Chronic pain and psychiatric illness

MANAGING COMORBID CONDITIONS

Pay close attention to risk and benefit when planning pain management

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Pain is one of the most common symptoms for which patients seek medical care, with an associated estimated annual cost of $600 billion.[1] Using a multimodal approach to care—thorough evaluation, cognitive-behavioral and psychophysiological therapy, physical therapy, medications, and other interventions—can help patients effectively manage their condition and achieve healthier outcomes.

Evaluating a patient with pain

When developing a safe, comprehensive, and effective treatment plan for patients with chronic pain, first perform a thorough history and physical exam using the following elements:

Pain history. The **PQRST** mnemonic (***Table 1, page 28***) can help you obtain critical information and assist in determining the appropriate diagnosis and cause of the patient's pain complaints.

Psychiatric history. Document the mental health history of the patient and first-degree relatives.

Medical history. Knowing the medical history could reveal comorbidities contributing to a patient's pain complaint.

Treatment history. Listing past and current treatments for pain, including effectiveness, helps the clinician understand if an existing treatment plan should be modified.

continued

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A comprehensive psychiatric evaluation, diagnosis, and treatment plan should consider the broader context in which a patient's pain occurs

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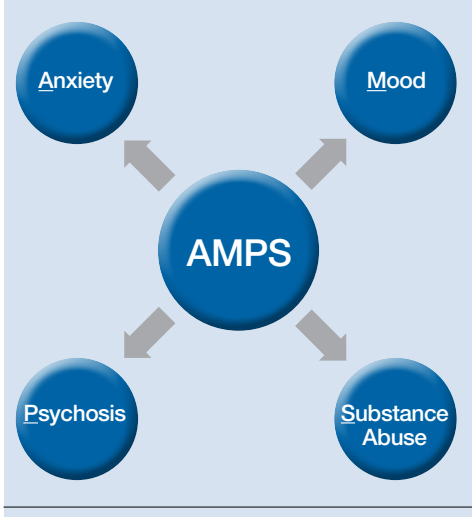
Table 1

Use the PQRST mnemonic to take a complete pain history

Provoking events (onset) What causes the pain? What makes the pain worse or better?
Quality of symptoms (character) What does it feel like (eg, sharp, dull, tingling, stabbing, burning, crushing)?
Region and radiation of symptoms (location) Is the pain focal or does it radiate to a different location?
Severity Use a scale (visual analogue scale, numerical rating scale, Faces Pain Scale) to rate the intensity of the pain
Time frame (duration) When did the pain start, and how long does it last?

Figure

AMPS psychiatric assessment tool



Source: Adapted from reference 3

Functional status. Document current level of daily activity, how life activities are affected by pain; strategies used to help cope with pain; level of physical and emotional support provided in home, work, and school environments; and active stressors (eg, financial, interpersonal).

Psychosocial history. Document historical information related to coping skills, trauma history, family of origin, abuse, interpersonal relationships, social support, and academic and vocational functioning.

Substance use or abuse. Assess for use of controlled substances (ie, early refills; lost medications; obtaining medications from multiple prescribers, friends, families, or strangers; use of prescribed and non-prescribed medications for non-medical and medical purposes), nicotine, alcohol, illicit substances, and caffeine. A thorough inventory can help to identify substances a patient is using that could affect daily functioning and pain level.

Behavioral observations. Assessing mental status (eg, insight, pain behavior, cooperation) can be useful. Paying attention to pain behaviors, such as complaints of pain, decreased activity, increased medication intake, or altered facial expressions or body posture, can help the clinician gain insight to the extent that pain affects the patient's quality of life.

The information gathered in the patient evaluation can be used to design a multimodal treatment plan to achieve maximum effectiveness.

Assessing psychiatric illness

Current approaches to pain evaluation and treatment recommend use of a biopsychosocial orientation because psychological, behavioral, and social factors can influence the experience and impact of pain, regardless of the primary cause.[2] A comprehensive psychiatric evaluation, diagnosis, and treatment plan should consider the broader context in which a patient's pain occurs.

