

## PAIN IN THE HIV-INFECTED SUBSTANCE USER

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### I. INTRODUCTION

#### **RECOMMENDATION:**

**Clinicians should not withhold treatment for pain because a patient has a history of substance use. Rather, standard pain assessment and treatment protocols should be followed.**

The sensation of pain is a fundamental protective physiologic response. Most often, it is a signal that tissue damage has occurred and that steps should be taken to avert further damage and foster healing. When pain is prolonged or intense, it can reduce quality of life and psychological functioning.<sup>1</sup> This chapter addresses the treatment of pain in HIV-infected substance users and special considerations for opioid use.

HIV-infected individuals are at increased risk for developing certain painful conditions, particularly neuropathy, which can be due to medications, diabetes, or the underlying HIV infection itself. Additionally, some opportunistic infections are painful, such as chronic herpes simplex virus or varicella zoster virus.

One study of ambulatory patients with AIDS reported that more than 60% of patients said they had current frequent or persistent pain, many with severe pain and associated dysfunction.<sup>2</sup> In another study, patients reported an average of 2.7 seemingly distinct pain-related problems, such as headaches, joint pain, polyneuropathy, and muscle pain, thus indicating they had multiple pain syndromes.<sup>3</sup>

Yet pain in HIV-infected substance users is greatly undertreated. In one study, AIDS patients with a history of substance abuse received adequate analgesic therapy in only 8% of cases compared to 20% of AIDS patients without a history of substance abuse.<sup>4</sup> In this study, clinicians did not make distinctions of whether the patients were actively using drugs, in methadone maintenance, or on drug-free rehabilitation when deciding to withhold analgesics (e.g., opioids).

Literature on the management of pain has focused primarily on pain management in the HIV-infected patient in general, with little guidance on pain management in the HIV-infected substance user.<sup>5</sup> In addition to the painful conditions listed above, persons with a history of substance use are also at increased risk for trauma, abscess, and chronic pancreatitis.

#### **Key Point:**

It may be more difficult for substance users to attempt to stop using drugs in the presence of severe pain. Furthermore, severe and/or chronic pain may precipitate an escalation in use or relapse following a period of recovery.

Of note, in the pain medicine community, the term “dependence” does not refer to a disorder, but to the situation in which there has been sufficient exposure to a substance that its abrupt cessation would lead to a withdrawal syndrome. This phenomenon occurs in relation to many

classes of drugs, including opioids, certain antihypertensive medications, and certain antidepressants. In pain medicine, the term “tolerance” is *not* used to characterize addiction. It conveys the need for a higher dose of medication to maintain the same level of effect. However, when considering substance use in the context of pain management, the traditional definitions of addiction apply.

## II. PAIN ASSESSMENT AND DIAGNOSIS

### RECOMMENDATIONS:

**Clinicians should ask HIV-infected patients about pain at each visit. The nature and severity of the pain should be defined by history and physical examination.**

**When the patient’s pain is ongoing or severe, clinicians should rate and document the patient’s pain, function, and response to medication at each visit.**

The assessment and treatment of pain among persons with comorbid HIV infection and substance use is often challenging for both patient and provider.<sup>6</sup> Distinguishing between behaviors associated with substance use from those associated with incompletely treated pain is especially difficult for many clinicians; however, a clinician’s ability to do so greatly benefits the patient.<sup>7</sup> Patients often have both problems—they may be unable to consistently limit their use of analgesics while experiencing ongoing severe pain. Thus, an ardent request for an opioid prescription may be 1) a request for indicated treatment of intractable pain, or 2) a request to help sustain a dysfunctional chemical dependency, or 3) both.

Pain, by definition, is subjective; pain is what the patient says it is. HIV-infected patients with a history of substance abuse who experience pain report that their pain experience is no different than that reported by patients without a history of substance abuse who experience pain. No difference in pain prevalence or severity was observed among HIV-infected patients with substance abuse compared to those without. The only difference between the groups was that those with a history of substance abuse reported lower levels of pain relief.<sup>4</sup>

There is no definitive diagnostic test for pain. Pain reflects multiple interactions among neurotransmitters, hormones, tissue, and nerve endings and pathways, as well as the psychosocial context of the individual experiencing it. Patient behavior may not necessarily correlate with severity of pain, especially if the pain is of long-term duration. Thus, observations that a patient does not appear to be in acute distress may not reflect how the patient actually feels. Laboratory tests do not always provide results that correlate with the patient’s experience of pain either. For example, spinal radiological examinations may indicate changes when no pain is reported, or, conversely, fail to identify pathology despite the presence of excruciating discomfort.

**Key Point:**

Pain is subjective and affects each patient differently. Patient appearance and laboratory tests do not always correlate with a patient’s report of pain.

