PAIN TREATMENT TOPICS

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Pain in Opioid-Addicted Patients Entering Addiction Treatment

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How common is pain among opioid-addicted patients? Does this affect their aberrant or illicit use of opioids? Does this influence their success in addiction treatment?

Complicated Interactions

Pain and addiction share some common physiologic pathways in the brain, especially those involving opioids, and each may affect the other. That is, the presence of pain may influence the development and course of opioid addiction, and vice versa (Compton and Gebhart 2003).

These interactions may complicate therapy for opioid addiction. For example, opioid-addicted persons appear to have lower tolerance for and greater sensitivity to pain, and this may continue during addiction treatment. Sleep disorders and psychiatric illness often associated with addiction may increase the experience of pain and decrease the effectiveness of pain-relief interventions. Furthermore, opioid medications may lose their analgesic potency in many of these patients, so the management of their pain can be challenging (Compton and Gebhart 2003).

Surprising Prevalence of Pain

Unfortunately, pain is a common phenomenon. Estimates vary, but it appears that roughly 50 to 75 million Americans (about 17%-25% of the population) have persistent pain (JAMA 2003).

Rosenblum and colleagues (2003) reported on the prevalence and characteristics of pain in a sampling of patients attending a methadone maintenance treatment (MMT) program for their opioid addiction (n=390). Surprisingly, pain was experienced during the prior week by *80%* of those surveyed. More than a third of all patients suffered from chronic, severe pain, defined as pain of moderate to severe intensity persisting for more than 6 months.

Pain was experienced by 80% of patients in opioid-addiction treatment during the prior week.

Among those MMT patients with chronic, severe pain, nearly two-thirds said their pain greatly disrupted physical and psychosocial functioning. About one-third reported having used illicit drugs (primarily opioids) and/or alcohol to self-medicate their pain, and a majority of them also had been prescribed pain medications by physicians. Many reported that pain was a reason for first using drugs.

Factors that seemed to significantly contribute to the patients' pain conditions included: age, chronic illness, lifetime psychiatric illness, psychological distress, and time in MMT. Why increasing time in treatment might correlate strongly with persistent pain complaints was unexplained by the study.

However, some authors have somewhat skeptically suggested that the Rosenblum et al. research may depict potential problems with the *over*-treatment of pain in some addiction treatment programs. Streltzer and Kosten (2003) expressed concerns regarding two possibilities: 1) opioid agonists, like methadone, might themselves increase sensitivity to pain, or 2) when opioid analgesics also are prescribed for pain in these patients, they "…may learn that it

is easier, safer, and cheaper to obtain opiates by complaining of pain than by procuring them from illicit sources."

Roesenblum's group retorted that there is no clinical evidence to support such propositions. Rather, patients with genuinely chronic pain may be reluctant to leave addiction treatment, "given the likelihood of relapse and the challenge of daily 'hustling' for street drugs" (Portenoy et al. 2003). Denying opioid analgesics to patients who might benefit from them could subvert the goals of addiction treatment by precluding achievement of a more functional, pain-free life.

Where does all the pain come from? Some authors have suggested that patients in addiction treatment may have high rates of acute and chronic pain resulting from injuries associated with past intoxication episodes or risk-taking behaviors (Brands et al. 2004). In addition to this, other studies have suggested that arthritis, headache, and lower back pain are prevalent pain diagnoses in persons addicted to opioids (Mertens et al. 2003).

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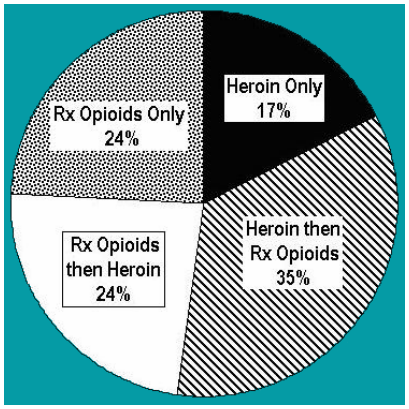
Body aches and pains, depression, and anxiety frequently coexist (Manning 2002). Furthermore, dual diagnoses of psychiatric disorders and substance abuse/addiction are common. Therefore, *triple-diagnoses* – pain, psychiatric disorder, and addiction – might be expected in many patients entering addiction treatment programs and should be considered in the diagnosis.

Rx Opioids Problematic

As if in followup to the Rosenblum et al. study (2003), a Canadian group headed by Brands (2004) reported on prescription opioid abuse among patients entering MMT (n=178). At admission most patients (83%) had been abusing prescription opioids, taking them at higher than therapeutic dosages and with or without heroin.

Four groups were identified (see ***Pie Chart***): a) those using heroin only, b) heroin first, plus prescription opioids subsequently, c) prescription opioids initially, then heroin later, d) prescription opioids only. Thus, heroin was involved to some extent in 76% of cases, which still leaves a noteworthy proportion of patients in MMT exclusively due to prescription opioid addiction. These results also were supported by an *Addiction Treatment Forum* reader survey (see ***Side Box*** on next page).



The majority of patients dependent on prescription opioids, as well as most who used prescription opioids initially then heroin, were more likely to have started opioid use due to ongoing pain problems. Most of them (61%) had received at least some of their opioids via prescription and also were engaged in psychiatric therapy.

