

TMS TRENDS

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TMS AND WOMEN'S HEALTH

This issue of TMS Trends examines the use of TMS Therapy in women of childbearing age in 2 recently published studies. In the first study, conducted at Washington University, TMS Therapy was used to treat women with post-partum depression. The University of Pennsylvania study authored by Kim et. al. demonstrated the safety and efficacy of TMS in pregnant women suffering from depression. Although these were both small open-label trials, the results achieved were quite impressive and suggest that further investigation is warranted.

A study by Keith Garcia, et al. investigated the use of rTMS on women with postpartum depression (PPD).

“Nine antidepressant-free women with PPD were given 20 rTMS treatments over 4 weeks (10 Hz, 120% motor threshold, left dorsolateral prefrontal cortex). Multiple characteristics were assessed at baseline and throughout treatment. Duration of effect was assessed at 30 days, 3 months and 6 months post treatment.

Friedman's tests were conducted on Hamilton Rating Scale for Depression-24 item (HRSD-24), Edinburgh Postnatal Depression Scale (EPDS), Inventory of Depressive Symptomatology-Self-Report (IDS-SR) and Clinical Global Impressions-Severity (CGI-S) scores to compare performances at four time points (baseline, end of Week 2, end of Week 4, and 180-day follow-up). Overall, these results revealed a significant reduction in depressive symptoms by the end of Week 2 of treatment. Analyses yielded a medium effect size ($r=0.68$) on the primary outcome variable (HRSD-24). Of note, all nine patients remained in treatment for the complete 4 weeks, did not miss any treatment sessions and eight participants achieved remission of symptoms, defined as a HRSD-10 and a CGI-S51. Analysis of follow-up data

indicated robustness of the rTMS treatment over time.

At 6-month follow-up, of the eight women that remitted, seven remained in remission without further psychiatric intervention, including the addition of medication and one was lost to follow-up. Results also indicated a significant improvement in bonding.”

Another study by Deborah Kim, et al. looked at rTMS therapy as an option for pregnant women suffering from Major Depressive Disorder. “Eligible participants were women 18–39 years old, 14–34 weeks gestational age, with a DSM-IV diagnosis of MDD and in a current major depressive episode (MDE), based on a Semi-structured assessment with the Mini International Neuropsychiatric Interview (MINI).

This is the first case series to systematically describe TMS for treatment of MDD during pregnancy. In this cohort of 10 women, 70% responded to treatment, and 30% of the subjects met criteria for remission after the twentieth treatment session. LFR TMS has shown similar overall therapeutic benefit to HFL TMS, based on the results of five controlled studies.^{32,36–39} low frequency right sided TMS was chosen because there is a small risk of seizure with high frequency left sided TMS. Seizures can be detrimental during pregnancy because of the risk of inducing preterm labor and fetal demise by reducing the blood supply to the fetus.”

JUNE 12, 2012; JULY 10, 2012

The TMS Support Group of Chester County will continue to hold meetings on the second Tuesday of every month. Our next meeting will be held on Tuesday, June 12th, followed by July 10th. Meetings begin at 7 PM & are located at 129 S. High Street, West Chester, PA 19382. All are welcome! Please call (610) 738-8671 for more information or for directions. We encourage members and interested family to join us!