Regarding psychiatric illness, past and current symptoms, treatment history, and risk assessment should all be included. Using the "AMPS approach" (*Figure*)[3]—assessing **A**nxiety, **M**ood (depression and mania), **P**sychotic symptoms (paranoid ideation and hallucinations), and **S**ubstance use—helps screen for comorbid psychiatric conditions in patients with chronic pain.

Sleep assessment

Chronic pain patients often experience significant sleep disturbance that could be caused by physiological aspects of the

Table 2

Screen for obstructive sleep apnea with the STOP-BANG questionnaire

Snore Do you snore loudly enough to be heard through closed doors?	Yes or No
Tired Do you often feel tired, without energy, and sleepy during the day?	Yes or No
Observed Have you been observed to stop breathing while you were sleeping?	Yes or No
Pressure Do you have or are you being treated for high blood pressure?	Yes or No
Body mass index (BMI) What is your BMI? Is it >35?	Yes or No
Age Are you over age 50?	Yes or No
Neck girth Do you have a neck circumference >40 cm (male), >35 cm (female)?	Yes or No
Gender Are you a male?	Yes or No
The presence of ≥3 risk factors identifies patients at increased risk and warrants consideration for further workup by a sleep specialist	

Source: Adapted from Bennett K, Mahajan G. Pain medicine in the psychiatric patient population. In: McCarron RM, Xiong GL, Keenan CR, et al. Preventive medical care in psychiatry. Arlington, VA: American Psychiatric Publishing, Inc; 2015:398

pain condition, environmental factors (eg, uncomfortable bedding), a comorbid sleep disorder (eg, sleep apnea), a psychiatric disorder, or a combination of the above.

Obstructive and central sleep apnea are characterized by nighttime hypoxia, which leads to frequent disruption of the sleep-wake cycle and often manifests as daytime fatigue, irritability, depression, drowsiness, headaches, and increased pain sensitivity. Changes in sleep arousal can lead to neuropsychological changes during the day, such as decreased attention, memory problems, impaired executive functioning, and reduced impulse control.

Screen patients for central and obstructive sleep apnea before prescribing opioids or benzodiazepines for pain because these medications can cause or exacerbate underlying sleep apnea. Although many screening tools, such as the Epworth Sleepiness Scale, assess daytime somnolence,[4] the STOP-BANG questionnaire is a quick, validated, and efficient screening tool that often is used to assess sleep apnea risk[5,6] (***Table 2***). The presence of ≥3 risk factors identifies patients at increased risk and warrants consideration for further workup by a sleep specialist.[7,8]

Box

Opioid risk assessment tools to screen for patients at high risk for harm

Opioid Risk Tool
www.drugabuse.gov/sites/default/files/files/OpioidRiskTool.pdf

Screener and Opioid Assessment for Patients with Pain
www.painedu.org/soapp.asp

Current Opioid Misuse Measure
www.painedu.org/soapp.asp

Pharmacotherapy for chronic pain

Non-opioid medications. Pain can be broadly categorized as neuropathic or nociceptive. Neuropathic pain can be described by patients as numbness, burning, electric-like, and tingling, and is associated with nerve damage. Nociceptive pain commonly is described as similar to a toothache with descriptors such as stabbing, sharp, or a dull aching sensation; it is often, but not always, associated with acute injury or ongoing trauma to tissue. Drug treatment is most successful when the appropriate class of medication is matched to the specific type of pain.

continued

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Opioids or benzodiazepines prescribed for pain can cause or exacerbate underlying sleep apnea

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Some newer anticonvulsants have been found to be more effective than placebo for a variety of neuropathic pain conditions

Table 3

Obtaining informed consent and a treatment agreement when prescribing an opioid

Informed consent should address:
Potential risks, benefits, and adverse effects (eg, constipation, cognitive impairment, respiratory depression, sleep apnea)
Likelihood of tolerance and physical dependence
Risk of opioid misuse, addiction, and overdose
Risk of drug-drug interaction that could result in over-sedation and impaired motor skills
Limited evidence of benefit for chronic opioid therapy
The clinician's expectations and policies regarding early refills, replacement of lost or stolen medications, misuse, and diversion
Reasons for modification or discontinuation of opioid therapy (eg, violation of policies, lack of efficacy)
Treatment agreement should address:
Functional goals
The patient's responsibility to use the medication safely (eg, secure storage; agreement to not misuse or use medications in combination with alcohol or other substances)
The patient's agreement to obtain medications from 1 clinician or clinic and use 1 pharmacy for refills
The patient's agreement to submit to periodic drug testing or pill counts, or both
The clinician's or clinic's agreement to be available for unforeseen problems and to prescribe scheduled refills

