New Depression Treatments
Offer Hope and Healing to Many

Over the past 15 years the treatment of Depression and related illnesses has undergone a myriad of changes. A milestone that had a significant impact was the effective use of Genomic testing that assisted in utilizing psychotropic medications in a systematic and scientific fashion. Here, the experience of the physicians was augmented by the genomic information about the patient and a better decision was reached in selecting the proper medication(s). This often resulted in a larger number of patients reaching greater degrees of emotional stability more rapidly and with fewer untoward effects. It has been noted that approximately 75% of patients can now reach a state of remission.

The World Health Organization has stated that over 350 million people in the world suffer from Depression. In the United States in 2012, the NIMH (National Institute of Mental Health) reported 6.9% of the population (16 million) suffered from at least one major episode of Depression. If you factor in those suffering from the depressive aspects of PTSD, Chronic Pain, Bipolar Disorders and Post Partum Disorders, these numbers drastically increase. Early diagnosis and scientifically based treatment can facilitate successful treatment to reach or surpass the 75% referenced above. The remaining 25% are referred to as Treatment Resistant Depression (TRD), and we now have more tools to effectively treat this population as well.

Transcranial Magnetic Stimulation
Transcranial Magnetic Stimulation (TMS) is one of the newer treatments for TRDs as well as other related illnesses. This was developed between 1985-95 and was approved by the FDA in 2006. TMS consists of “spinning” magnets sufficient to develop an electrical field of approximately 5 cm. The cone of the field is placed on the Left Dorsolateral Pre Frontal Cortex position (determined by a process known as “Mapping”) and a wave is generated. TMS uses a 10 Hz wave and requires 36 treatments of 3000 stimuli administered over the 37 minutes. Over the course of 36 treatments there is an increase in Neurogenesis (Neuron growth), Neuroplasticity, and a seeming “reboot” of the limbic system. There are virtually no side effects and the process is covered by most commercial insurances as well as Medicare. Approximately 75% of treatments result in resolution of the current episode of depression, but it does require a time commitment of 8 weeks.

Theta Burst Stimulation
As is often the case, improvements and innovation brings new changes and greater successes. Medical scientists for the past 10 years have been using 50 Hz waves and the results have been outstanding. This process is referred to as Theta Burst Stimulation (TBS). In a setting similar to rTMS, different protocols can be used. One is the same as the rTMS and another requires much less time. With TBS sessions, the patient gets a 4 minute treatment and receives 6000 stimuli, gets a 15 minute rest, followed by a second treatment. This is repeated for 30 minutes daily for 10 days and the course of treatment is over. This represents a significant increase in convenience and decrease in time lost from work. The treatment can be used for an entire sequence or as a booster, if required. Insurance coverage is available for some of these treatment scenarios.

Ketamine for Depression is Astonishing the Entire Industry
In addition to technological advancements, the medical community has found a new way to use an existing drug to assist in the treatment of TRDs. Ketamine is an anesthetic agent that has been used since the 1970s for various surgical procedures. It was, and is, used in emergency rooms and by paramedics in ambulances for rapid sedation. Its short half-life made it ideal for that use and it was safe enough for Pediatric Oral Surgeons to use it for children. It had long been noted that people often reported feeling “better” after Ketamine was used, but it was believed that this was due to the successful nature of the surgeries. This eventually supported the notion that Ketamine held great promise for the treatment of Depression, which is now referred to as a Brain Disease.

Fate stepped in when an agitated and “suicidally depressed” patient came to an emergency room and was given a dose of Ketamine intramuscularly. The young man dozed off and when he awakened his mood had improved, he had no thoughts of self-harm and wanted to go home. A few days later he returned, his depression had returned, and a repeat 1M dose of Ketamine was administered. Aside from some sedation from the injection, there was no antidepressant effect like before. This event was noted by the medical community and the anti-depressant effects were regarded as limited and isolated.

Today Ketamine is given orally, intranasally and intravenously. The oral dose has a 20% bioavailability, the intranasal has a 25-50% bioavailability (depending on the preparation and delivery system) and the IV administration has a 96% bioavailability. The plasma half-life is 2.3 hours and it is rapidly cleared after the IV infusions. A dose of 0.5 mg/kg is administered in 100 cc of Saline intravenously over a 40 minute period. This is repeated until 6 treatments have been given over a 2 week period.

It became evident that the efficacy of this treatment depended on the dosing, method of introduction and duration of the medication. Ketamine IV infusions are currently being used to treat those suffering from TRDs as well as depression from PTSD, Bipolar Disorder, Post Partum Depression and Neuropathic Pain. Ketamine’s effectiveness stems from its ability to inhibit NMDA receptors, which cause an increase in the amount of Glutamate liberated. This results in increased Neuroplasticity and Neurogenesis along with enhanced dendritic activity and a subsequent increase in BDNF (Brain Derived Neurotropic Factor), which function like an energy generator for the central nervous system

Three New Treatment Options for Treatment-Resistant Depression
Psychiatric Associates of Southwest Florida is pleased to offer all three of these treatment options at our practice. At this time we have many ways of treating primary depression as well as depressions related to other medical illnesses. I have been practicing Psychiatry since the 1970s and I believe that the best is yet to come. More information is available on our website, www.paswfl.com or 888-491-4171. My staff and I are standing by to be of assistance to you.

About Dr. Robert Pollack
Robert W. Pollack, M.D. CEO is a Florida-licensed Board Certified Psychiatrist. He has been in practice since 1977 and has served the public in many capacities.

The American Psychiatric Association Board of Trustees, January 1, 2015, has granted him Life Fellow status.

Psychiatric Associates of Southwest Florida (PASWFL) is a private solely owned psychiatric medical practice located in Fort Myers, Florida. Dr. Pollack is currently the CEO of Psychiatric Associates of Southwest Florida and resides in Fort Myers. His practice serves people from ages 18 and up. His current special interests focus on the use of Genomics to aid in the determination of the most efficacious way to utilize psychotropics as well as the use of rTMS in the treatment of refractory depressions and other psychiatric illnesses. Ketamine, Theta Burst Stimulations and new and innovative treatments for psychiatric patients.

At PASWFL, appointments are scheduled quickly, within one week of your call. For more information on Ketamine and our practice, please visit our website at www.paswfl.com.