THE PSYCHIATRIST'S TOOLBOX

What We Can Learn About Addiction

Recently I attended a continuing medical education program at Columbia University's College of Physicians and Surgeons.

The program focused on the use of the partial opioid agonist buprenorphine for treating opioid dependence in an office practice. Our focus was on a formulation called Suboxone, which combines buprenorphine and naloxone. Suboxone is the preferred formulation of buprenorphine for maintenance treatment.

BY ROBERT T. LONDON, M.D.

My special interest in the treatment of addiction has focused on tobacco smoking, which I believe is our greatest health hazard ("A Twist on Dual Diagnosis," CLINICAL PSYCHIATRY NEWS, January 2005, p. 30). So I was fascinated to learn about some of the progress we have made in treating opioid dependence.

The use of medication for addiction treatment is not new. For example, disulfiram (Antabuse), bupropion (Wellbutrin, Zyban), nicotine patches, and nicotine gum all have their place in addiction medicine.

The use of methadone—the first recognized chemical treatment for opioid addiction and dependence in the United States—began in the early 1960s.

Over the past 40 years or so, the concept of methadone maintenance has been controversial. Many people believe that "drug free" is the only way to treat addiction. That notion holds merit, and I'm certain that many people who are on maintenance programs would share that view.

But according to Eric D. Collins, M.D., a psychiatrist at Columbia University and one of the faculty members teaching this program, "When a patient regularly demonstrates that opioid dependence cannot be controlled through abstinence and that continued use presents a high risk of disease transmission, institutionalization, incarceration, and/or death, it's time to work within medical boundaries to treat opioid addiction in the best way we can."

This rationale supports the use of maintenance treatment with methadone—and now, to add another alternative in certain circumstances, buprenorphine. Because the use of buprenorphine is sufficiently complicated and the drug is prone to diversion, an 8-hour course and a Drug Enforcement Administration certificate is necessary to treat with buprenorphine in office practice.

Dr. Collins, a strong believer in the utility of buprenorphine for opioid dependence, sees this treatment not as a replacement for methadone, but as a parallel treatment for certain levels of opioid addiction. He points out that buprenorphine transitions patients from their illicit opioid use to buprenorphine. The program accepts people only after careful psychiatric/psychological evaluation of opioid use.

Furthermore, a personality inventory is taken, support systems are evaluated, and counseling or psychotherapy is offered for patients entering a buprenorphine maintenance program. Dr. Collins and clinical psychologist Margaret Rombone, Ph.D., work diligently to take psychiatric and psychological aspects of the people in the program as seriously as the actual use of medication in the program. The early stage—especially the first week—of buprenorphine treatment generally requires more intensive treatment. After that, the process usually goes smoothly, as long as relapse doesn't occur.

Opioid addiction is chronic, and therefore relapse is not perceived as failure, but as part of the natural course of the illness.

The most exciting aspect of this new approach to opioid addiction is that it represents a step forward in treating a worldwide illness safely in an office-based setting. It combines medication management as well as a psychotherapeutic arm for these motivated people who want to move beyond the terrifying world of opioid addiction.

Medical and surgical advances have been made over the years, and it is important for addiction medicine and addiction psychiatry also to move forward. Just as continuing medical education is necessary to keep current in other specialties, it is equally important that physicians and other health care providers learn the methodology of this new and promising treatment, so that our patients are evaluated and offered the best treatments for their illnesses.

This new treatment is not solely for psychiatrists and their office-based practices. Primary care physicians can offer this treatment as well. Teaching more clinicians this approach will make it possible to serve patients who are seen in and beyond the mental health community—provided that these clinicians get the proper psychosocial training in the mental health aspects of addiction.

Bradford M. Goff, M.D., a psychiatrist, addiction medicine specialist, and chairman of the department of psychiatry at Lutheran Medical Center, New York, believes that the ability to treat opioid addictions in office-based practices will put psychiatrists at the cutting edge of caring for many patients who are not interested in methadone maintenance programs.

