ALPRAZOLAM AS A MONOTHERAPY FOR ANXIETY AND DEPRESSION

DEAR EDITOR:

It is well known that alprazolam is effective in anxiety disorders. But review of published literature suggests that alprazolam can be effective in treatment of depression[1] as well OCD.[2] Animal studies have suggested that alprazolam causes a net decrease in noradrenergic activity in an anxiety state but produces a net increase in noradrenergic activity in both prefrontal cortex and hippocampus in depression.[3] Studies have also shown that alprazolam treatment resulted in significantly decreased plasma and urinary cortisol level, serotonin platelet-bound, and urinary 3-mthoxy 4-hydroxyphenyglycol concentrations, which reinforce its efficacy in depression and anxiety.[4] We present a case that suggests the possible therapeutic benefits of monotherapy of alprazolam in a patient with both anxiety and depressive disorders.

Case report. Miss G was a 63-year-old Caucasian woman who was being seen in the psychiatry outpatient clinic for last three years. She was diagnosed with generalized anxiety disorder, major depressive disorder, recurrent, and obsessive compulsive disorder. The patient was tried on trifluoperazine, mipramine, anafranil, paroxetime, fluoxetine hydrochloride, sertraline hydrochloride, bupropion, amoxapine, diazepam mirtazapine, olanzapine, and even monoamine oxidase inhibitors in the past. All had to be discontinued because of lack of efficacy and adverse effects.

When she was seen in the clinic, the patient was started on nefazodone 50mg b.i.d. along with alprazolam 0.25mg four times daily. When the dose of nefazodone was increased to 100mg p.o. b.i.d. patient started complaining of nausea and expressed her reluctance to continue the medication. The treatment team at that time decided to stop nefazodone and increase the dose of alprazolam to 0.5mg p.o. four times daily. Later alprazolam was switched to an extended release formulation of alprazolam (Xanax XR). For the last 21 months, patient has been on this extended release formulation at 2mg p.o. in morning and 1mg at night. The patient has shown significant improvement in her clinical symptoms with regard to not only her generalized anxiety but also to her depression and OCD.

When one considers the risk of abuse, dependence, and withdrawal, alprazolam can never be the first choice in the treatment of comorbid depression and anxiety disorders. In this patient with multiple previous drug trial failures, however, it proved to be a useful alternative. Though more research is needed, the authors want clinicians to be aware of this possible option.

With regards,
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1. Jonas JM, Cohon MS. A comparison of the safety and efficacy of alprazolam versus other agents in the treatment of anxiety, panic, and depression: A review. *J Clin Psychiatry* 1993;54(Suppl):25–45.
2. Tesar GE, Jenike MA. Alprazolam as treatment for a case of obsessive-compulsive disorder. *Am J Psychiatry* 1984;141(5):689–90.
3. Petty F, Trivedi MH, Fulton M, Rush AJ. Benzodiazepines as antidepressants: Does GABA play a role in depression? *Biol Psychiatry* 1995;38:578–91.
4. Santagostino G, Cucchi ML, Frattini P, et al. *Pharmacopsychiatry* 1998;31(4):131–6.