Pain management: Focus on function

American Pharmacists Association

The evolving management of chronic pain

It is well documented that chronic pain is a common condition that can have a profound impact on patients' lives. The National Center for Health Statistics reported in 2006 that chronic pain affects 26% of individuals in the United States.[1] Another survey of a nationally representative sample found that approximately one-third of those reporting frequent or persistent pain described their pain as disabling, defined as being severe and having a high impact on functions of daily life.[2] The annual cost of chronic pain in the United States was estimated to be $100 billion in 1998.[3] However, more recent estimates of chronic pain conditions such as low back pain and arthritis suggest that the overall cost could be much higher.[4,5]

During the previous 2 decades, awareness has increased among health care providers that good pain management is an important component of ethically managing patients with chronic pain. Further, pain management was focused on reducing pain as a strategy to improve patient function. The increased awareness about pain management practices was accompanied by increased prescribing of opioids for the treatment of chronic nonmalignant pain.

As the appropriate use of opioids gained an accepted role in the long-term treatment of chronic nonmalignant pain, inappropriate use also increased. The increased prescribing of opioids for the management of pain during the previous 2 decades has been accompanied by an increased incidence of opioid misuse, abuse, and mortality.[6]

Advisory board: Kathryn Hahn, PharmD, CPE, DAAPM, Affiliate Faculty, College of Pharmacy, Oregon State University, Corvallis, OR, and Manager, Bi-Mart Pharmacy, Springfield, OR. Daniel Kennedy, BSPharm, FAPhA, Outpatient Pharmacy Operations Manager, Oregon Health & Science University, Portland.

Development: This home-study continuing pharmacy education (CPE) activity was developed by the American Pharmacists Association.

Funding: This activity is supported by independent educational grants from Cephalon, Endo Pharmaceuticals Inc., and Purdue Pharma LP.

This article is based on the educational session Pain Management: Focus on Function, presented by Kathryn Hahn, PharmD, CPE, DAAPM, and Daniel Kennedy, BSPharm, FAPhA, at APhA2011, the American Pharmacists Association Annual Meeting & Exposition.

This publication was prepared by Judy Crespi Lofton, MS on behalf of the American Pharmacists Association.

Accreditation information

Provider: American Pharmacists Association
Target audience: Pharmacists
Release date: August 15, 2011
Expiration date: March 26, 2014
Learning level: 2
ACPE number: 202-000-11-058-H04-P
CPE credit hours: 2.0 hours (0.2 CEUs)

Fee: There is no fee associated with this activity for members of the American Pharmacists Association. There is a $15 fee for nonmembers.

The American Pharmacists Association is accredited b the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education (CPE). The ACPE Universal Activity Number assigned to this activity by the accredited provider is 202-000-11-058-H04-P.

Disclosure: Dr. Hahn has a financial interest or other relationship (advisory board, speakers' bureau) with the following manufacturers: King, Pfizer, Meda, Zogenix, Covidien, and Pricara. Mr. Kennedy, Ms. Crespi-Lofton, and APhA's editorial staff declare no conflicts of interest of financial interests in any product or service mentioned in this program, including grants, employment, gifts, stock holdings, and honoraria.

If you participated in the live offering of this activity with the same ACPE number held on March 26, 2011, at APhA2011, the American Pharmacists Association Annual Meeting & Exposition, you are not eligible to receive credit for this activity.

Learning objectives

At the completion of this application-based activity, the pharmacist will be able to:

- Cite statistics related to chronic pain and opioid use, misuse, and abuse.
- Assess whether a patient is an appropriate candidate for chronic opioid therapy for nonmalignant pain.
- Describe the importance of functional treatment goals for patients with chronic nonmalignant pain.
- Assess the impact of chronic opioid therapy in patients with nonmalignant pain.
- Develop a strategy for managing a patient whose function declines while receiving chronic opioid therapy for nonmalignant pain.

