

NOTE: To view the article with Web enhancements, go to: <http://www.medscape.com/viewarticle/503596>

Pharmacologic Management of Pain Expert Column

Universal Precautions in Pain Medicine: The Treatment of Chronic Pain With or Without the Disease of Addiction

Douglas L. Gourlay, MD, MSc, FRCPC, FASAM; Howard A. Heit, MD, FACP, FASAM

Medscape Neurology & Neurosurgery. 2005; 7 (1): ©2005 Medscape

Introduction

The term "universal precautions in pain medicine" refers to a standardized approach to the assessment and ongoing management of all chronic pain patients.^[1] The concept of "universal precautions" was borrowed from an infectious disease model of that name. As with the hepatitis or HIV patient, it is impossible to predict with any degree of certainty which pain patients will become problematic users of prescription medications. By recognizing the need to carefully assess all patients with a biopsychosocial model, including past and present aberrant behaviors when they exist, and by applying careful and reasonably set treatment limits before writing the first prescription, it is possible to safely treat chronic pain. A standardized assessment and management approach to the chronic pain patient will result in reduced stigma, improved patient care, and will contain overall risk.

The term "universal precautions," as it applies to infectious diseases, came out of the realization that it was impossible for a healthcare professional to reliably assess risk of infectivity during an initial assessment of a patient.^[1,2] It was only after research into the prevalence of diseases, such as hepatitis B, hepatitis C, and HIV, that we realized that the safest and most reasonable approach was to apply an appropriate minimum level of precaution to *all* patients to reduce the risk of transmission of potentially life-threatening infectious diseases to healthcare professionals. Thus, the practice that we know as universal precautions in infectious diseases was born. Opioids have long been recognized as valid treatment for moderate-to-severe chronic pain. However, important barriers to using opioids to manage such pain are fear of abuse and addiction.^[3] The application of universal precautions in pain medicine in the initial assessment and treatment of a patient may reduce these barriers.

The fear of addiction is one of the barriers to opioid pain management; the result can be under- or nontreatment of moderate-to-severe pain.^[4] Addiction is a "brain disease"^[5] in which the diagnosis is often made prospectively over time by monitoring the patient's behavior and ability to stay within a mutually agreed upon treatment plan. There is no definite test or physical sign that will predict which patient will do well on a therapeutic trial of opioids for pain. Therefore, it makes sense to apply a universal precautions approach to all pain patients, especially those who are considered for a therapeutic trial of opioids, to improve their quality of life.^[1]

Approximately 50-70 million people in the United States are undertreated or not treated for their painful conditions.^[6] Currently available data suggest that 3% to 16% of the American population have addictive disorders.^[7] Therefore, based on these statistics, as many as 5-7 million patients with the disease of addiction may also have pain. The goal of pain treatment is to decrease pain and improve function while monitoring for any adverse side effects. If this goal is not achieved by nonopioid and adjunctive analgesics, a trial of opioids may be indicated.

The disease of addiction is a chronic relapsing disorder that involves multiple factors. The most common triggers for relapse are states of stress, drug availability, and reexposure to environmental cues

stressor and consequently may trigger relapse to addiction.

Substance Use Assessment in the Pain Patient

Every patient should be asked about present and past use of both licit and illicit drugs, including alcohol and "over-the-counter" preparations.^[9] In fact, persons with problematic use of drugs, including alcohol, may be aware of the extent of their problem and be looking for a solution. They are often reluctant to accept even rational pharmacotherapeutic approaches due to a very realistic concern about reactivating now dormant drug-related problems. This is further complicated by the somewhat naive reassurance that because they are believed to have "real pain," the risks of a substance use disorder are minimal. These patients are all too aware of the risks associated with prescription drug use and would like to see a careful and cautious approach. Even for those patients at no apparent risk, the application of a universal precautions approach allows for the formulation of individualized treatment plans on the basis of mutual trust and honesty. By consistently applying this basic set of principles, good patients with complex problems will have appropriate management of their chronic pain. Thus, the treatment plan will be in the best interest of the patient and healthcare professional.

A history of illicit drug use is a potentially complicating factor in chronic pain management; it is not a contraindication.^[10] Active untreated addiction, however, may be an absolute contraindication to the ongoing prescription of controlled substances, including opioids. Although acute pain can be treated in a patient with an underlying active addictive disorder, in the authors' opinion, the successful diagnosis and treatment of a complaint of chronic pain in the face of an active untreated addiction are unlikely. The patient must be able to accept assessment and treatment of both. Thus, the diagnosis of a concurrent addictive disorder, when it exists, is vital to the successful treatment of chronic pain.

