both effects can certainly result when opioids are dosed around the clock. However, these effects can often be managed safely and should not be a contraindication to the use of opioids in patients who have significant pain that is refractory to other treatments.

Medication tolerance is a state in which exposure to a drug induces changes that result in a diminution of one or more of the drug's effects over time. Most chronic pain patients can be managed on stable doses for months or years without the development of tolerance. Although tolerance may occur, it is not necessarily an indication that continued use of opioids is contraindicated. In addition, diminishing pain relief may be an indication that the underlying disease process has gotten worse, rather than secondary to the development of tolerance. Tolerance also raises the doses of opiates required to achieve adequate pain control in the treatment of acute pain for those who use opiates chronically, be it for treatment of chronic pain, heroin, or methadone use.

Physical dependence occurs when a withdrawal syndrome can be produced by abrupt cessation or rapid dose reduction of a drug. Opioid withdrawal can be very unpleasant for patients, but usually it can be avoided by tapering opioids slowly when indicated, and it is not a contraindication to the use of opioids in chronic pain patients.

## **Addiction, Diversion, and Pseudoaddiction**

*Addiction* is a set of behaviors distinguished by persistent craving of a drug, compulsive use, or continued use of a substance or drug despite evidence of harm. Addiction or diversion should be suspected in patients who are unable to take opioids according to an agreed-upon schedule, frequently report lost or stolen prescriptions, or seek opioid prescriptions from multiple doctors. Patients with a history of past or current substance abuse may legitimately warrant the use of opioids for chronic pain, but they also require careful evaluation of their pain syndrome, history with prescribed opioids, and current addiction status. An evaluation by an addiction specialist is very desirable.

*Diversion* of prescription opioids is an important law enforcement and public health problem in many communities. From a medical point of view, the greatest fear is that potent opioids will be taken by nontolerant persons, causing overdose or death.

Drug-seeking behavior also may result from an iatrogenic condition termed *pseudoaddiction*.<sup>34</sup> Pseudoaddictive behaviors can occur when a patient with unrelieved pain becomes focused on obtaining medications on time or even turns to the use of illicit drugs when he or she cannot receive enough pain medication from the physician. Pseudoaddiction can be distinguished from true addiction in that it resolves when the pain is effectively relieved.

Chronic pain patients who have no prior history of substance abuse generally have a much lower potential for addiction. Clinicians should make sure that patients understand the relatively low potential for abuse in this situation, because a patient's fear of addiction may prevent him or her from accepting opioids even when they could be beneficial.

## **Preventing Abuse or Diversion**

When prescribing opioids, a relatively simple set of clinical procedures may reduce the risk of unwittingly contributing to drug abuse or diversion.<sup>35</sup> Begin by explaining to patients the potential risks and benefits of opioid medications, and setting out clear guidelines and consequences for the use or misuse chronic opioid prescriptions. Opioid prescriptions should be logged and documented in a central location in the clinical chart so that clinicians and staff who work together can easily monitor the amount of drug that is prescribed or dispensed. Patients should be seen frequently, especially when opioids are initiated, to monitor efficacy and side-effects. Avoid prescribing opioids to patients without complete or current clinical information (e.g., over the telephone or in on-call situations). Establish a single clinic or clinician as the sole prescriber of opioids by setting and communicating clear rules from the outset with the patient and other clinicians caring for the patient. Although pain medicine, addiction medicine, and subspecialty resources may be limited in many communities, clinicians should not hesitate to pursue consultation with a specialist as a precondition to the continued prescription of opioids, especially for patients with aberrant behaviors or suspected drug abuse. Some states now offer clinical databases on patients prescribed controlled substances that can be consulted if a clinician suspects unauthorized use of multiple prescribers or "doctor shopping."

Mandatory random urine drug testing also can be a useful tool for monitoring both the presence of unexpected drugs of abuse and the absence of prescribed opioids.<sup>36</sup>

Discussing the consequences of unexpected positive results before they occur is useful. For example, continued prescription of opiates might be made contingent on the patient entering drug use treatment. When performing urine drug testing, it is important to remember that rapid immunoassays do not reliably detect synthetic or semisynthetic opioids. Therefore, in addition to sending urine for a rapid urine immunoassay to screen for unexpected substances of abuse, clinicians should simultaneously order specific urine

testing for the drug in question using gas chromatography, mass spectroscopy, or high-performance liquid chromatography.

It is important to understand that unexpected results cannot always be interpreted as abuse or diversion. For example, certain over-the-counter medications may lead to false-positive results for amphetamines on immunoassays, and unexpectedly negative results on specific drug testing may result from an improperly high threshold for detection in the laboratory assay. Therefore, to avoid improper interpretation of results, unexpected results should always be discussed both with the laboratory that performs the test and the patient.