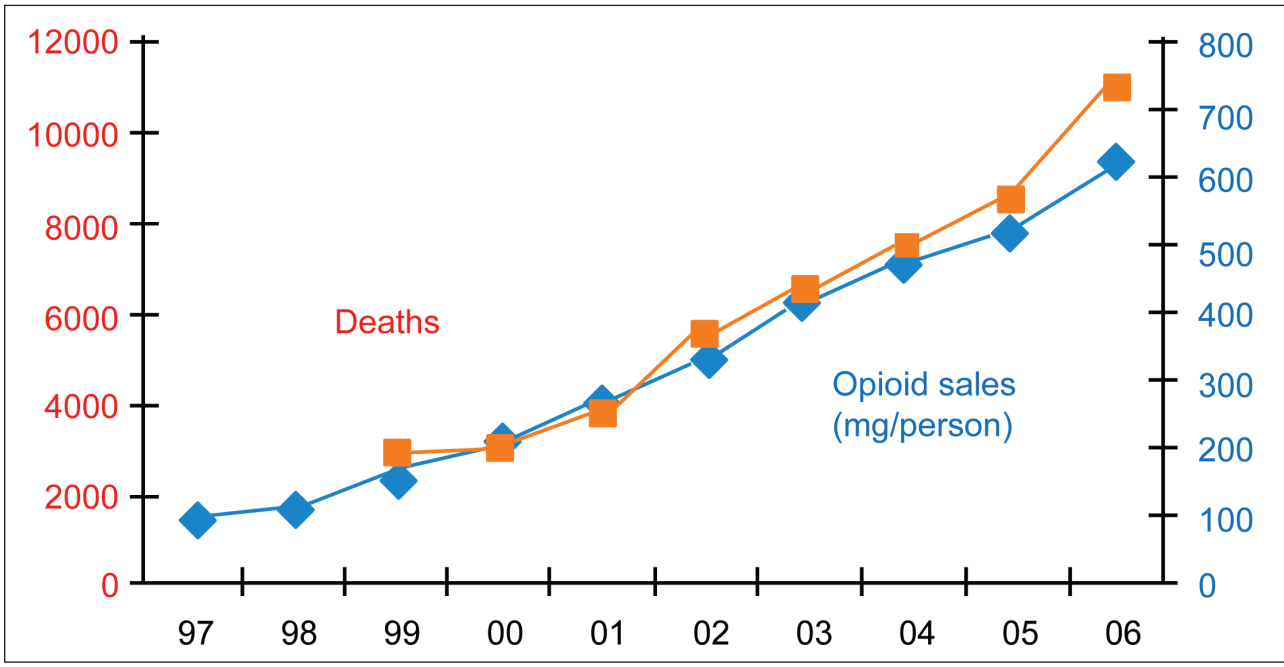

Figure 1. Unintentional overdose deaths involving opioid analgesics
Source: Reference 8.

The number of individuals who began abusing prescription drugs increased fivefold from 1985 to 2001.[7] Looked at another way, in 2002, opioid analgesics accounted for 9.9% of all drug abuse, up from 5.8% in 1997.[7] Further, the rate of unintentional overdose deaths has increased along with the prescribing of opioids (Figure 1).[8] More than 27,600 deaths from unintentional drug poisoning occurred in the United States in 2007. Opioid pain medications (such as oxycodone and methadone) were involved in more than one-half of these deaths.[8]

The 2008 National Survey on Drug Use and Health reported that 1.9% of the population (~4.7 million individuals) reported nonmedical use of pain relievers in the previous month.[9] Of these individuals, 56% reported receiving the medication free from a friend or relative. Another 9% bought the medication from a friend or relative, and 5% took it from a friend or relative without asking.[9] Only 18% said they received the medications from a physician, and 4% reported purchasing the medications from a drug dealer or other stranger. Thus, misuse and abuse by patients, as well as diversion to other individuals, have become key issues to consider when opioids are prescribed.

Preactivity questions

1. When should a patient care agreement be implemented?

a. Prior to initiating opioid therapy in a patient with chronic nonmalignant pain
b. After a patient has repeatedly been nonadherent to treatment recommendations
c When providers harbor suspicions that patients are misusing or abusing opioids
d. At the first follow-up visit, when making a determination regarding whether an opioid trial has been effective

2. Which of the following is an example of a functional treatment goal?

a. Reducing the amount of pain experienced while walking
b. Reduce the level of pain when walking to less than 5 on a 0- to 10-point scale
c. Walking for 15 minutes three times a week
d. Reducing the amount of medication needed to walk for 15 minutes

3. Which of the following scenarios represents a positive outcome of opioid therapy?

a. A patient who is fired from his or her job and develops troubled family relationships during the course of therapy but reports a reduction in pain
b. A patient whose pain is reduced from severe to mild but continues to sleep most of the day
c. A patient who reports a reduction in pain from moderate to mild but who has missed all of his or her physical therapy visits
d. A patient whose pain level remains similar but has returned to work and resumed performance of all activities of daily living

Today, general consensus exists that opioid therapy may be appropriate for severe acute pain and for moderate to severe pain related to cancer, HIV/AIDS, and advanced medical illness of any type.[10] However, the role of opioid therapy for chronic nonmalignant pain remains less clear. A substantial body of evidence has demonstrated that long-term opioid therapy can be a safe and effective component of a treatment plan for patients with chronic nonmalignant pain.[11] However, monitoring patients using opioids for aberrant behaviors, including misuse, abuse, addiction, and diversion, is essential.

National guidelines state that a trial of opioid therapy may be considered for patients with moderate to severe nonmalignant pain, but the decision to proceed must be guided by the answers to the following questions[12]:

- What is conventional practice/does this represent standard of care?
- Are there other therapies with an equal or better therapeutic index?
- What is the risk of adverse drug effects?
- What is the risk of drug abuse, addiction, or diversion?

