Clinical Neuroscience Update

## Antidepressants: The Blue-Chip Psychotropic for the Modern Treatment of Anxiety Disorders

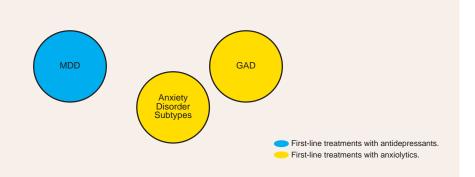
Stephen M. Stahl, M.D., Ph.D.

**Issue:** Antidepressants were just antidepressants in the 1960s. Now antidepressants are antidepressants AND anxiolytics, useful not only for the treatment of major depressive disorder, but also anxiety disorders ranging from obsessive-compulsive disorder, to panic disorder, social phobia and posttraumatic stress disorder, and now including generalized anxiety disorder.



his issue of Brainstorms is a visual lesson amplifying last month's written feature entitled "Mergers and Acquisitions Among Psychotropics: Antidepressant Takeover of Anxiety May Now Be Complete."

Figure 1. Treatment of Depression and Anxiety in the 1960s



The earliest antidepressants were tricyclic antidepressants (TCAs) and monoamine oxidase inhibitors (MAOIs) and were conceptualized as targeting an entirely different syndrome (major depressive disorder [MDD]) than did the earliest anxiolytics, namely, the benzodiazepines. At that time, benzodiazepines targeted anxiety disorders as a whole including generalized anxiety disorder (GAD) or anxiety neurosis, which was much more broadly defined at that time, as well as anxiety disorder subtypes.

BRAINSTORMS is a monthly section of The Journal of Clinical Psychiatry aimed at providing updates of novel concepts emerging from the neurosciences that have relevance to the practicing psychiatrist.

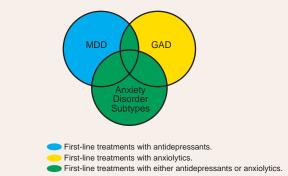
From the Clinical Neuroscience Research Center in San Diego and the Department of Psychiatry at the University of California San Diego.

Reprint requests to: Stephen M. Stahl, M.D., Ph.D., Editor, BRAINSTORMS, 8899 University Center Lane, Suite 130, San Diego, CA 92122.

## BRAINSTORMS

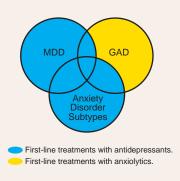
## Clinical Neuroscience Update

Figure 2. Treatment of Depression and Anxiety in the 1970s and 1980s



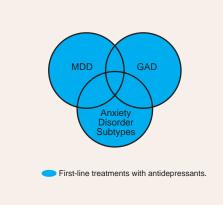
As the TCA/MAOI era matured, mixtures of anxiety and depression were increasingly recognized and treated both with these antidepressants and with buspirone as well as benzodiazepines. Benzodiazepines along with TCAs and MAOIs began to make inroads into treating anxiety disorder subtypes such as panic disorder, and in the case of the TCA clomipramine, obsessive-compulsive disorder (OCD).

Figure 3. Treatment of Depression and Anxiety in the 1990s



Once the selective serotonin reuptake inhibitor (SSRI) era came into full swing, these agents eventually took over as first-line treatment choices not only of MDD, but also of numerous anxiety disorder subtypes, from panic disorder and OCD to social phobia and posttraumatic stress disorder, but not GAD. Benzodiazepines became progressively second-line treatments of anxiety disorder, although buspirone continued as a first-line treatment of GAD.

Figure 4. Treatment of Depression and Anxiety in the 21st Century



When is an antidepressant an antidepressant, and when is an antidepressant an anxiolytic? Recently, the first antidepressant was approved for the treatment of GAD, namely, venlafaxine XR. Venlafaxine XR, as well as nefazodone and mirtazapine, has preliminary evidence of efficacy for some anxiety disorder subtypes, such as panic disorder, social phobia, and posttraumatic stress disorder. SSRIs, nefazodone, and mirtazapine have preliminary evidence of efficacy in generalized anxiety disorder. Virtually all forms of anxiety can now be treated by an antidepressant, with the documentation of efficacy of some antidepressants better than that of others. Perhaps the distinction between an antidepressant and an anxiolytic will cease to exist in the 21st century.

## REFERENCE

1. Stahl SM. Mergers and acquisitions among psychotropics: antidepressant takeover of anxiety may now be complete. J Clin Psychiatry 1999;60:282–283