

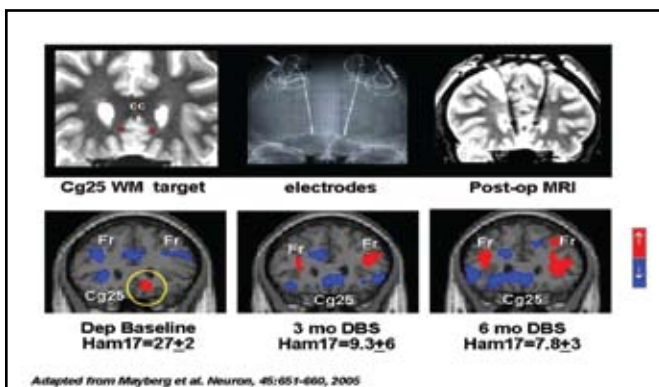
Figure 1. Deep Brain Stimulation.



Photo courtesy of Medtronic.

In 2005, Dr. Mayberg and colleagues published the preliminary results of a pilot study of DBS in 6 patients with chronic, treatment-resistant depression [Mayberg HS et al. *Neuron* 2005]. In this study, patients showed progressive improvement over several weeks, and by 3 months, the investigators were able to distinguish between those patients who would go on to do well and those who would not. Four of the 6 patients achieved a good clinical result at 6 months (Figure 2). Follow-up continues on all patients, and the initial 4 responders continue to do well more than 4 years out with continuous DBS. As of 2008, 20 patients have received DBS implants as part of the original pilot study. Approximately 50 patients worldwide have been implanted in this same brain target, and placebo-controlled studies are now underway. Final results of the original 20-patient pilot project are now in press. Although these studies clearly offer hope to patients who have not responded to other treatments, Dr. Mayberg cautioned that “behavioral rehabilitation is still needed for patients after DBS.”

Figure 2. 6-Month Results.



In closing Dr. Mayberg said, “The combination of deep brain stimulation and advanced imaging capabilities have given us new insights into the pathogenesis of depression that are laying the foundation for a whole new approach to the treatment of psychiatric disorders.”

APA 2007 Survey Explores Efficacy of Current Antidepressants

The American Psychiatric Association (APA) survey on the treatment of depression was undertaken to gain insight into the challenges that physicians face when treating individuals with major depression (MD) and identify the issues that inhibit effective treatment. A 6-question multiple-choice survey was administered to 1066 physician attendees at the APA’s 2007 annual meeting. Results were reported by region where there were notable differences; US respondents and rest of world (ROW):

What are the top three symptoms that lead you to a diagnosis of depression? Top responses:

- depressed mood (30%)
- diminished interest (23%)
- feelings of worthlessness (US 13.5%; ROW 9.1%)
- fatigue (US 9.2%; ROW 12.9%)

What is your primary treatment goal?

The most commonly cited goal for MD treatment was long-term prevention of relapse (US 78%; ROW 59%), while only a minority of respondents considered acute efficacy, meaning short-term response or remission, as the priority.

How effective are prescription medications in meeting your treatment goal?

ROW physicians rated current medication as very effective (ROW 20.8%; US 14.9%) or effective (ROW 56.8%; US 50.3%) more often than domestic physicians.

What are the main obstacles to achieving your treatment goal?

- drug-related sexual function (23%)
- weight gain (17%)
- inadequate efficacy (16%)

How often do you switch medications, and why?

Half of all respondents indicated that each month, >20% of their patients switched because of tolerability issues, and approximately the same number of respondents indicated that >20% of the patients switched due to lack of efficacy.

The survey investigators concluded that the key barriers to reaching treatment goals are adverse events and treatment efficacy, adding emphasis to the need for the development of better treatment options.