Assessing and managing risks when prescribing opioids

Careful attention to the management of patients with chronic nonmalignant pain is necessary to ensure that the patient achieves desirable outcomes. Although opioid risk includes adverse effects such as constipation and respiratory depression, in general, the risks of greatest concern have been opioid diversion, misuse, abuse, and addiction.

The universal precautions approach

Because reliably determining which patients are at risk for misuse, abuse, and diversion of opioids is difficult, a "universal precautions" approach has been recommended for the assessment and ongoing management of patients receiving chronic opioid therapy. The universal precautions concept was originally developed to manage blood-borne infectious diseases (e.g., HIV), for which clinicians cannot readily identify patients who will require more stringent procedures. Therefore, all patients are treated under the assumption that they could have a blood-borne disease. In pain medicine, the universal precautions approach assumes that all patients have some risk for using opioids inappropriately; therefore, the risk of opioid misuse, abuse, and diversion must be considered for all patients. There are 10 steps to this approach[13]:

- Make a diagnosis and treat the underlying condition (if possible)
- Perform a psychological assessment, including assessment of addictive disorders
- Obtain informed consent
- Develop a treatment agreement
- Assess pain level and patient function before and after initiating opioids
- Perform an appropriate opioid trial with or without adjuvant analgesics
- Regularly reassess the pain score and level of function
- Regularly reassess analgesia, activity, adverse effects, and aberrant behavior
- Periodically review the diagnosis and comorbid conditions, including addictive disorders
- Carefully document initial and follow-up evaluations

Using the universal precautions approach, patients should be assessed and stratified according to risk (low, moderate, or high). Patients then are managed based on their risk category. In addition, this approach requires that providers triage patients based on personal and family history of substance abuse or major psychiatric disorder. Patients are categorized as having low, moderate, or high risk and are managed accordingly.[13]

- Category 1 (low risk): Patients have no personal or family history of substance abuse, no major or untreated psychological disorder, and are suitable for treatment by the primary care provider.
- Category 2 (moderate risk): Patients have a history of treated substance abuse, substantial family history of substance abuse, and/or past or comorbid psychological disorder. These patients are not actively addicted, but they are at higher risk for addiction and should be comanaged by a primary care provider and a specialist.
- Category 3 (high risk): These patients are the most difficult to manage because of their active substance abuse and/or addiction; they also may have a major untreated psychological disorder and pose a considerable risk to themselves and the health care practitioner. If such a patient becomes completely sober for at least 6 months, opioid therapy may be an option. However, if possible, the patient should be managed by a specialist rather than a primary care provider, and the patient will require more frequent follow-up visits.

A number of tools are available for assessing opioid risk. Tools most commonly used by pain management centers include the Screener and Opioid Assessment for Patients with Pain; the Diagnosis, Intractability, Risk, and Efficacy inventory; and/or the Opioid Risk Tool (ORT).[14,15]

The agreement

After a comprehensive assessment has been performed, the practitioner can weigh the anticipated positive effects of the medication against the potential risks that are identified during the assessment. If the decision is made to treat the patient with an opioid, it should be considered a trial of therapy. For the opioid-naive patient, a 1-month trial should provide a sense of whether the pain condition is opioid responsive.

During the initial trial, the practitioner should assess the impact of opioid therapy to determine whether the patient is experiencing adverse events, is adherent, is displaying any aberrant behaviors, and whether the opioid is improving the patient's overall function. Although the impact on pain level can be considered, the patient's function should be the determinant of whether an opioid is beneficial in chronic pain.

As noted in the universal precautions approach, a treatment agreement is a recommended component of the treat-

ment plan. In 2009, the American Pain Society and American Academy of Pain Medicine released guidelines that recommended the use of patient care agreements for patients with chronic nonmaligant pain using opioids. Such agreements include patient history, goals of therapy, treatment plan, and other treatments.[16] The agreement may specify other requirements for continued therapy such as urine drug screens, pill counts, and various other types of objective evidence.

In addition, the patient care agreement should establish ground rules for opioid prescriptions. Recommended requirements include[12]:

- No early refills.
- No pain medications from other clinics or emergency departments.
- No refills by phone.
- All controlled substances filled at one pharmacy.

The use of exit strategies also should be explained in the agreement. Therefore, if the patient does not achieve treatment goals or has an undesirable response to opioid treatment, the agreement clearly states how the situation will be handled.

By establishing open communication and expectations at the beginning of treatment, patient agreements can be very helpful in establishing a collaborative physician–patient relationship. Properly used, agreements may circumvent the adversarial atmosphere that surrounds much chronic pain care. Patients should be educated that periodic monitoring is a required component of good patient care rather than punishment for expected negative behavior. Further, agreements also can help avoid time-intensive patient management problems later in treatment.[12] If patients have a suboptimal response to treatment, then they already know what to expect and unwelcome surprises at treatment visits can be avoided.