Finally, many clinics incorporate their protocols for controlled substances into a written agreement that is signed by both the clinician and patient. Excellent examples of written agreements are available on the Internet (Table 32-1).<sup>37</sup>

## **Medicolegal Issues and Documentation Requirements**

Many physicians are reluctant to prescribe opioids because of rare but well-publicized cases of inappropriate investigations by the US Drug Enforcement Agency. At the same time, there also has been a public outcry about the undertreatment of pain triggered by patients who have successfully sought damages for inadequate pain treatment through the courts. In 1997, California became the first state to legally enact a “Pain Patient’s Bill of Rights.” These opposing forces have heightened the anxiety that physicians may feel about the use of opioids for chronic pain.

In 1998, in order to encourage the appropriate use of opioids when indicated, the Federation of State Medical Boards published guidelines for the use of controlled substances that recently have been updated and are now endorsed by most state medical boards.<sup>38</sup> The guidelines recommend chart documentation of a thorough patient evaluation and treatment plan; informed consent and agreement for treatment; all treatments offered or provided (including date, type, dosage, and quantity prescribed); consultation with specialists when needed; and periodic review of progress toward treatment goals.

## **CONCLUSION**

Four months later, Thuy continues to have some bad days, but these are helped by hydrocodone prescribed to use when she needs it. Acupuncture, support group meetings, and fluoxetine also have helped and she is working again.

Few primary care clinicians seem to enjoy working with patients in chronic pain.<sup>32</sup> Yet, clinicians have an ethical responsibility to provide compassionate and appropriate care to their patients with chronic pain, even and especially when access to specialty resources or expensive treatments is limited. Well-informed clinicians can contribute greatly to the amelioration of chronic pain among their patients. On a broader level, clinicians can be important advocates for appropriate pain management resources within health care organizations that provide services to medically underserved communities.

## **KEY CONCEPTS**

- Ask your patients about pain or you may never know about it.
- Understand the context and meaning of pain for the patient, and diagnose comorbid conditions such as depression or substance abuse.
- Create a goal-oriented treatment plan to address the underlying cause of pain, the level of pain, and the functional limitations caused by the pain.
- Periodically review the treatment plan to make sure it remains realistic and relevant to patient goals.
- Treatment of chronic pain is often a trial-and-error process.
- An understanding of the potential risks and benefits of opioid therapy can help primary care clinicians rationally select and safely monitor patients who may benefit from them.
- Opioids can be prescribed to patients with intractable pain and a history of substance abuse, provided that close monitoring and specialty evaluation are included in the treatment plan.
- Explicit office policies, written agreements, prescription drug logs, and random urine drug testing can support clinicians and patients in adhering to treatment guidelines.
- At every visit in which opioids are prescribed, document the five As: analgesia, activities of daily living, adverse effects, aberrant behaviors, and affective disorders.

### **CORE COMPETENCY**

#### Management of Chronic Pain

- Ask about pain. Use a scale, monitor treatment effectiveness
- Successful pain management requires several issues to be addressed simultaneously:
  - The underlying cause of pain
  - The pain itself
  - Functional limitations caused by the pain
  - Comorbidities such as depression or substance abuse that make treatment more complex
  - Contextual issues such as employment, insurance, cultural beliefs, and social supports that may influence the ability to obtain appropriate care
- A therapeutic alliance is especially important.
  - Trust, realistic expectations and mutual goals are important
- Treatment of chronic pain often involves trial and error.
  - Distinguish between nociceptive, neuropathic, or mixed etiologies of pain.

Base treatment on etiology of pain.

Use adjuvant treatments.

Consider specialty consultation.

- Opioids can be effective medication for chronic pain, but must be prescribed with care.

- Manage side-effects.

Constipation may be prevented with docusate and senna.

Itching may be prevented or treated with antihistamines.

Nausea can be treated with antiemetics or by changing to a different opioid.

Watch for tolerance and dependence when prescribing opioids—but recognize that these are not contraindications to use!

- Consider written agreements and random urine drug testing.

- Monitor pain.

- Use equianalgesic dosing when converting medications.

- Address and document the five As at each clinical visit:

- Analgesia

- Activities of daily living

- Adverse effects

- Aberrant behaviors

- Affective disorders

## **DISCUSSION QUESTIONS**

1. Discuss the reasons why chronic pain is more prevalent in medically underserved populations.
2. What can you do in your own practice to make it easier for your patients to talk to you about pain?
3. What practice tools can help you manage pain once it is recognized?
4. If Thuy's pain were more severe or persistent, would you have prescribed long-acting opioids? Why or why not? If so, how would you have monitored her care?

