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Commentary

## Opioids for chronic pain in patients with substance abuse: Too much, too little or just right?

Over the past two decades, opioid analgesic prescriptions for chronic noncancer pain have increased [12]. Medical literature supporting this practice began in the 1980s [13], followed by aggressive marketing of "safe" sustained-released opioids to primary care physicians. Increases in opioid prescribing continued despite lack of strong evidence supporting this practice [9] and subsequent increases in rates of opioid misuse including addiction and overdose [3,16,17].

The paper by Weisner et al. [18] confirms this dramatic increase in long-term opioid analgesic prescribing over an eight year period in two large health plans representing community practices. Importantly, they found that patients with a prior substance abuse history were about 4 times more often prescribed opioids than those without a substance abuse history. This prevalence increased by 7-8 times for patients with an opioid use disorder with over half of these patients prescribed opioids. Patients with a substance abuse history were prescribed opioids with higher potency and at higher dosages. They were also twice as likely to be concurrently prescribed sedative hypnotics. Of concern is the assertion by the authors that primary care physicians prescribing opioids may not have been aware of their patient's substance abuse history. Often these diagnoses were made in mental health and substance abuse treatment settings where restrictive privacy regulations prevent full communication of these diagnoses with primary care physicians. These findings are concerning in light of observational studies that have found that a substance abuse history significantly increases the risk for prescription opioid misuse [11]. This paper adds a great deal to our understanding of the magnitude of highrisk opioid prescribing by community-based physicians.

It is unlikely that all patients with a history of substance abuse share the same level of risk for prescription opioid misuse. A limitation of this study is the inability to differentiate between patients who are in stable recovery from their substance abuse from those who are not. For patients in recovery, relapse prevention theories would suggest that unrelieved pain is more likely to trigger relapse than adequate analgesia. For patients with active substance abuse, the potential risks i.e. prescription opioid abuse and/or diversion, may outweigh any potential benefits. Guidelines state that patients who are "actively using illicit drugs" should be treated in "highly controlled and specialized settings" and co-managed with an addiction expert [4]. Unfortunately addiction experts are not readily available to most primary care physicians and when available, their level of expertise and interest in managing patients with chronic pain is highly variable.

So what is the correct prevalence of opioid prescribing for the management of chronic pain in patients with a history of substance abuse? This is obviously a controversial and contentious issue as

exemplified by a survey of state medical boards where the majority of respondents did not consider the use of long-term opioid analgesics in patients with substance abuse to fall within the scope of acceptable medical practice [6]. This question is particularly pertinent since chronic pain and substance abuse can be related phenomena. Over forty years ago, Martin and Inglis [10] observed that patients with opioid addiction self-medicate "an abnormally low tolerance for painful stimuli". The presence of one condition seems to influence the expression of the other. Savage and Schofferman [15] found that persons with addiction and pain have a "syndrome of pain facilitation." Their pain experience is worsened by withdrawal-related sympathetic nervous system arousal, sleep disturbances, and affective changes, all consequences of addictive disease. Supporting a negative effect of addiction on pain tolerance, patients who abuse stimulants and those who abuse opioids have been shown to be less tolerant of pain than their peers in remission [5]. Studies have consistently found that patients with substance abuse histories have an unusually high prevalence of chronic pain [14] and are more likely to have their pain under-treated [1]. This under-treatment has been reported as a reason for initiating and continuing illicit drug use [8]. While opioids are not indicated or effective for all chronic pain, it is unlikely that pain in patients with substance abuse is any less opioid responsive than pain in patients without a history substance abuse. Universally withholding opioid analgesics as well as ignoring their risks in patients with substance abuse would constitute poor clinical care.

Although this study raises concerns about opioid over-prescribing in high risk patients, we do not know what is happening behind the scenes. Are opioids being started appropriately and continued based on improved clinical outcomes? Are patients being closely monitored for signs of prescription opioid misuse or abuse? Pain and addiction society guidelines [4] recommend performing a careful initial assessment including screening for unhealthy substance use. Historically substance use screening tools have been lengthy and impractical for primary care physicians however shorter screening [2] instruments are available. Also recommended are the use of controlled substance agreements to inform patients about the expected benefits and risks of opioids, and that treatment goals include close monitoring for improved function and any addictive behaviors. Because the consequences of opioid analgesic misuse are so serious and because the true risk cannot be reliably predicted, it has been suggested that physicians utilize "universal precautions" when starting and maintaining patients on opioids [7]. That is, monitoring all patients as if they all have the potential for developing prescription opioid abuse.