The paradigm shift: Establishing functional treatment goals

In recent years, a paradigm shift has occurred in the management of chronic nonmalignant pain. A decade ago, pain management was focused on the level of pain a patient experienced, based on a subjective pain rating scale. The goal of treatment was to reduce the patient's subjective pain rating. Today, experts generally agree that good pain management must focus on patient function rather than relying solely on subjective reports of pain. An important benefit of this approach is that treatment goals are objective and independently verifiable. Further, because addiction is associated with dysfunction, a function-based approach differentiates patients with addiction from those who are using their medications appropriately.

When establishing functional goals, practitioners should identify the patient's most important activities that are restricted by pain and define what would be considered a significant improvement in the patient's ability to perform the activity. By using this approach, the agreement focuses both the health care team and the patient on improving the patient's quality of life, rather than trying to eliminate pain. Functional treatment goals should be achievable, realistic, measurable, and verifiable. Examples of such goals are shown in Table 1.

Patients should be actively involved in establishing their goals of treatment because this approach helps encourage adherence to the treatment program.[17] The following prompts can be helpful for eliciting patient input in the development of treatment goals:

- What does your pain keep you from doing that you most want to do?
- What percent reduction in pain would allow you to make these improvements?
- Aside from medication, what would help you make these improvements?
- What medication adverse effects would be an important problem for you?
- Using your own words (without using the word "pain"), how will we know when this medication is working for you?

The word "pain" should be avoided when establishing functional goals because, in the new paradigm, the purpose of treating pain is to improve quality of life, which does not necessarily equate with pain reduction. Therefore, if pain is reduced, but overall quality of life has not improved (e.g., the patient continues to spend the entire day on the couch), treatment has not succeeded. In fact, focusing solely on minimizing or eliminating pain can cause iatrogenic problems that impede patient function, such as oversedation. Further, because psychological issues play an important role in chronic nonmalignant pain, focusing the patient's goals on something other than pain is important.[12]

Patients may be surprised to be asked to create functional goals and may express concerns that providers are not focusing on their pain. Patients may require education that the overall goal is to reestablish a reasonable quality of life and that they are more likely to do so when treatment is focused on their life goals rather than their pain levels.

Monitoring response to therapy

Close monitoring of the response to therapy is crucial when managing chronic nonmalignant pain. At each visit, providers should assess and document the "4 As"[18]:

- Analgesia: Average and worst pain intensity
- Activities: Physical and psychosocial function
- Adverse effects: Are effects occurring and are they manageable?
- Aberrant behavior: Any signs of misuse, abuse, or addiction

Within the new paradigm, specific focus should be placed on the "activities" component of the overall assessment. As

Table 1. Examples of objective, measurable, functional treatment goals

Walk up a flight of stairs without pausing
Grocery shop independently
Stand at work for at least 2 hours daily
Play catch with one's children for at least 15 minutes
Participate fully in an aqua aerobics class

Source: Reference 17.

noted earlier, goals should be measurable and verifiable, so that providers can objectively determine whether patients have achieved their goals. In this paradigm, a positive outcome does not necessarily correlate with reduced pain. Examples of positive and negative outcomes are shown in Table 2.

Evidence to document the achievement of functional goals could come from patient diaries (written or using a smartphone application or other electronic means), electronic trackers (e.g., pedometers), and third parties who verify the information, including friends and family members, employers, or letters from other treatment providers (e.g., physical therapists).[12]

Obtaining a reliable third-party report of patient function is very useful. If the patient or family members report loss of work or deterioration of relationships, self-care, or other functional outcomes, misuse of the opioid may be occurring. (Of note, many medications used in the treatment of pain, as well as the pain itself, can produce psychological or psychiatric adverse events, and ongoing functional assessment should not be limited to patients receiving opioids.)

The primary responsibility for attaining functional treatment goals, and providing any requested evidence that the goal was obtained, lies with the patient. Therefore, if the patient's goal was to participate in an aqua aerobics class, it is the patient's responsibility to bring a letter (or other agreed-upon documentation) from the instructor stating that the patient participated. The provider is not responsible for ensuring that patients make any necessary arrangements to meet their goals or obtaining evidence that they have done so. (This expectation also should be clearly stated in the patient agreement.)

A negative outcome does not necessarily indicate that treatment should be discontinued. Depending on the cause of the negative outcome, several approaches may be appropriate. The assessment should investigate whether the patient is experiencing a deterioration of the pain condition, has developed tolerance to the analgesic effect of the opioid, has developed opioid-induced hyperalgesia, or is seeking opioids for misuse, abuse, or illicit activities.