## **RESOURCES**

<http://www.painmed.org>

The American Academy of Pain Medicine

<http://www.ampainsoc.org>

American Pain Society

<http://www.asam.org>

American Society of Addiction Medicine

<http://www.medsch.wisc.edu/painpolicy/>

Pain and Policy Studies Group

## REFERENCES

1. American Medical Association Module 1. *Pain management: Pathophysiology of pain and pain assessment*. Accessed December 11, 2005. Available at: [www.ama-cmeonline.com/pain\\_mgmt/module01/pdf/ama\\_painmgmt\\_m1.pdf](http://www.ama-cmeonline.com/pain_mgmt/module01/pdf/ama_painmgmt_m1.pdf)
2. Gureje O, Von Korff M, Simon GE, et al. Persistent pain and well-being: A World Health Organization Study in Primary Care. *JAMA* 1998;280(13):1142.
3. Mantyselka PT, Turunen JH, Ahonen RS, et al. Chronic pain and poor self-rated health. *JAMA* 2003;290:2435–2442.
4. Meldrum ML. A capsule history of pain management. *JAMA* 2003;290(18):2470–2475.
5. Sturm R, Gresenz CR. Relations of income inequality and family income to chronic medical conditions and mental health disorders: National survey. *BMJ* 2002;324:20–23.
6. Mauksch LB, Katon WJ, Russo J, et al. The content of a low-income, uninsured primary care population: Including the patient agenda. *J Am Board Fam Pract* 2003; 16:278–289.
7. Green CR, Anderson KO, Baker TA, et al. The unequal burden of pain: Confronting racial and ethnic disparities in pain. *Pain Med* 2003;4:277–294.
8. Stewart WF, Ricci JA, Chee E, et al. Lost productive time and cost due to common pain conditions in the US workforce. *JAMA* 2003;290:2443–2454.
9. Smedley BD, Stith AY, Nelson AR. *Unequal treatment: Confronting racial and ethnic disparities in health care*. Washington, DC: National Academy Press, 2002:336–354.
10. Parrot TE. Pain management in primary-care medical practice. In: Tollison C, Satterthwaite J, Tollison J, eds. *Practical pain management*. Philadelphia: Lippincott Williams & Wilkins, 2002:729–747.
11. Litcher-Kelly L, Stone AA, Broderick JE, et al. Associations among pain intensity, sensory characteristics, affective qualities, and activity limitations in patients with chronic pain: A momentary, within-person perspective. *J Pain* 2004;5: 433–439.
12. Bertakis KD, Azari R, Callahan EJ. Patient pain in primary care: Factors that influence physician diagnosis. *Ann Fam Med* 2004;2:224–230.
13. Dersh J, Polatin PB, Gatchel RJ. Chronic pain and psychopathology: Research findings and theoretical considerations. *Psychosom Med* 2002;64:773–786.

14. Savage SR. Assessment for addiction in pain-treatment settings. *Clin J Pain* 2002;18(4 Suppl):S28–38.
15. Brunton S. Approach to assessment and diagnosis of chronic pain. *J Fam Pract* 2004;53(10 Suppl):S3–10.
16. Greco T, Eckert G, Kroenke K. The outcome of physical symptoms with treatment of depression. *J Gen Intern Med* 2004;19:813–818.
17. Barnes PM, Powell-Griner E, McFann K, et al. Complementary and alternative medicine use among adults: United States, 2002. *Adv Data* 2004;343:1–19.
18. Turk DC. Cognitive-behavioral approach to the treatment of chronic pain patients. *Reg Anesth Pain Med* 2003; 28:573–579.
19. van Tulder MW, Touray T, Furlan AD, et al. Muscle relaxants for non-specific low back pain. *Cochrane Database Syst Rev* 2003;CD004252.
20. Towheed T, Maxwell L, Anastassiades T, et al. Glucosamine therapy for treating osteoarthritis. *Cochrane Database Syst Rev* 2005;CD002946.
21. Gossec L, Dougados M. Intra-articular treatments in osteoarthritis: From the symptomatic to the structure modifying. *Ann Rheum Dis* 2004;63:478–482.
22. Arroll B, Goodyear-Smith F. Corticosteroid injections for osteoarthritis of the knee: Meta-analysis. *BMJ* 2004; 328:869.
23. Simon LS. The treatment of rheumatoid arthritis. *Best Pract Res Clin Rheumatol* 2004;18:507–538.
24. Collins SL, Moore RA, McQuay HJ, et al. Antidepressants and anticonvulsants for diabetic neuropathy and postherpetic neuralgia: A quantitative systematic review. *J Pain Symptom Manage* 2000;20:449–458.
25. Pacula RL, Chriqui JF, Reichmann DA, et al. State medical marijuana laws: Understanding the laws and their limitations. *J Public Health Policy* 2002;23(4):413–439.
26. Ibrahim MM, Porreca F, Lai J, et al. CB2 cannabinoid receptor activation produces antinociception by stimulating peripheral release of endogenous opioids. *Proc Natl Acad Sci USA* 2005;102:3093–3098.
27. Bloodworth D. Issues in opioid management. *Am J Phys Med Rehabil* 2005;84(3 Suppl):S42–55.
28. Grond S, Sablotzki A. Clinical pharmacology of tramadol. *Clin Pharmacokinet* 2004;43:879–923.
29. Fishbain DA, Cutler RB, Rosomoff HL, et al. Are opioid-dependent/tolerant patients impaired in driving-related skills? A structured evidence-based review. *J Pain Symptom Manage* 2003;25:559–577.