Many experts encourage the routine use of pain scales (e.g., McGill Pain Assessment Scale or the Gracely Pain Scale, which is commonly used in HIV-specific neuropathic pain<sup>8</sup>) to help standardize pain assessments. When staff and patients are trained to use pain scales, the scales can be beneficial in monitoring patients' responses to treatment over time. Furthermore, assessing how pain affects activity and other aspects of function helps define the extent of intervention required and may be useful in monitoring response to treatment. To date, research has not documented the reliability and validity of pain scales in substance-using patients.

Pain may reflect underlying disease in need of treatment, and, although the cause of pain may be readily apparent, diagnostic evaluation is often indicated. In many cases, no definitive etiology can be ascertained. In this situation, the goal may be palliation rather than cure.

Knowing that the patient also has a history of substance use may be beneficial in the differential diagnosis of the pain. For example, peripheral neuropathy can be caused by HIV, malnutrition, medication side effects, diabetes, or alcoholism; each of these mechanisms has a different prognosis and treatment. Similarly, chest pain and confusion have multiple etiologies in the HIV-infected patient, including infection, ischemia, and cocaine use. Thus, knowledge of past and present substance use and abuse and HIV infection status may help determine likely causes of pain.

**Key Point:**

Assessing the psychological status of patients who present with pain is essential because persistent pain is typically associated with depression, loss of self-esteem, and social isolation. Addressing these issues, verbally and/or with medication, may also help the patient cope with overall pain and dysfunction.

### **III. PAIN MANAGEMENT**

**RECOMMENDATIONS:**

**Clinicians should refer HIV-infected substance users with chronic pain to a pain management specialist.**

**Clinicians should offer concurrent treatment for both pain and substance use to patients with unstable substance use and significant pain.**

**Clinicians should use the following factors to guide the decision of which modality to use to treat pain in substance users:**

- **Etiology of pain**
- **Pain severity**
- **Previous treatment response**

**Key Point:**

HIV-infected patients with severe pain who either have a history of substance use or are active substance users may need higher doses of pain medication for longer periods of time because physiologic tolerance may be present.

Clinically appropriate pain management in substance users requires careful individualized judgment. It also requires a willing commitment over time by both patient and clinician and may best be managed by a closely coordinated multidisciplinary team. Clinicians should be familiar with a range of pain treatment options, including opioid pharmacotherapy. Severe pain problems, especially those chronic in duration, are often best treated with more than one modality. Treatments such as nerve blocks, electrostimulation, antidepressants, membrane-stabilizing medications, and others can be safe and effective.

Comorbid substance use should not alter the following goals of pain treatment:

- Establishing a diagnosis
- Treating underlying causes
- Reducing discomfort to a manageable level
- Improving function as much as possible

An HIV-infected patient's unstable substance use may undermine diagnostic measures and treatment efforts by reducing adherence to treatment regimens or interfering with the patient's judgment. Patients with pain who are experiencing withdrawal from substances likely notice an escalation in pain, thus, efforts to stabilize substance use may be crucial to further intervention. It may be necessary to treat substance use and pain concurrently. Adequate substance abuse treatment and management may aid recovery from pain.

#### **IV. SPECIAL CONSIDERATIONS FOR TREATING PAIN WITH OPIOIDS**

##### **RECOMMENDATIONS:**

**Clinicians should carefully individualize, monitor, and document prescriptions for opioid treatment of long-term pain in patients with a history of opioid use. The clinician should determine whether effective alternatives are available, and if not, weigh the risk-to-benefit ratio of opioid use (see Table 1).**

**Before prescribing opioids, the clinician should discuss expected outcomes, including symptom reduction and improved function, with the patient.**

Non-opioid treatment is often successful for mild to moderate pain; however, there are clinical scenarios that may require the use of opioids to provide optimal care. The presence of current or past substance use does not preclude the use of opioids for pain management. Although clinicians should be alert to the possibility of being misled into prescribing opioids that a patient intends to divert, excessive concern about regulatory scrutiny should not preclude sound medical care.<sup>9</sup> When used appropriately, opioids may aid greatly in the reduction of pain and improvement of function. Opioids have been used as standard treatment for severe pain because they can effectively reduce pain, improve function, and are generally well tolerated. As with any treatment decision, the clinician and patient should discuss the relative benefits and risks of opioid use (see Table 1). If opioids are used in patients with a history of substance use, higher doses of medications may be required because of higher physiologic tolerance in some of these patients.<sup>10</sup> This is particularly true for patients participating in methadone maintenance treatment, in whom opioids other than methadone can be prescribed while maintaining baseline methadone

doses. Opioids should be aggressively augmented with other pain management approaches and their use discontinued as indicated. Some pain syndromes may not respond to opioids, and some patients may not be able to adequately manage their use of opioids.