If the patient is clearly abusing or diverting medications, discontinuation is warranted. Urine drug screens can help identify such patients. However, results must be interpreted with caution, as all urine drug screens can have false-positive or false-negative results, and the entire clinical picture must be considered. Many tools are available to assess behaviors to determine whether patients are using opioids appropriately after treatment has begun. Evidence indicates that higher scores on the Current Opioid Misuse Measure are associated with current aberrant drug-related behaviors.[16,19] Other tools include the Addiction Behaviors Checklist and the SAFE (Social, Analgesia, Function, Emotional) form.[20,21]

If the patient develops tolerance or experiences a deterioration of his or her painful condition, titrating the dosage upward can be effective. On the other hand, increasing the dosage will lead to increased adverse events and/or a further decline in function if the patient has opioid-induced hyperalgesia or is misusing or abusing the medication.[22] Other strategies include exploring nonpharmacologic strategies, adjuvant analgesics, and/or opioid rotation; however, extreme caution must be used if rotating a patient to methadone.

Table 2. Assessing outcomes of opioid therapy

Positive outcomes	Negative outcomes
Satisfactory pain control with limited dose escalation and unchanged or better function	Decline in function
Improved but not satisfactory improvement in function	Poor pain control with unchanged function
Poor pain control but satisfactory improvement in function	Poor adherence

Source: Reference 22.

Exit strategies

An exit strategy is appropriate in several situations, and these situations should be clearly stated in the agreement.[23] These situations include a high index of suspicion of misuse, abuse, or diversion; dangerous or illegal behaviors; persistent poor adherence (either to medications or other treatment recommendations); unmanageable adverse events that outweigh the benefits of treatment; or a lack of convincing benefit despite attempts at optimizing therapy.[23] When making this determination, distinguishing addiction from pseudoaddiction (addiction-like behaviors that arise from poorly controlled pain) is important.

Behaviors that are more or less indicative of addiction are shown in Table 3.[12] Patients who manifest behaviors of addiction (either to the opioid or other substances) should be offered referral to an addiction specialist. Depending on the circumstances, it may be appropriate to (1) discontinue the opioid immediately and address withdrawal symptoms, (2) taper therapy or continue until a consultation is obtained, or (3) continue therapy until the patient enters an opioid treatment program.[23]

Ideally, the decision to withdraw opioid therapy should be made jointly with the patient. The use of a treatment agreement can be helpful in such situations to review the goals of treatment and the reasons for discontinuation. However, consensus is not always possible, and if the patient does not agree with the decision, a number of challenging behaviors can occur. Some patients may become manipulative, while others may become threatening or intimidating. Providers should attempt to anticipate such situations and have a second provider accompany them while seeing the patient and/or have a system to summon security.[23] Referral or consultation with a specialist may be appropriate. Other providers should be alerted of the plan to discontinue opioid therapy.

When discontinuing an opioid, the dosage should be gradually tapered to minimize withdrawal symptoms. Withdrawal symptoms (e.g., nausea, diarrhea, muscle pain, myoclonus) can occur within hours of discontinuing an opioid and, although not life threatening, can be very uncomfortable.[23] Decreas-

Table 3. Patient behaviors and likelihood of addiction

Behaviors less indicative of addiction	Behaviors more indicative of addiction
Express anxiety or desperation over recurrent symptoms	Bought pain medication from a street dealer
Hoard medications	Stole money to obtain medications or other drugs
Take someone else's pain medication	Tried to get opioids from more than one source/seeing multiple prescribers without them being aware of each other
Aggressively complain to prescribers about pain and need for medication	Performed sex for drugs
Used more opioids than recommended	Forged prescriptions
Sought a second opinion about pain medications	Sold prescription drugs
Smoke cigarettes to relieve pain	Bought drugs from others
Drink more alcohol when in pain	

Source: Reference 12.

ing the dosage 10% every week is generally well tolerated, although some patients may need a more extended schedule while others may tolerate a more rapid one.[24] Evidence suggests that the longer the person has been on opioids, the slower the taper should be.[23] Of important note, mild symptoms of opioid withdrawal may persist for 6 months after opioids have been discontinued. Autonomic withdrawal symptoms can be managed with clonidine, and antihistamines or trazodone can be used for insomnia and restlessness.[24] Referral to a pain specialist or chemical dependency center should be made for complicated withdrawal symptoms.

Patients should not be abandoned, and throughout the process, providers should emphasize that they are still willing to care for patients. Nonopioid analgesics, including NSAIDs, antidepressants, or antiepileptics, may be appropriate. However, patients may experience increased pain as a result of opioid withdrawal, particularly if it is due to adverse effects or nonadherence. Medications are only one of many treatment options for chronic pain, and ensuring that all options are considered, including psychological treatment, interventions, rehabilitation, lifestyle changes (e.g., weight loss, stretching and strength training), and alternative therapies such as acupuncture, chiropractic, or movement therapies (e.g., yoga, tai chi), is important.

