## A Tool for Buprenorphine Care (A series of monthly newsletters about buprenorphine treatment)

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## Cautions and Contraindications for Buprenorphine Treatment

Several medical conditions and medications, as well as concurrent abuse of other drugs and alcohol, necessitate caution or are relative contraindications to buprenorphine treatment.

1. Seizures - When buprenorphine is used concurrently with antiseizure medications (e.g., phenytoin, carbamazepine, valproic acid, etc), metabolism of buprenorphine and/or the antiseizure medications may be altered. In addition, the relative risk of interaction between buprenorphine and sedative-hypnotics (e.g., phenobarbital, clonazepam) should be kept in mind. Monitoring for therapeutic plasma levels of seizure medications should be considered.

2. HIV treatment - Buprenorphine should be used cautiously in combination with HIV antiretroviral medications that may inhibit, induce, or be metabolized by the cytochrome P450 3A4 enzyme system. Protease inhibitors inhibit cytochrome P450 3A4. Metabolism of buprenorphine and/or the antiretroviral medications may be altered when they are combined. In some cases, therapeutic blood levels may need to be monitored. Note that this is a caution, not a contraindication; successful treatment of addiction with buprenorphine in HIV-infected patients has been well demonstrated (Berson et al. 2001; Carrieri et al. 2000; McCance-Katz et al. 2001; Moatti et al. 2000).

3. Hepatitis and impaired hepatic function - Pharmacotherapy with buprenorphine is not contraindicated on the basis of mildly elevated liver enzymes; however, elevated liver enzymes should be appropriately evaluated and monitored frequently. Viral hepatitis (especially infection with HBV or HCV) is common among individuals who abuse opioids and should be evaluated and treated appropriately.

4. Pregnancy - In the United States, methadone is the standard of care for pregnant women who are addicted to opioids. Very few studies exist on the use of buprenorphine in pregnant women. If a patient is pregnant or is likely to become pregnant during the course of treatment with buprenorphine, the physician must weigh the risks and benefits of buprenorphine treatment against all the risks associated with continued heroin or other opioid use. A recent study (see below) concluded that maternal buprenorphine use at time of birth may have resulted in neonatal abstinence syndrome leading to long-term hospitalization of the infants.

5. Use of other drugs - Although use of other drugs tends to be a predictor of poor adherence, other drug use is not an absolute contraindication to buprenorphine treatment. (See below for exceptions.) Patients should be encouraged to abstain from the use of all nonprescribed drugs while receiving buprenorphine treatment. However, abuse of or dependence on other drugs (e.g., alcohol, cocaine, stimulants, sedative-hypnotics, hallucinogens, inhalants) is common among individuals who are addicted to opioids, and such abuse or dependence may interfere with overall treatment adherence.

Patients who use or abuse more than one substance present unique problems and may need referral to resources outside the office setting for more intensive treatment. Patients should be encouraged to be truthful about their use of all drugs. A recent drug use history and a toxicology screen for drugs of abuse are guides to help assess use, abuse, and dependence on opioids and other drugs. Treatment of patients with more than one addiction problem will depend largely on the physician's level of comfort in treating addiction, the availability of psychosocial support and counseling, and the availability of other forms of addiction treatment.

6. Sedative-Hypnotics (including alcohol) – Use of sedative-hypnotics (benzodiazepines, barbiturates, etc.) is a relative contraindication to treatment with buprenorphine because the combination (especially in overdose) has been reported to be associated with deaths (Reynaud et al. 1998a,b). The combination may increase depression of the central nervous system. If treatment with buprenorphine and sedative-hypnotics is necessary, the doses of both medications may need to be lowered. Physicians must assess for use, intoxication, and withdrawal from sedative-hypnotics. Unfortunately, the use of certain benzodiazepines and other sedatives may not be detected on routine drug screens. Physicians must determine their laboratory's specific parameters for detection of sedative-hypnotic use.

Because alcohol is a sedative-hypnotic drug, patients should be advised to abstain from alcohol while taking buprenorphine. Rarely are individuals with active, current alcohol dependence appropriate candidates for officebased buprenorphine treatment. (It may be possible to treat such patients through initial, intensive services that effectively detoxify the patient from alcohol while concurrently starting buprenorphine [e.g., in an inpatient or residential setting].) Patients may present with withdrawal symptoms from other drugs at the same time they are experiencing opioid withdrawal symptoms. Buprenorphine will not control seizures caused by withdrawal from alcohol or other sedative-hypnotic substances. Benzodiazepines and barbiturates, the most commonly used pharmacological treatments for seizures caused by alcohol or other sedative-hypnotic withdrawal, should be used in combination with buprenorphine only with caution because of the increased risk of central nervous system and respiratory depression from the combination.

Adapted from Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction, Laura McNicholas, M.D., Ph.D.

## Updates in Research

- Singhal A., et al. Effect of buprenorphine on psychomotor functions in patients on buprenorphine maintenance. J Opioid Manag. 2008 Jan-Feb;4(1):41-7. PubMed ID 18444447.
- Hytinantti T., et al. Neonatal outcome of 58 infants exposed to maternal buprenorphine in utero. Acta Paediatr. 2008 May 8. [Epub ahead of print]. PubMed ID 18474065.

## Tip of the Month

Patients should be in mild to moderate opioid withdrawal when inducing. A COWS score of 12-13 indicates a good time to begin. Source: VA Buprenorphine Resource Guide

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