| <b>TABLE 1</b>  |   |
|---|---|
| <b>RISKS AND BENEFITS OF OPIOID USE</b>   |   |
| <b>Benefits</b>   | <b>Risks</b>  |
| <ul style="list-style-type: none"> <li>• Effectively reduce pain and improve function</li> <li>• Generally well tolerated</li> <li>• Favorable side effect profile</li> </ul> | <ul style="list-style-type: none"> <li>• Side effects: oversedation, delirium, constipation</li> <li>• Dependency potential: in persons with past or current substance use, unstable psychopathology, or strong family history of abuse, risk for opioid dependency is higher than in persons without pre-existing risk factors<sup>11</sup></li> <li>• Non-intended use: pharmaceutical opioids have significant “street value,” thus, it is the joint responsibility of patient and clinician to minimize diversion</li> <li>• Insufficient pain control: some patients paradoxically experience reduced pain control with opioids</li> </ul> |

Clinicians who choose to prescribe opioids for pain management in patients with a substance use history should be aware that some patients, as well as other physicians providing care to the patient, may be uncomfortable with and resist using opioids to treat their pain, even when done in a manner consistent with accepted guidelines.<sup>12</sup> Clinicians who choose to prescribe opioids for pain in this context should be prepared to explain their rationale to colleagues who may think such treatment inappropriate. Patient education may also be required if patients or their support network (family, fellowship member in AA or NA) are uncomfortable with this practice. Legal concerns present an additional barrier to some clinicians’ comfort in prescribing opioids to substance users. As in all aspects of medical care, appropriate documentation and adherence to published clinical guidelines should be practiced.

To minimize the risks of opioid use/misuse, the following principles may be helpful<sup>13,14</sup>:

- Clearly state how behaviors suggestive of unstable use, such as drug hoarding, repeated loss of prescriptions, or unauthorized dose escalation, will be handled, and how other drug use will be managed. Deteriorating function related to prescription abuse may require detoxification and discontinuation of opioid therapy.
- Consider periodic random urine drug testing as a tool to help confirm absence of illicit substance use. This should only be performed with the consent of the patient.
- Continually reevaluate the risks/benefits of opioid treatment during the course of treatment.
- Reinforce the use of interventions such as counseling and self-help, especially if these interventions have been helpful in the past for stabilizing substance use.
- Use long-acting opioids and/or those that are less immediately reinforcing, when possible. Some experts recommend prescription of generic medications, which may have less street value than brand names.
- Document the diagnoses, assessment, and prescriptions given. This can help protect both patient and prescriber.

When opioids are prescribed, the clinician should work with the patient to determine what the patient's needs for pain management are, and all points should be discussed and agreed upon. In some cases, it may be useful for the clinician and patient to work together to establish a clear oral or written treatment agreement. When treatment agreements are used, it is important to present them as an agreement rather than an ultimatum.<sup>15</sup> The culture of an institution may affect how or whether a clinician decides to use treatment agreements. If the clinician decides to use a treatment agreement, all points should be agreed upon before the prescription is given. Examples of points that may be discussed include the following:

- The functional goals of treatment
- Agreement that only one provider will prescribe the opioids
- The anticipated duration of medication use
- How to manage requests for early refills due to lost prescriptions or lost or stolen medications

If illicit drug use or alcohol use is suspected, performing random urine toxicology screening or alcohol breathalyzer may be helpful for treatment purposes but should be obtained only with the patient's consent. Interpretation of these tests can be complex, especially if the patient is receiving prescribed opioids. A positive test for non-prescribed opioids, cannabis, cocaine, or abuse of alcohol should be followed with a comprehensive assessment of the status of substance use and possibly a referral for further intervention, and not with reflexive discontinuation of a clinically indicated opioid-based analgesic regimen. Some experts in pain management argue that urine toxicology testing for illicit drug use should be made as a precondition for opioid therapy.<sup>16</sup> By making this a routine practice in their treatment setting, these clinicians aim to *avoid* distrust and anger by patients who might otherwise feel singled out for urine testing.

The following are additional resources for management of pain in substance users:

- **WHO guidelines** for guidance in pharmacotherapy issues: [www.who.int](http://www.who.int)
- **Consensus statement** endorsed by The American Academy of Pain Medicine, The American Pain Society, and the American Society of Addiction Medicine: [www.ampainsoc.org/advocacy/opioids2.htm](http://www.ampainsoc.org/advocacy/opioids2.htm)
- **Prescription Pain Medication:** Frequently Asked Questions and Answers for Healthcare Professionals and Law Enforcement. Available at: [www.painfoundation.org/downloads/PainMedFAQ.pdf](http://www.painfoundation.org/downloads/PainMedFAQ.pdf)

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