Letter to the Editor

Midazolam improvement of severe mood disorder

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Midazolam recently aroused the interest of clinicians in the treatment of chronic psychiatric states. Jeffrey and Delisle (1991) reported the attenuation of catatonia in a schizophrenic and efficacy in the treatment of aggressive and violent patients resisting all treatments. We report the case of a patient improved under similar conditions.

Mr G, aged 70 years, presented with a severe depressive syndrome developing for 15 months and resisting different antidepressant treatments at therapeutic dosage. The cachectic state of the patient did not allow electroconvulsive therapy to be carried out.

During the seventh month, anorexia, negligence, mutism and an overall slowing down developed, evoking a stuporous form in a context of sadness. The hypothesis of dementia onset was rejected due to maintained cognitive abilities with a mini-mental state rated 26/30.

Magnetic resonance imaging (MRI) was performed while the patient was receiving 200 mg of amineptine per day for 4 weeks. Amineptine is a central dopaminergic activating drug. The MRI showed the presence of diffuse leukoencephalitis of vascular origin. The test required an IV injection of 5 mg of midazolam.

The day after the test, the basic emotional behavior disturbances, mutism, the opposing behavior and the depressive mood improved in a spectacular way. Smiling came back progressively. On the tenth day the clinical picture was similar.

This observation suggests that midazolam induced dramatic relief of a severe psychiatric picture. The importance of its association with amineptine is difficult to evaluate. Midazolam is a benzodiazepine compound with an ultra-short half-life. After an IV injection, midazolam disappears from the CNS in 3 h (Merlo and Lion, 1985). The extremely fast occupation and the rapid withdrawal of midazolam from the GABA receptors could be a possible explanation for this result. Midazolam could displace a pathological endogenous ligand. The major memory impairment induced by midazolam should be taken into account. This molecule could act by rephasing certain biological rhythms which would be consistent with Langer's hypothesis for isoflurane for the attenuation of mood disorders (Langer et al, 1985).

References

Bond WS, Mandos LA, Kurtz MD. Midazolam for aggressivity and violence in three mentally retarded patients. *Am J Psychiatry* 1989;7:46
Jeffrey D, Delisle MD. Catatonia unexpectedly reversed by midazolam. *Am J Psychiatry* 1991;6:148

Langer G, Neumark J, Koining G, Graph M, Schönbeck D. Rapid psychotherapeutic effects of anesthesia with isoflurane (es narcotherapy) in treatment refractory depressed patient. *Neuropsychobiology* 1985;14:118–20

Merlo F, Lion P. Study of the rapid EEG activity induced by midazolam. Curr Ther Res Clin Exp 1985;38/5:798–807

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