Because of the uncertain benefits of using long-term opioids for managing chronic pain especially in patients with substance abuse histories, primary care physicians should universally adopt guideline-based practices. Implementation of these guidelines will not be easy as they will require system changes including developing specific policies and procedures for universally screening and assessing for substance use disorders, using patient agreements and monitoring for benefits and risks. Physician educational initiatives must address when and how to use opioids safely and when and how to discontinue opioids when there is lack of benefit and/or apparent harm. Finally, primary care physicians must learn communication skills for discussing opioid misuse and abuse with patients. Because these discussions are potentially uncomfortable, they are often delayed, addressed poorly or never addressed at all.

## References

- Breitbart W, Rosenfeld BD, Passik SD, McDonald MV, Thaler H, Portenoy RK. The undertreatment of pain in ambulatory AIDS patients. Pain 1996;65:243–9.
- [2] Brown RL, Leonard TARCS, Saunders LAMSSW, Papasouliotis O. A two-item conjoint screen for alcohol and other drug problems. J Am Board Fam Pract 2001:14:95–106.
- [3] Centers for Disease Control and Prevention. Unintentional poisoning deaths: United States, 1999–2004. MMWR 2007;56:93–96. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5605a1.htm [Accessed 20.05.2009.].
- [4] Chou R, Fanciullo GJ, Fine PG, Adler JA, Ballantyne JC, Davies P, Donovan MI, Fishbain DA, Foley KM, Fudin J, Gilson AM, Kelter A, Mauskop A, O'Connor PG, Passik SD, Pasternak GW, Portenoy RK, Rich BA, Roberts RG, Todd KH, Miaskowski C. American Pain Society-American Academy of Pain Medicine Opioids Guidelines Panel. Clinical guidelines for the use of chronic opioid therapy in chronic noncancer pain. J Pain 2009;10:113–30.
- [5] Compton MA. Cold-pressor pain tolerance in opiate and cocaine abusers: correlates of drug type and use status. J Pain Symptom Manage 1994;9:462–73.
- [6] Gilson AM, Maurer MA, Joranson DE. State medical board members' beliefs about pain, addiction, and diversion and abuse: a changing regulatory environment. J Pain 2007;8:682–91.
- [7] Gourlay DL, Heit HA, Almahrezi A. Universal precautions in pain medicine: a rational approach to the treatment of chronic pain. Pain Med 2005;6: 107-12.

- [8] Karasz A, Zallman L, Berg K, Gourevitch M, Selwyn P, Arnsten JH. The experience of chronic severe pain in patients undergoing methadone maintenance treatment. J Pain Symptom Manage 2004;28:517–25.
- [9] Martell BA, O'Connor PG, Kerns RD, Becker WC, Morales KH, Kosten TR, Fiellin DA. Systematic review: opioid treatment for chronic back pain: prevalence, efficacy, and association with addiction. Ann Intern Med 2007;146:116–27 [see comment].
- [10] Martin JE, Inglis J. Pain tolerance and narcotic addiction. Br J Soc Clin Psychol 1965;4:224–9.
- [11] Michna E, Ross EL, Hynes WL, Nedeljkovic SS, Soumekh S, Janfaza D, Palombi D, Jamison RN. Predicting aberrant drug behavior in patients treated for chronic pain: importance of abuse history. J Pain Symptom Manage 2004;28:250–8.
- [12] Olsen Y, Daumit GL, Ford DE. Opioid prescriptions by U.S. primary care physicians from 1992 to 2001. J Pain 2006;7:225–35.
- [13] Portenoy RK, Foley KM. Chronic use of opioid analgesics in non-malignant pain: report of 38 cases. Pain 1986;25:171–86.
- [14] 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 2003:289:2370–8.
- [15] Savage SR, Schofferman J. Pharmacological therapies of pain in drug and alcohol addictions. In: Miller N, Gold M, editors. Pharmacological therapies for drug and alcohol addictions. New York: Dekker; 1995. p. 373–409.
- [16] Substance Abuse and Mental Health Services Administration, Office of Applied Studies. The NSDUH report: patterns and trends in nonmedical prescription pain reliever use: 2002 to 2005. Rockland, MD; 2007. Available from: http:// www.oas.samhsa.gov/2k7/pain/pain.pdf [Accessed 20.05.2009.].
- [17] Substance Abuse and Mental Health Services Administration, Office of Applied Studies. Treatment Episode Data Set (TEDS) highlights: 2006 national admissions to substance abuse treatment services. OAS Series #S-40, DHHS Publication No. (SMA) 08-4313. Rockville, MD; 2007. Available from: http:// www.oas.samhsa.gov/TEDS2k6highlights/toc.cfm [Accessed 20.05.2009.].
- [18] Weisner C, Campbell CI, Ray GT, Saunders K, Merrill JO, Banta-Green C, Sullivan MD, Silverberg MJ, Mertens JR, Boudreau D, Von Korff M. Trends in prescribed opioid therapy for non-cancer pain for individuals with prior substance use disorders. Pain 2009:145:287–93.

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