Of interest, patients who used prescription opioids exclusively or initially exhibited significantly greater retention in addiction treatment during a two-year period. These patients also were considerably older and started opioid abuse later in life, compared with those who used heroin only or initially.

Furthermore, patients who started on prescription opioids or used them exclusively had significantly higher rates of chronic pain prior to MMT. So, as noted above (Portenoy et al. 2003), these persons might have been more reluctant to leave treatment.

Barriers to Pain Treatment

Rosenblum et al. (2003) stressed that *undertreatment* of pain is an important concern in persons with addiction, and there are many barriers to effective pain management in these patients. Some include: misguided institutional practices, inadequate physician training, reluctance to provide adequate pain medications (especially opioids) to chemically dependent

persons, a reluctance by these patients to seek care due to stigma and fear of drug relapse, and clinicians' fears of regulatory sanctions.

Yet, the findings of research described above point to the need for competent pain management in addiction-treatment populations. In some cases, however, it seems possible that patients might have been referred to such programs for problems that might be described as "pseudoaddiction" – that is, aberrant opioid-seeking behaviors due more to the unavailability of adequate prescribed pain medication than to a true neurobiological addiction.

Brands et al. (2004) observed that pain doctors have little understanding of addiction or how to manage pseudoaddiction. Meanwhile, specialists in addiction medicine often have limited training in the assessment and management of persistent pain. This is not surprising, considering that medical schools and internships provide very little in the way of education regarding either pain or addiction (JAMA 2003).

At one time, modalities like MMT were reserved exclusively for treating heroin addiction. Certainly, this has changed over the years; the Brands et al. study clearly demonstrates that a significant proportion of patients are being treated for addiction to opioids other than heroin, and this also is supported by the *AT Forum* reader survey (***Side Box***). Unfortunately, studies to date have not fully examined the influence of persistent pain and prescription opioid abuse on addiction treatment outcomes over time. Meanwhile, better communication between pain management and addiction treatment specialists should be encouraged.

References:

Brands B, Blake J, Sproule B, Gourlay D, Busto U. Prescription opioid abuse in patients presenting for methadone maintenance treatment. *Drug Alcohol Dep*. 2004;73(2004):199-207.

Compton P, Gebhart GF. The neurophysiology of pain and interfaces with addiction. In: Graham AW, et al., eds. *Principles of Addiction Medicine*. Chevy Chase, MD: American Society of Addiction Medicine; 2003: 1385-1404.

JAMA (*Journal of the American Medical Association*). See special edition devoted to pain: November 12, 2003;290(18).

Manning JS. The brain-body connection and the relationship between depression and pain. Medscape CME Online. Available at: http://www.medscape.com/viewprogram/2166_pnt.

Mertens JR, Lu YW, Parthasarathy S, Moore C, Weisner CM. Medical and psychiatric conditions of alcohol and drug treatment patients in an HMO. *Arch Intern Med*. 2003;163:2511-2517.

Portenoy RK, Rosenblum A, Joseph H, Kipnis S. Methadone maintenance therapy and chronic pain [letter]. *JAMA*. 2003;290(18)2403-2404.

Rosenblum A, Joseph H, Fong C, Kipnis S, Cleland C, Portenoy RK. Prevalence and characteristics of chronic pain among chemically dependent patients in methadone maintenance and residential treatment facilities. *JAMA*. 2003;289(18):2370-2378.

Streltzer J, Kosten TR. Methadone maintenance therapy and chronic pain [letter]. *JAMA*. 2003;290(18)2403.

AT Forum Reader Survey: Agony of Opioid Addiction

A reader survey in the Summer 2003 edition of *AT Forum* (Vol. 12, No. 3) focused on chronic pain in MMT patients, its treatment, and the sort of opioid drugs patients are abusing when they enter treatment. There were 90 responses via feedback cards or at the ATForum.com website.

On average, 75% of patients entering MMT were addicted to heroin, which is consistent with the findings of Brands et al. (2004; *see main article*). *AT Forum* readers noted that other opioids also were implicated as important in many patients, including: oxycodone (15%), hydrocodone (16%), and other (17%). Dilaudid and OxyContin were most commonly mentioned in the "other" category. This survey did not measure rates of simultaneous addiction to multiple opioids.

Respondents further noted that 23% of the MMT patients also were being treated for chronic pain. This was significantly less than the 37% reported by Rosenblum et al. (2003); although, their survey asked how many patients experienced chronic pain in the prior week, rather than how many were being actively treated for those conditions.

Only 17% of *AT Forum* survey respondents indicated that pain management was handled at their MMT clinics. This suggests that a significant number of MMT patients with pain conditions might be seeing outside specialists for these problems. Whether or not this is a favorable trend seems worthy of further discussion between leaders in the pain management and addiction treatment fields.

In summary, this survey confirms other research demonstrating that pain is a noteworthy problem among patients being treated for opioid addiction, and many are entering treatment today for addiction to opioids besides or in addition to heroin. However, it should be noted that, while *AT Forum* surveys are usually accurate in depicting trends, data collection methodologies are not scientifically rigorous.

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