

The View Community Mental Health Newsletter



Riverview Psychiatric Medicine, PC is a leader in providing state of the art treatments for neuropsychiatric conditions including depression and anxiety. In 2009, Dr. Pardell established the **TMS Center of the Hudson Valley**, bringing the breakthrough technology of transcranial magnetic stimulation (TMS) to our region. TMS therapy is uniquely positioned to treat patients who have not responded to antidepressant medications, could not tolerate medications or have opted for a non-pharmacologic modality. The TMS Center of the Hudson Valley utilizes the Neurostar TMS Therapy System which is the first TMS technology cleared by the FDA.

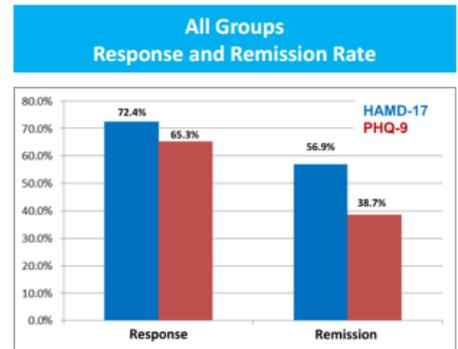
TMS works by utilizing an MRI strength magnetic field to stimulate the areas of the prefrontal cortex of the brain that are responsible for depression. In essence, the directed magnetic pulse "awakens" neurons and generates both electrical and chemical changes to normalize function and lift depression. Unlike electroconvulsive therapy (ECT), TMS does not induce seizure for therapeutic benefit or require anesthesia or sedation. During the 40 minutes procedure patients are positioned and comfortably reclined in a European spa chair. They have the option of listening to music, watching TV, or interacting with staff. Reported side effects are local site sensitivity and mild to moderate headache which are easily managed with over the counter medications. Over the initial week of treatment side effects abate. The incidence rate of seizure with TMS is rare (3/10,000 treatments as reported by FDA), and is the same or less than the rate of seizure reported for antidepressant medications. TMS is contraindicated in patients with ferromagnetic material implanted in and around the head such as cochlear implants, stents, or metal plates or fragments.



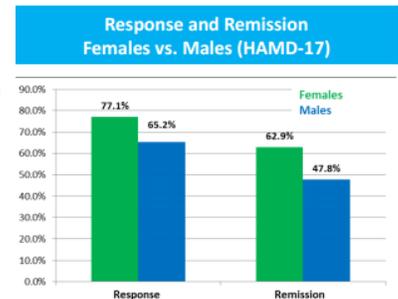
TMS patients have an initial consultation with Dr. Pardell to evaluate the potential benefit of TMS therapy. At the onset of treatment a motor threshold determination (SMT) is performed to ascertain a patient's unique treatment intensity and precise location for magnetic coil placement. Patients are welcomed to bring a trusted friend or family member for support. In the acute treatment phase, patients will receive 5 treatment sessions per week for a minimum of 20 sessions. Though some patients may experience improvement early in treatment, typical antidepressant effects will occur in the 3rd to 4th week of treatment. The total number of sessions required in the acute treatment phase varies with each patient. Following acute treatment, Patient may require subsequent maintenance treatments to remain free of depression. Dr. Pardell holds regularly scheduled complimentary **TMS Educational Meetings**. The next meeting will be held on **April 19, 2014 from 10AM-12 PM at Riverview Center, 370 Violet Avenue, Poughkeepsie, NY. 12601.** RSVP at info@riverviewpsychiatric.com or call us at **845-471-1807**.

In October 2013, at the US Psychiatric and Mental Health Congress in Las Vegas, Nevada, Dr. Pardell presented his research on depressed patients treated with transcranial magnetic stimulation at the TMS Center of the Hudson Valley. Utilizing the Hamilton Depression Rating Scale, Dr. Pardell described a Response Rate of 72% and Remission Rate of 57%.

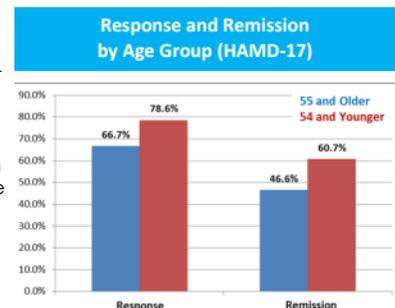
Dr. Pardell performed further analysis of his results stratifying Response and Remission Rates by age and gender. His statistical analysis using parameters of age and gender was a landmark study.



His research showed that woman had higher response and remission rates compared to men. Though a gender difference was found, one explanation for the variation could be attributed to men initiating treatment later on in their illness when they were more severely ill and less treatment responsive.



Younger patients under the median age of 55 appeared to respond better to TMS then older patients. Prior studies have shown that TMS effectiveness is directly related to the power of TMS pulsing. As we age the brain cortex begins to recede from the cranium and is at a greater distance from the magnetic coil and hence may lead to less effective treatment response due to reduce power of the magnetic field.



The results presented were received with much interest and were nationally reported in an article circulated through the Psych Congress Network. Please access our website for links to the poster presentation and article at riverviewpsychiatric.com.