30. Oliver P, Keen J. Concomitant drugs of misuse and drug using behaviours associated with fatal opiate-related poisonings in Sheffield, UK, 1997–2000. *Addiction* 2003; 98:191–197.
31. Ballantyne JC, Mao J. Opioid therapy for chronic pain. *N Engl J Med* 2003;349:1943–1953.
32. Potter M, Schafer S, Gonzalez-Mendez E, et al. Opioids for chronic nonmalignant pain. Attitudes and practices of primary care physicians in the UCSF/Stanford Collaborative Research Network. University of California, San Francisco. *J Fam Pract* 2001;50:145–151.
33. Heit HA. Addiction, physical dependence, and tolerance: Precise definitions to help clinicians evaluate and treat chronic pain patients. *J Pain Palliat Care Pharmacother* 2003;17:15–29.
34. Kirsh KL, Whitcomb LA, Donaghy K, et al. Abuse and addiction issues in medically ill patients with pain: Attempts at clarification of terms and empirical study. *Clin J Pain* 2002;18(4 Suppl):S52–60.
35. Potter M. Chronic pain management: Practical tips and guidelines for primary care. *Adv Stud Med* 2004;4:31–40.
36. Heit HA, Gourlay DL. Urine drug testing in pain medicine. *J Pain Symptom Manage* 2004;27:260–267.
37. Teichman PG. A tool for safely treating chronic pain. *Fam Pract Manag* 2001;8:47–49.
38. California Pain Patient Bill of Rights. California Senate Bill No 402. Accessed March 5, 2005. Available at: [http://www.paincare.org/pain\\_management/advocacy/ca\\_bill.html](http://www.paincare.org/pain_management/advocacy/ca_bill.html)

**Figure 32-1. A.** Faces pain scale. This scale presents pictures of six to eight different facial expressions depicting a range of emotions. From: Wong DL, Hockenberry-Eaton M, Wilson D, et al. Wong’s essentials of pediatric nursing, 6th ed. St. Louis: Mosby, 2001:1301. **B.** Visual analog scale (VAS). The VAS is a validated approach to pain measurement. The most common VAS consists of a 10-cm line with one end labeled “no pain” and the other end labeled “worst pain imaginable.” The patient marks the line at the point that best describes the pain intensity. The length of the line to the patient’s mark is measured and recorded in millimeters. **C.** Numeric rating scale (NRS). The NRS is simple to use and is one of the most common approaches for quantifying pain. Patients indicate their pain intensity on a scale of 0 to 10, with 0 indicating no pain and 10 the worst pain imaginable. This scale is more sensitive to treatment induced changes than the VRS. The NRS can be a helpful technique for clarifying the relationship between pain and activity, the effectiveness of pain treatments, and the pattern of the patient’s *pain*. Adapted from: American Medical Association Module 1. Pain management: Pathophysiology of pain and pain assessment. Accessed December 11, 2005. Available at: [www.ama-cmeonline.com/pain\\_mgmt/module01/pdf/ama\\_painmgmt\\_m1.pdf](http://www.ama-cmeonline.com/pain_mgmt/module01/pdf/ama_painmgmt_m1.pdf)

**Figure 32-2.** World Health Organization pain ladder. To maintain freedom from pain, drugs should be given “by the clock;” that is, every 3 to 6 hours rather than on demand. This multiple-step approach of administering the right drug in the right dose at the right time is inexpensive and 80% to 90% effective. Step 1: Nonpharmacologic treatments: massage, physical therapy, behavioral modification. Step 2: Nonopiate medications (pain persisting or increasing): Acetaminophen, acetylsalicylic acid (ASA); nonsteroidal antiinflammatory drugs (NSAIDs), tricyclic antidepressants, anticonvulsants, topical preparations. Step 3: Less potent opiates (for mild or moderate pain): codeine, oxycodone (least invasive administration—oral or transdermal—with appropriate agents to control and minimize side-effects). Step 4: More potent opiates (for moderate or severe pain): fentanyl, morphine, methadone, oxycodone (via intravenous route if necessary). Adapted from: *World Health Organization analgesic ladder: Cancer pain relief*, 2nd ed. Geneva: World Health Organization, 1996.