Patient case 1

M.S. is a 38-year-old delivery truck driver with lumbar disc injury that occurred while he was lifting a heavy package. Laminectomy and fusion surgery was successful; however, his pain continued. Several nerve blocks failed to bring adequate relief, and he began treatment with hydrocodone/acetaminophen 5 mg/325 mg twice daily.

After several months housebound, M.S. sought help at a nearby pain center. He lacked energy, slept through each night in his reclining chair, and was often irritable and short tempered with his wife and children. He complained that the analgesic he was prescribed was no longer effective. His wife reported that he had used various drugs in the past and currently uses alcohol (one or two beers once or twice a week).

At the pain center, his physician negotiated a realistic function-based treatment plan. His initial goals were to sleep in his bed again, attend a function at his son's elementary school, enroll in a pain education class, and begin a program of gentle but long-term physical therapy. The hydrocodone/acetaminophen dosage was increased to 10 mg/325 mg three times daily. These functional goals and conditions for opioid prescribing were included in a patient agreement.

At a 4-week follow-up visit, the patient reported that "the medication is really working, my pain has gone from an 8 to a 2 most of the time." However, following additional questioning, it became clear that M.S. had not made progress toward his functional goals. He was still sleeping in the reclining chair, did not feel up to attending the school science fair, and had only seen the physical therapist once. He also was not sleeping well, even though he felt sleepy most of the time.

Based on this report of the patient's function, the physician concluded that the sedation he was experiencing was interfering with his progress toward his goals. After considerable patient education and negotiation, including a review of the patient agreement, M.S. agreed to taper off the opioid and try a new regimen of a nonamphetamine stimulant in the morning and a sedating medication for the evening. This normalized his sleep/wake cycles and left him with more energy during the day. He was prescribed a nonopioid analgesic (ibuprofen) for his pain. The patient also was referred to a pain psychologist.

At the next follow-up visit 4 weeks later, M.S. reported that he had attended five meetings of a chronic pain support group and several sessions with the pain psychologist, who taught him skills for coping, distraction, and relaxation.

Twelve weeks later, M.S. presents to the clinic looking relaxed and alert. His pain was not gone; he reported that it varied from about 3 to 5 points (on a 10-point scale) from day to day. He was becoming more physically active, making slow but steady progress in physical therapy, and becoming socially active. M.S. was benefiting from a positive feedback loop: a relatively minor reduction in his pain led to improvements in function. This, in turn, further reduced the importance of pain in his life, which further increased his function.

Questions to consider:

- Did M.S. experience adverse effects from the opioid?

- What eventually started working to increase his functional status?
- How can a good reduction in pain score (6 points) be viewed as a treatment failure?

A reduction in a subjective 10-point pain rating scale of 6 points appears to be a success, but the patient was not functioning well. Because improved function was the desired outcome, rather than simply pain improvement, the opioid trial was considered unsuccessful.

Focusing on the functional outcomes throughout the treatment program allowed M.S. to eventually improve his quality of life. Realistic, measurable, functional goals were the foundation of a successful treatment program. These goals allowed the ultimate development of an approach that allowed the patient to reengage with life.

Patient case 2

J.S. is a 33-year-old woman with a 1-year history of low back pain that started while she was at her job as a waitress. She had a lumbar magnetic resonance imaging scan 6 months ago that revealed degenerative disc disease but no herniated discs or other compression of cord or nerve roots. J.S. presents to the clinic after recently moving from another city where she was being treated with oxycodone/acetaminophen 5/500 mg twice daily.

J.S. reports a past medical history that is remarkable only for past alcohol abuse in her early 20s. She has been sober for 10 years. Since moving, she is experiencing problems with frequent awakenings due to worsening pain, but she denies depressed mood. She is eager to work and start her new life, but her pain is making it difficult to stand for a whole shift at her new waitress job.

The clinician works with J.S. to develop a patient agreement that includes functional goals of therapy. These goals focus on enjoying working and engaging in activities with her daughter. The physician prescribes a sustained-release opioid, physical therapy, and a short daily walking program.

At her 1-month follow-up visit, J.S. reports that her pain levels are about the same as those she reported at the first session and she has not made progress toward the goals specified in her patient agreement. She is discouraged about her lack of progress and worried about finances for herself and her daughter because she is only working about 20 hours each week. In addition, her insomnia has worsened; she awakens at 5:00 a.m. and is unable to return to sleep.

J.S. asks for an increase in her oxycodone dose. However, the clinician detects signs of depression that may be interfering with her pain treatment. Therefore, the clinician decides to prescribe venlafaxine once daily in the morning and continue with the same dosage of oxycodone every 12 hours. J.S. and the physician have a discussion about the issues of pain, depression, and sleep.

