

Title: Internet Acquisition of Opiates and Sedatives by Adolescents: A Growing Concern for the Practicing Anesthesiologist

Author(s): MM Liao, B Vaughan, CS Scher

Affiliation(s): Mount Sinai School of Medicine, New York, NY

In recent years, the rate of cigarette smoking and alcohol use among adolescents has reached historic lows. Additionally, the rate of illicit drug use has dropped by more than 30% among 8th graders and by 10% among 12th graders since the late 1990's (1). However, the use of prescription drugs such as opioid analgesics and sedatives has increased at alarming rates. Opiates are the most commonly abused class of prescription medications among adolescents. In fact, Vicodin is the most commonly abused drug in this population today, second only to marijuana. The 2006 National Institute on Drug Abuse's (NIDA's) Monitoring the Future Survey found that 9.7 percent and 4.3 percent of 12th graders reported using Vicodin and OxyContin, respectively, for non-medical purposes in the past year (2, 3). In addition to opiates, sedative-hypnotics are also commonly abused. According to the 2004 National Survey on Drug Use and Health, 2.5% of adolescents between the ages of 12 and 17 years have used sedative-hypnotics such as benzodiazepines in the past year (4).

The Internet has played a large role in the increasing popularity of prescription drug abuse. In particular, websites such as <http://www.buymedsquick.com> virtually guarantee that anyone with a credit card can purchase prescription medications. The ease with which adolescents can access these drugs of abuse is reflected in the NIDA Monitoring the Future Survey in which 39.2% of 12th graders reported that obtaining Vicodin and OxyContin was "fairly easy" or "very easy" (5).

Opiate and sedative-hypnotic abuse is relevant to practicing anesthesiologists who care for adolescent patients. There is no doubt that chronic opiate abuse can impact post-operative pain management. One issue is that these patients may develop tolerance to opiates and require higher doses to achieve adequate post-operative pain relief. If the anesthesiologist is not aware that the patient chronically abuses opiates, he/she may be more inclined to wonder whether the patient is truly in pain or whether the patient is "drug seeking." Frank withdrawal is a concern as well. A previous study reported that 42% of patients on chronic opioids exhibited withdrawal symptoms within 36 hours of surgery (6).

It is therefore crucial that anesthesiologists be vigilant about obtaining information about substance use and/or abuse during the preoperative evaluation of adolescent patients. However, there exist significant obstacles to obtaining an accurate history. Awareness of prescription drug abuse in adolescents may be low because there is not a large body of literature on the topic and patients are unlikely to present under the influence. Furthermore, many adolescent patients insist on maintaining their right to privacy; others may simply offer inaccurate reports of risky behavior. It is therefore essential to maximize the likelihood of obtaining an accurate history by undertaking measures such as interviewing adolescent patients without parents and clearly explaining to patients the risks of not accurately reporting drug use.

References

1. Friedman, Richard A. The Changing Face of Teenage Drug Abuse -- The Trend toward Prescription Drugs. *N Engl J Med.* 2006; 354: 1448-1450.
2. Johnston, L. D., O'Malley, P. M., Bachman, J. G. & Schulenberg, J. E. (December 21, 2006). Decline in daily smoking by younger teens has ended. University of Michigan News and Information Services: Ann Arbor, MI.[On-line]. Available: www.monitoringthefuture.org; accessed 04/07/07.
3. Johnston, L. D., O'Malley, P. M., Bachman, J. G. & Schulenberg, J. E. (December 21, 2006). Teen drug use continues down in 2006, particularly among older teens; but use of prescription-type drugs remains high. University of Michigan News and Information Services: Ann Arbor, MI. [On-line]. Available: www.monitoringthefuture.org; accessed 04/07/07.
4. Boyd, Carol J., McCabe, Sean Esteban, Cranford, James A., Young, Amy. Adolescents' Motivations to Abuse Prescription Medications. *Pediatrics.* 2006; 118: 2472-2480.
5. Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2006). Monitoring the Future national survey results on drug use, 1975-2005. Volume I: Secondary school students (NIH Publication No. 06-5883). Bethesda, MD: National Institute on Drug Abuse, 684 pp.
6. Colon J, Scher C, Bateman M, Borg T. Postoperative Opioid Withdrawal Syndrome in Chronic Non-Cancer Patients. Abstract. American Society of Anesthesiologists. October 2003, San Francisco, Calif. *Anesthesiology* 2003; 99: A1352