

Treating Catatonia With Benzodiazepines

Barbiturates and benzodiazepines, sedative drugs used to relieve anxiety and to induce sleep, are effective treatments for catatonia. Their use has been well documented with the caveat that effective dosing is often considerably higher than when these agents are used as an anxiolytic or a soporific. An additional use is the sedative benzodiazepine test that verifies the presence of catatonia.¹

The modern story began with the use of sodium amobarbital (Amytal Sodium) in catatonia in 1930 by William Bleckwenn of Wisconsin. Within a few minutes of an injection, patients in stupor, mute, and posturing were quickly relieved, a relief that persisted for hours. This dramatic change was documented in a black and white film and within a very short time dosing with amobarbital became the standard treatment in emergency rooms and hospital settings.² Bleckwenn's intravenous dosing was 2 grams, however, a high dose considering that each vial contained 500 mg. For many subjects, relief was immediate and complete. For others, the benefits were transient and treatments had to be continued.

Amobarbital injections were the standard treatment for catatonia until 1983 when Gregory Fricchione of Massachusetts General Hospital reported that each of four patients with febrile catatonia, agitated and delirious, with elevated blood pressures, rapid heart rates, and increased sweating, were quickly relieved by 2-mg intravenous lorazepam (Ativan). Such dosing is the principal treatment of catatonia today.

Management of catatonia today is well structured. Scoring the severity

using a catatonia rating scale (like the Bush-Francis 23-item scale) establishes a baseline severity of the symptoms. Relief of up to 50% of the CRS score following an intravenous injection of 1 milligram given every 5 minutes for 2 doses confirms the presence of catatonia.

Treatment with lorazepam begins with 1mg to 3mg orally, increasing rapidly by 3mg a day, progressing until symptom relief is seen. For severely ill patients, dosages of 15mg to 40mg/day have been necessary.

In one study the signs of catatonia were relieved by lorazepam dosing in 16/21 patients (76%). Eleven (69%) of the 16 patients had a complete resolution of catatonic signs (CRS scores = 0) by the end of the first day of treatment.

Diazepam (Valium) and zolpidem (Ambien) are also effective sedatives. Diazepam dosages are calculated at ratios of 5mg to 1mg of lorazepam. Zolpidem dosages up to 40mg/day are used.

In systematic studies of catatonia about 80% of the recognized cases respond to benzodiazepine treatment, leaving fewer than 20% requiring referral for ECT.

In acutely ill patients with the malignant form of catatonia, with fever, delirium, hypertension, tachycardia, and often dehydrated, ECT is considered early.

Consent for treatment may be an issue since many catatonic patients are mute and negativistic. In contrast to ECT, where a signed consent is necessary, consent for medications is not an issue. Considering that the dosing necessary for catatonia is often higher than the usual pharmacy guidelines that are based on lorazepam as a mild anxiolytic or a night time sedative, the pharmacy may question the dosing. Referring the pharmacist to catatonia texts may be helpful.³

¹ Bush G, Fink M, Petrides G, Dowling F, Francis A. Catatonia II: treatment with lorazepam and electroconvulsive therapy. *Acta Psychiatr Scand.* 1996;93:137-143.

² Bleckwenn WJ. Catatonia cases after IV sodium amytal injection [motion picture]. National Library of Medicine, ID 8501040A.

³ Fink M, Taylor MA. *Catatonia: A Clinician's Guide to Diagnosis and Treatment*. NY: Cambridge University Press, 2003.