Two weeks later, J.S. reports being adherent to both medications, but her pain levels have not really changed. She reports that she is sleeping better and has managed to walk three times the first week and five times the second week. Further, she has been able to increase the number of work hours that she can tolerate. Although J.S.'s pain has not decreased substantially, her life is moving forward and she seems encouraged.

Questions to consider:

- Why did the clinician decide to add an antidepressant rather than increase the pain medication?
- Should the clinician have been worried about the risk of addiction?
- Is there a reason the clinician chose a serotonin–norepinephrine reuptake inhibitor (SNRI) rather than a selective serotonin reuptake inhibitor (SSRI)?
- How is Jane's treatment considered a success if her pain levels haven't really changed much?

In this case, the clinician decided to add an antidepressant rather than increase the dosage because often addressing a comorbid psychological condition is necessary for effective pain treatment. An SNRI was selected rather than an SSRI because SNRIs have shown greater benefit in the management of chronic pain. Addiction was less of a concern because the history occurred almost 10 years ago. Although her pain levels did not improve, her function did; thus, this was considered a treatment success.

Patient case 3

T.M. is a 33-year-old man with a landscaping business. He presents with complaints of shooting pain from groin to abdomen since surgery to repair a hernia 8 months earlier. T.M. reports that after work, he is in severe pain for hours, which interferes with his sleep. His prescription oxycodone (immediate release), which has been prescribed by a previous clinician, has run out early.

T.M. reports that he fears he is taking more medication than he is supposed to because his medication does not last as long as it should and he already needs a refill. He reports taking an extra pill to get to sleep about 4 times a week. On a scale from 1 to 10, T.M. rates his average pain at an 8. On examination, his abdomen is tender to the touch but his function and sensitivity are intact. The clinician diagnoses the patient with post–hernia repair pain syndrome.

The clinician reviews T.M.'s history and performs a risk assessment. After administering the ORT, the clinician finds a family history of alcoholism and a history of the patient taking medications differently than prescribed; however, a history of addiction or psychiatric problems is not found. T.M.'s ORT score is 4, placing him as a moderate risk for aberrant behavior.

T.M. is advised that regular appointments will be necessary, as well as pill counts and random urine drug tests. A written treatment plan is presented, and an agreement outlining the responsibilities and expectations for pain management is signed. T.M.'s functional goals are to sleep for at least 6 hours each night, work unimpaired, and start home exercises with physical therapist guidance. The clinician discontinues the immediate-release opioid in favor of an extended-release product (methadone) for around-the-clock pain control. In addition, T.M. is referred to physical therapy to increase flexibility and break up some of the scar tissue causing the pain.

After 4 weeks on the new pain regimen, T.M. reports that overall his pain has improved—his current pain level is 3 to 4 points at rest and 5 points when walking or working (on a 10-point scale). The clinician determines that T.M. is able to work with his current pain level and does not feel the need to take additional medication for pain relief. He also is sleeping much better. T.M. reports attending physical therapy once a week and adding regular stretches and exercises at home, which his wife corroborates. His urine drug test is positive for the prescribed opioid, and the pill count is consistent with the prescribed amount.

Questions to consider:

- Why is T.M. in the moderate-opioid-risk group?
- Why not just increase the amount of immediate-release oxycodone to decrease his pain level?
- How is his treatment considered a success if he only rates a modest pain reduction while working?

In the universal precautions approach to pain management, T.M. is in the moderate-risk group because his history includes some behaviors that are categorized as misuse. Simply increasing the amount of his opioid prescription would not have been appropriate, particularly not with a short-acting opioid, given that some behaviors of concern (e.g., taking extra pills) are already present. Further, an extended-release opioid is more likely to allow a full night's sleep. His treatment is considered a success because it resulted in functional improvement.

Summary

The increased awareness of chronic pain as an important public health issue in the previous few decades resulted in the increased prescribing of opioids as a humane and accepted approach to patient care. However, as the rates of prescription opioid use increased, the rates of opioid misuse, abuse, diversion, addiction, and death also increased. As the risks of opioid use have become better understood, new approaches have been developed to manage patients with chronic nonmalignant pain.

The use of universal precautions in pain management requires clinicians to recognize that all patients have some risk of using opioids inappropriately. This framework identifies characteristics associated with greater risk and guidance for categorizing and managing patients. All patients who are considered for opioid therapy for chronic nonmalignant pain should undergo a thorough assessment that evaluates their risk for inappropriate opioid use as well as their pain complaint.

If a trial of opioid therapy is warranted, national guidelines recommend the use of a patient care agreement that specifies the goals of treatment and conditions for continued therapy. When developing goals of treatment, another recent and critical shift in therapy has been the movement toward the development of functional goals. Treatment is more focused on improving quality of life than improving pain per se.

After the initial opioid trial, patients must be carefully evaluated to assess their response to therapy. The assessment should consider several factors, but should focus on ensuring that the patient has made progress toward functional goals. If, despite attempts to optimize therapy, the patient fails to achieve such goals, an exit strategy should be implemented.