Of course, the majority of patients who suffer from a chronic pain condition are unlikely to have a concurrent substance use disorder. Unfortunately, distinguishing between those patients who will be prone to develop problems with opioid drugs and those who won't is extremely difficult. This makes the taking of a careful history around past and present drug and alcohol use of critical importance to the assessment of risk.

In most cases, patients will be forthcoming in answering specific questions related to drug and alcohol use if presented in a caring and respectful manner. The unasked question may be the most relevant one in terms of assessing risk. Although most patients don't lie about their drug use, they frequently don't volunteer information, especially if they think that this information may be likely to limit their access to care.

One of the goals in the initial evaluation of a pain patient is to obtain a reasonable assessment of risk of a concurrent substance use disorder or other comorbid psychopathology. In this context, patients can be stratified into 3 basic groups: patients who may be safely managed in the primary care setting, those who should be comanaged with specialist support, and those who should be referred to a specialist for management of their chronic pain condition.

Group I — Primary Care Patients

This group is composed of patients with no past or current history of substance use disorders. They have a noncontributory family history with respect to substance use disorders and lack major or untreated psychopathologies. This group clearly represents the majority of patients who will present to the primary care practitioner.

Group II — Primary Care Patient With Specialist Support

In this group, there may be a past history of a treated substance use disorder or a significant family history of problematic drug use. They may also have a past or concurrent psychiatric disorder. These

consultation with appropriate specialist support. This consultation may be formal and ongoing (comanaged) or simply with the option for referral back for reassessment should the need arise.

Group III — Speciality Pain Management

This group of patients represents the most complex cases to manage due to an active substance use disorder or major untreated psychopathology. These patients are actively addicted and pose significant risk both to themselves and to the practitioners who often lack the resources or experience to manage them.

It is important to remember that groups II and III can be dynamic: a group II patient may become a group III patient with relapse to active addiction, whereas group III patients can move to group II with appropriate treatment. In some cases, as more information becomes available to the practitioner, the patient who was originally thought to be low-risk (group I) may be reclassified as being in group II or even group III. It is important to continually reassess risk over time.

Universal Precautions in Pain Medicine

The following universal precautions are recommended as a guide for all healthcare professionals who prescribe Schedule II medications to treat chronic medical problems, including pain. As with universal precautions in infectious diseases,^[2] by applying the following recommendations, patient care may be improved, stigma reduced, and overall risk contained.

The 10 Steps of Universal Precautions in Pain Medicine

1. **Make a Diagnosis With Appropriate Differential.** Treatable causes for pain should be identified when they exist, and therapy should be directed to the cause of pain. Any comorbid conditions, including substance use disorders and other psychiatric illnesses, must also be addressed.
2. **Psychological Assessment, Including Risk of Addictive Disorders.** A complete inquiry into past personal and family history of substance misuse is essential to adequately assess any patient. A sensitive and respectful assessment of risk should not be seen in any way as diminishing a patient's complaint of pain. Patient-centered urine drug testing should be discussed with all patients regardless of the medications that they are currently taking.^[9] Patients found to be using illicit or unprescribed licit drugs should be offered further assessment for possible substance use disorders. Those refusing such assessment should be considered unsuitable for pain management with a controlled substance.
3. **Informed Consent.** The healthcare professional must discuss the proposed treatment plan with patients and answer any questions that they may have about its anticipated benefits and foreseeable risks.
4. **Treatment Agreement.** The expectations and obligations of both the patient and the treating practitioner need to be clearly set forth in writing or by verbal agreement. Combined with informed consent, the treatment agreement forms the basis of the therapeutic trial. A carefully worded treatment agreement will help to clarify appropriately set boundary limits making possible early identification and intervention around aberrant behaviors.^[10,11]
5. **Pre- or Post Intervention Assessment of Pain Level and Function.** It must be emphasized that any treatment plan must begin with a trial of therapy. This is particularly true when controlled substances are contemplated or used. Without a documented assessment of preintervention pain scores and level of function, it will be difficult to assess success in any medication trial. The ongoing assessment and documentation of successfully met clinical goals will support the continuation of any mode of therapy. Failure to meet these goals will necessitate

reevaluation and possible change in the treatment plan.