Source: Adapted from reference 23

Nociceptive pain often is successfully treated with non-steroidal anti-inflammatory drugs and acetaminophen. Non-selective COX inhibitors (eg, ibuprofen, indomethacin, ketorolac) and COX-2 selective inhibitors (eg, celecoxib) have been associated with cardiovascular, gastrointestinal, and renal disease; acetaminophen is associated with liver dysfunction.[9-11] However, the absolute risk for complications in healthy patients is low.[12] To minimize risk, use these agents for the shortest duration and at the lowest effective dosage possible.

Neuropathic pain can be addressed with certain antidepressants[13]—specifically, those that increase serotonin and norepinephrine (eg, tricyclic antidepressants [TCAs] and serotonin-norepinephrine reuptake inhibitors [SNRIs]), or medications that block ion channels (eg, anticonvulsants). TCAs (eg, desipramine, nortriptyline, amitriptyline) are among the best studied and most cost effective medications for treating neuropathic pain,[14,15] but they can have sedating and anticholinergic effects, as well as cardiac adverse effects (ie, prolongation of the QTc interval). SNRIs (eg, venlafaxine, desvenlafaxine, duloxetine, and milnacipran) can be effective and often are better tolerated than TCAs.[14]

Some newer anticonvulsants (eg, gabapentin and pregabalin) have been found to be more effective than placebo for a variety of neuropathic pain conditions.[16,17] Although they have few drug-drug interactions, anticonvulsants can cause dizziness, forgetfulness, and sedation. These adverse effects can be minimized by starting at a low dosage and titrating carefully. Because hepatic or renal impairment can affect metabolism or excretion of these drugs, review the prescribing information to determine safe dosing.

Targeted injection of medications to major pain generators (eg, an epidural steroid for radicular neck and back pain; facet injections for facet-related neck and back pain; trigger point injections for myofascial pain; occipital nerve blocks for occipital neuralgia; and botulinum toxin A injections for chronic migraine headache) can be effective in reducing discomfort and increasing function in patients with chronic pain. A detailed discussion of such therapies is beyond the scope of this article, but have been reviewed extensively elsewhere.[18,19]

Opioids. Although there is little evidence of long-term efficacy with chronic opioid therapy for most patients, a trial of opioids might be warranted for select patients who do not respond to other medications. Because the risk–benefit ratio for chronic opioid therapy is high,[20-22] a decision to initiate a trial of a low-dosage opioid should be made only after careful consideration of those risks. It is generally agreed that treatment of chronic pain with low-dosage opioid therapy is more likely to be successful when it is used as an adjuvant to non-opioid modalities (eg, physical reconditioning, injection therapies, spinal cord stimulation, neurobehavioral interventions, non-opioid medications).

The Federation of State Medical Boards has stated that excessive reliance on opioid medications for treating chronic pain is a deviation from best practices.[23] To maximize benefit and minimize risk, clinicians should carefully select appropriate patients, establish functional goals, and regularly monitor for efficacy and compliance. Thoroughly document these steps in the patient's record for later reference.[23]

After establishing a clinical diagnosis for the cause of the pain, you should determine the risk of opioid abuse or misuse by using any one of the available risk assessment tools (***Box, page 29***). Understand, however, that no single tool has been shown to be more effective than others.

Although patients and some clinicians tend to overvalue the benefits of chronic opioid therapy, many do not fully appreciate the risks (eg, respiratory depression and death), which can be exacerbated if the patient is using other substance that suppress respiration (eg, benzodiazepines, alcohol, and illicit substances). Written informed consent and treatment agreement is highly recommended; components of such a document are listed in ***Table 3***.[23]

Develop a treatment plan that emphasizes functional goals based on the patient's physical limitations and that incorporates some type of daily, atraumatic physical activity. This plan should be documented and reviewed regularly to help monitor treatment effectiveness.

