Letter to the Editor

Gabapentin in the Treatment of Posttraumatic Stress Disorder

Sir: Gabapentin is a newer anticonvulsant approved for use as an adjunct agent in the treatment of partial seizures with or without secondary generalization.[1] Recent publications indicate that gabapentin has been useful in a wide array of psychiatric conditions including anxiety disorders,[2] alcohol withdrawal,[3] bipolar disorder,[4] behavioral disorders,[5,6] and even antidepressant-induced bruxism.[7] Although its exact mechanism of action is not known,[1] it is structurally related to γ-aminobutyric acid (GABA), but does not interact with GABA receptors.[8]

A case is presented in which a patient diagnosed with posttraumatic stress disorder (PTSD) who had been taking multiple medications with little clinical response was placed on gabapentin treatment with beneficial results. To date, there has been 1 report describing its use in treating PTSD.[9]

Case report. Mr. A, a 48-year-old man, had a chronic history of PTSD (DSM-IV criteria) and opioid abuse dating back to his military service in Vietnam. He had been treated over the years with numerous medications for his PTSD, most recently fluoxetine, 40 mg/day; trazodone, 150 mg at night; and clonidine, 0.1 mg p.o. t.i.d., all for at least 1 year. He was admitted for an exacerbation of his symptoms including increasing nightmares, flashbacks, intrusive thoughts, and suicidal ideation. His medical history was significant for hepatitis C and mildly increased hepatic enzymes.

Mr. A requested a change in medication to alleviate his worsening presenting symptoms, especially the nightmares and flashbacks. He agreed to a trial of gabapentin initiated at 300 mg at bedtime in addition to his current medication regimen. Over the next several days, he noted decreased nightmares, no flashbacks, and less anxiety and irritability overall. On day 3, the gabapentin was increased to 300 mg b.i.d., which further reduced his irritability. His sleep increased to 6 hours a night without awakenings. Over the course of 3 months, Mr. A noted a distinct reduction in nightmares and flashbacks, and his depression improved. He continues to participate in an outpatient treatment group and has begun a 12-step program to work on his opioid abuse.

Gabapentin is an anticonvulsant that is eliminated by the kidneys and is not protein bound.[8] By virtue of these properties as well as lack of hepatic enzyme induction, gabapentin has little potential for drug interactions with psychotropic medications,[8] which is of great importance in treating a complicated psychiatric disorder such as PTSD. Although the exact neurobiology of gabapentin is not fully understood, Nutt[10] reviews the current understanding of the role of certain neurotransmitters such as glutamate, GABA, serotonin, and norepinephrine as well as hypothalamic peptides in PTSD. Gabapentin may exert its effects through its structural relationship to GABA, playing an important role in decreasing excitatory input (glutamate) at the *N*-methyl-D-aspartate (NMDA) and α-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptors, thought to play a role in sensory transmission important in the psychobiology of PTSD.[10] Gabapentin may be an important adjunct in a complicated psychiatric disorder; however, further studies in a controlled fashion are needed.

Conclusions and opinions expressed are those of the author and do not necessarily reflect the position or policy of the U.S. Government, Department of Defense, Department of the Army, or the U.S. Army Medical Command.

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Timothy R. Berigan, D.D.S., M.D.
William Beaumont Army Medical Center
El Paso, Texas