

Bupropion: Off-label treatment for cocaine and methamphetamine addiction

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Initiating bupropion while a patient is detoxifying will significantly reduce cravings and treat depressive symptoms

Many psychiatric patients present with substance abuse problems in addition to mood, anxiety, or psychotic disorders. Addiction to cocaine or methamphetamine is widespread and difficult to treat. Also, patients who abuse these substances frequently relapse.¹

Need for treatment. There are no FDA-approved medications for treating cocaine or methamphetamine addiction. Several compounds are being studied, including therapy for addiction–cocaine addiction (TA-CD), a potential cocaine vaccine. The vaccine produces anticocaine antibodies that attach to cocaine molecules in the blood, preventing them from passing the blood-brain barrier. This mechanism blocks cocaine-induced euphoria. Although promising, it is still under investigation and pharmaceutical companies have shown little interest in producing it.²

Initial treatment. Bupropion is a norepinephrine-dopamine reuptake inhibitor with a chemical structure similar to amphetamine. It is FDA-approved for treating major depressive disorder and nicotine addiction;³ however, some clinicians have found it helpful during the initial treatment of cocaine and methamphetamine

addiction. If bupropion is initiated while the patient is detoxifying, the drug significantly reduces cravings and also treats depressive symptoms, which are common during withdrawal.⁴ The patient can safely remain on bupropion after discharge if the medication is taken continuously without a lapse in treatment.

Caveat. If a patient presents with depression or another mood disorder, take a careful addiction history before prescribing bupropion. If the patient has a recent history of cocaine addiction, but has been abstinent for ≥ 1 month, bupropion may not be the drug of choice. Because bupropion has a chemical structure similar to amphetamine, it can be a powerful trigger for relapse. To avoid this problem, take a careful history during the initial psychiatric evaluation. Timing is crucial for effective bupropion use and for maintaining continued abstinence among dual diagnosis patients.

References

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