Table 4

5 'A's to guide opioid management of chronic pain

Analgesia: Adequate pain relief
Activity: Activities of daily living and psychosocial functioning; tolerance for sitting, standing, and walking
Adverse effects: Constipation, nausea, sedation
Aberrant behaviors: Unsanctioned dosage escalation, misuse, abuse, lost prescriptions, diversion
Affect: Changes in how the patient feels

Source: Reference 24

After an initial trial of a few weeks, the patient and clinician should meet to review the 5 "A"s (***Table 4***)[24] to determine the success of the opioid regimen. Consulting your state's prescription drug monitoring program (if one is available), obtaining a random urine drug test, and doing a pill count can provide useful, objective data. If the patient has not made progress but has experienced no adverse effects, then a small dosage increase might be warranted. If any of the 5 "A"s indicates lack of improvement or increased risk, consider stopping opioid therapy and exploring non-opioid options to manage chronic pain.

Referrals to a pain specialist or an addiction specialist, or both, might be needed, depending on the patient's condition at any given follow-up visit. Such referral decisions, as well as all treatment plans, should be documented clearly in the medical record to prevent any misunderstanding, false accusations, or medicolegal repercussions regarding the rationale for continuing or terminating opioid-based treatment.

Non-pharmaceutical therapy for treating pain

The pain management field has successfully integrated the biopsychosocial model into regular practice. This model advocates the use of multimodal non-drug interventions in conjunction with opioid and non-opioid medications. Such interventions address behavioral, cognitive, sociocultural

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The biopsychosocial model advocates the use of non-drug interventions in conjunction with opioid and non-opioid medications

Table 5

Biopsychosocial dimensions of non-pharmaceutical therapies

	Dimension of pain		
Intervention	Psychosocial	Lifestyle	Physiological
Non-invasive			
Acupuncture	✓		✓
Behavioral sleep management	✓	✓	
Behavioral weight and eating management	✓	✓	
Cognitive-behavioral therapy	✓	✓	
Hypnosis	✓		
Massage therapy			✓
Mindfulness meditation	✓	✓	
Nutritional counseling	✓	✓	
Occupational therapy		✓	✓
Physical therapy		✓	✓
Psychophysiological training (eg, biofeedback, electromyography, posture correction)	✓	✓	✓
Spinal cord stimulation implant			✓
Transcutaneous electrical nerve stimulation			✓
Yoga	✓		✓
Invasive			
Joint injection			✓
Soft tissue injection			✓
Spinal injection			✓

(psychosocial), lifestyle, and physiological dimensions of pain. A partial list of non-drug interventions is provided in ***Table 5***.

Integration of these interventions within a biopsychosocial framework can assist you in making a comprehensive treatment plan. For example, patients with focal myofascial shoulder and back pain might derive only transient benefit from trigger point injection. However, concurrent referral to a pain psychologist and physical therapist could substantially improve functional outcomes by addressing factors that directly and indirectly influence myofascial pain. Inclusion of cognitive-behavioral therapy (addressing psychosocial and lifestyle dimensions), surface electromyography, psychophysiological interventions/biofeedback (addressing psychosocial, lifestyle, and physiological dimensions), and physical therapy (addressing lifestyle and physiological dimensions) allows the patient to learn coping skills, decrease physiological arousal that can lead to unnecessary tensing of muscles, and strengthen core muscle groups.

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Drug Brand Names

Amitriptyline • Elavil
Botulinum toxin A • Botox
Celecoxib • Celebrex
Desipramine • Norpramin
Desvenlafaxine • Pristiq
Duloxetine • Cymbalta
Gabapentin • Neurontin
Indomethacin • Indocin
Ketorolac • Toradol
Milnacipran • Savella
Nortriptyline • Pamelor
Pregabalin • Lyrica
Venlafaxine • Effexor

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Integration of interventions within a biopsychosocial framework can assist you in making a comprehensive treatment plan

Bottom Line

Treating chronic pain in patients with concomitant psychiatric illness can be challenging. A multimodal approach that includes appropriate medications, interventional procedures, physical therapy, and behavioral therapies improves pain, psychiatric illness, and functioning and enhances a patient's sense of well-being.