6. **Appropriate Trial of Opioid Therapy With or Without Adjunctive Medication.** Pharmacologic regimens must be individualized on the basis of subjective as well as objective clinical findings. The appropriate combination of agents, including opioids and adjunctive medications, may be seen as "rational pharmacotherapy" and provide a stable therapeutic platform from which to base treatment changes.
7. **Reassessment of Pain Score and Level of Function.** Regular reassessment of the patient combined with corroborative support from family or other knowledgeable third parties will help document the rationale to continue or modify the current therapeutic trial.
8. **Regularly Assess the "4 A's" of Pain Medicine.** Routine assessment of analgesia, activity, adverse effects, and aberrant behaviors will help to direct therapy and support pharmacologic options taken.^[12]
9. **Periodically Review Pain Diagnosis and Comorbid Conditions, Including Addictive Disorders.** Underlying illnesses evolve. Diagnostic tests change with time. As a result, treatment focus may need to change over the course of time. If an addictive disorder predominates, aggressive treatment of an underlying pain problem will likely fail if not coordinated with treatment for the concurrent addictive disorder.
10. **Documentation.** Careful and complete recording of the initial evaluation and each follow-up is both medicolegally indicated and in the best interest of all parties. Thorough documentation combined with an appropriate doctor-patient relationship will reduce medicolegal exposure and risk of regulatory sanction.

Conclusion

By adopting a universal precautions approach to the management of all chronic pain patients, stigma is reduced; patient care is improved; and overall risk is contained. Careful application of this approach will greatly assist in the identification and interpretation of aberrant behaviors and, when they exist, the diagnosis of underlying addictive disorders. In those found to have or be at risk for complicating addictive disorders, treatment plans can be adjusted on a patient-by-patient basis. Adopting a universal precautions approach to the management of chronic pain will be an important step in raising the standard of care in this often complex patient population.

Supported by an independent educational grant from Cephalon.

References

1. Gourlay D, Heit HA, Almahrezi A. Universal precautions in pain medicine: a rational approach to the treatment of chronic pain. *Pain Med.* 2005;6:107-112. [Abstract](#)
2. Recommendations for prevention of HIV transmission in health-care settings. *MMWR Morb Mortal Wkly Rep.* 1987;36(suppl2):1S-18S.
3. 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.

Abstract

4. Choiniere M, Melzack R, Girard N, Rondeau J, Paquin MJ. Comparisons between patients' and nurses' assessment of pain and medication efficacy in severe burn injuries. *Pain*. 1990;40:143-152. [Abstract](#)
5. Leshner AI. Addiction is a brain disease, and it matters. *Science*. 1997;278:45-47. [Abstract](#)
6. Krames ES, Olson K. Clinical realities and economic considerations: patient selection in intrathecal therapy. *J Pain Symptom Manage*. 1997;14(suppl):S3-S13.
7. Savage SR. Long-term opioid therapy: assessment of consequences and risks. *J Pain Symptom Manage*. 1996;11:274-286. [Abstract](#)
8. Koob GF, Le Moal M. Drug addiction, dysregulation of reward, and allostasis. *Neuropsychopharmacology*. 2001;24:97-129. [Abstract](#)
9. Heit HA, Gourlay DL. Urine drug testing in pain medicine. *J Pain Symptom Manage*. 2004;27:260-267. [Abstract](#)
10. Federation of State Medical Boards of the United States, Inc. Model policy for the use of controlled substances for the treatment of pain. Policy statement: Federation of State Medical Boards of the United States, Inc. May 2004. Available at: <http://www.ama-assn.org/ama1/pub/upload/mm/455/fsmbguidelines.pdf> Accessed April 20, 2005.
11. Heit H. Creating and implementing opioid agreements. *Dis Manage Digest*. 2003;7:2-3.
12. Passik SD, Weinreb HJ. Managing chronic nonmalignant pain: overcoming obstacles to the use of opioids. *Adv Ther*. 2000;17:70-83. [Abstract](#)

Douglas L. Gourlay, MD, MSc, FRCPC , Lecturer, Departments of Anesthesiology and Psychiatry, University of Toronto, Toronto, Ontario, Canada

Howard A. Heit, MD, FACP, FASAM , Assistant Clinical Professor, Georgetown University Hospital, Washington, DC

Disclosure: Douglas L. Gourlay, MD, MSc, FRCPC, has disclosed that he has served as an advisor or consultant to Purdue Pharma, Titan Pharmaceuticals, Organon-Ligand, Alpharma, and Janssen-Ortho, Inc.

Disclosure: Howard A. Heit, MD, FACP, FASAM, has disclosed that he has served as an advisor or consultant to Purdue Pharma, Cephalon, Organon-Ligand, and Titan Pharmaceuticals. Dr. Heit has also disclosed that he has served on the speaker's bureaus for Purdue Pharma and Cephalon.