Dr. Goff is concerned, as am I, that when primary care physicians treat these patients, they may lose sight of the need to address the mental health problems that many of these patients have. He points out that recent reports from the Substance Abuse and Mental Health Services Administration (SAMSHA) estimate that 50%-75% of patients in substance abuse treatment programs have co-occurring mental illness.

Thus, Dr. Goff proposes a special CME program for primary care physicians, emphasizing the serious mental illness that may go hand in hand with opioid addiction. Perhaps psychiatric consultation should be necessary for the primary care physician.

When we use medications to help patients achieve and maintain abstinence (such as acamprosate [Campral] for alcohol dependence), the efficacy of psychosocial treatments—including 12-step programs—is enhanced.

The Psychiatrist's Toolbox tries to provide education and current concepts in many areas of mental health. When I attended this program, I was excited to learn about these new advances from these experts, to speculate on how far we've come in the understanding and treatment of addiction as an illness, and, of course, to pass these ideas along to my readers. ■

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Chronic Methamphetamine Use Linked to Cardiomyopathy

BY MITCHEL L. ZOLER
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NEW ORLEANS — Chronic use of methamphetamine can lead to nonischemic, dilated cardiomyopathy and profound left-ventricular dysfunction, according to a study of 53 methamphetamine users seen at a single medical center in California.

"To our knowledge, this is the first study of its type to examine the relationship between chronic methamphetamine use and its effect on the heart," Melissa R. Robinson, M.D., reported in a poster at the annual scientific sessions of the American Heart Association.

"In contrast with cocaine, long-term methamphetamine use seems to have a direct, cardiotoxic effect, and promotes the development of severe, nonischemic, dilated cardiomyopathy," according to Dr. Robinson of the department of internal medicine at the University of California, Davis.

Although the number of chronic users of methamphetamine is not known, a 2001 survey estimated that more than 5 million people in the United States had tried the drug, the physician commented.

Dr. Robinson's review started with 226 patients who were either hospitalized at the UC Davis Medical Center or seen in the hospital's emergency department during 1993-2002 and reported using methamphetamine and were diagnosed with either cardiomyopathy or heart failure.

The effects of methamphetamine are exacerbated by its relatively long half-life, 8-12 hours. In contrast, the half-life of cocaine is 30-60 minutes.

This list of patients was then pared to exclude those with another possible explanation for their heart disease, including a history of significant alcohol use (at least four drinks per day for at least 5 years), alcoholic cirrhosis, cocaine use, or severe coronary artery disease.

These exclusions left 53 patients who were methamphetamine users and had no clear etiology for their cardiomyopathy or heart failure. The average duration of drug use among these 53 patients was 5 years.

The patient's average age was 46 years, and 43% were younger than 45. Their average left-ventricular end-diastolic dimension was 66.3 mm, and 87% had an end-diastolic dimension of more than 55 mm, indicating severe dilated cardiomyopathy.

Echocardiography was done on 46 patients, who had an average left-ventricular ejection fraction of 25%; 35 of the 46 patients (76%) had an ejection fraction of less than 30%.

Several of the patients had severe complications while they were followed at UC Davis. Five patients had strokes, another five had recurrent ventricular arrhythmias that required implantation of a cardioverter defibrillator, and six had sudden deaths.

"These clinical findings were unusual given the relatively young age of these patients," Dr. Robinson commented.

Four patients had resolution of their cardiomyopathy after they stopped using methamphetamine.

Methamphetamine probably triggers cardiomyopathy by causing a chronic excess of catecholamines, similar to what happens in patients with a pheochromocytoma, an adrenal gland tumor, Dr. Robinson told this newspaper.

The effects of methamphetamine are exacerbated by its relatively long half-life, 8-12 hours.

In contrast, the half-life of cocaine is 30-60 minutes.

These findings show that chronic methamphetamine use can lead to severe cardiomyopathy, and physicians should think about these effects when caring for patients who use methamphetamine, she said. ■