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CPE exam

Instructions: The assessment test for this activity must be taken online; please see "CPE information" below for further instructions. There is only one correct answer to each question. This CPE activity will be available online at www.pharmacist.com no later than August 31, 2011.

1. **Approximately what percentage of individuals in the Unites States have chronic pain?**
   a. 14%
   b. 17%
   c. 22%
   d. 26%

2. **In 2002, opioid analgesics accounted for approximately what percentage of all drug abuse in the United States?**
   a. 5.8%
   b. 7.1%
   c. 9.9%
   d. 11.3%

3. **Among those who use opioids for nonmedical reasons, how do the majority obtain the opioid?**
   a. They are prescribed the medication by a physician.
   b. They receive it free from friends or relatives.
   c. They buy it from friends or relatives.
   d. They buy it from a drug dealer or other stranger.

4. **Applying "universal precautions" to pain management requires that:**
   a. Clinicians approach all patients as having some level of risk for opioid misuse, abuse, and addiction.
   b. Clinicians recognize that individuals with substance abuse diseases are more likely to also have blood-borne diseases.
   c. All patients receiving chronic opioid therapy should have monthly random urine drug screens and pill counts.
   d. A second clinician should accompany the prescriber when making decisions about opioid treatment.

5. **A patient with a history of alcohol abuse and cannabis use who has been sober for 5 years and has no comorbid psychiatric conditions would fall into which category according to the universal precautions approach?**
   a. Low risk
   b. Moderate risk
   c. High risk
   d. Not enough information to answer

6. **When should a patient care agreement be implemented?**
   a. Before initiating opioid therapy in a patient with chronic nonmalignant pain
   b. After a patient has repeatedly been nonadherent to treatment recommendations
   c. When providers harbor suspicions that patients are misusing or abusing opioids
   d. At the first follow-up visit, when making a determination regarding whether an opioid trial has been effective

7. **Which of the following is an example of a functional treatment goal?**
   a. Reducing the amount of pain experienced while walking
   b. Reducing the level of pain when walking to less than 5 on a 0- to 10-point scale
   c. Walking for 15 minutes three times a week
   d. Reducing the amount of medication needed to walk for 15 minutes

8. **When guarding against misuse, abuse, and addiction to opioids, one advantage of functional goals is that:**
   a. Patients who use opioids inappropriately are likely to experience a decrease in function, resulting in a negative outcome.
   b. Patients who divert opioids may experience higher levels of function.
   c. Such goals can support the rehabilitation of a patient with a substance abuse disorder.
   d. They reduce the need to perform random urine drug screens and pill counts.

9. **Why should the word "pain" be avoided when establishing functional treatment goals?**
   a. Because the word makes people uncomfortable
   b. To avoid labeling people as chronic pain patients
   c. Because the purpose of treatment should be to improve patients' quality of life
   d. To differentiate patients with pain from those seeking opioids for illicit purposes

10. **Providers should obtain evidence that patients are achieving their functional goals by:**
    a. Relying on patients' verbal reports.
    b. Asking patients to bring documentation from reliable third parties.
    c. Calling or e-mailing third parties to request document.
    d. Hiring private detectives to follow patients.

11. Which of the following scenarios represents a positive outcome of opioid therapy?

a. A patient who is fired from his or her job and develops troubled family relationships during the course of therapy but reports a reduction in pain
b. A patient whose pain is reduced from severe to mild but continues to sleep most of the day
c. A patient who reports a reduction in pain from moderate to mild but who has missed all of his or her physical therapy visits
d. A patient whose pain level remains similar but has returned to work and resumed performance of all activities of daily living

12. Which of the following patient behaviors is considered most indicative of addiction?

a. Hoarding medication
b. Buying medications from "street" sources
c. Drinking alcohol to relieve pain
d. Aggressively complaining about pain and the need for more medication

13. Which of the following statements about exit strategies is true?

a. Conditions that will result in treatment discontinuation should be specified in the patient agreement.
b. Most patients who have received opioids for less than 6 months can taper off the medication within 2 weeks.
c. Symptoms of withdrawal are generally well tolerated and short lived.
d. If the patient requires referral to an addictionologist, the prescriber should immediately discontinue treatment.

14. Which of the following medications may be prescribed to manage symptoms of withdrawal?

a. NSAIDs
b. Serotonin–norepinephrine reuptake inhibitor antidepressants
c. Antiepileptics
d. Clonidine

CPE information

To obtain 2.0 contact hours of CPE credit (0.2 CEUs) for this activity, complete and submit the CPE exam online at www.pharmacist.com/education. A Statement of Credit will be awarded for a passing grade of 70% or better. You will have two opportunities to successfully complete the CPE exam. Pharmacists who successfully complete this activity before March 26, 2014, can receive credit.

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