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Provider

Re: Helping your patients

Ascend Health Center is a provider-owned, specialty behavioral health practice. We focus on providing cutting-edge, evidence-based treatment to patients suffering from treatment-resistant depression (TRD). Treatment options include Transcranial Magnetic Stimulation (TMS), Spravato (nasal esketamine), and ketamine infusions. Provider referrals are our primary source of patients. Indeed, if you are already referring patients, we wish to thank you, and if not, respectfully ask that you consider doing so. The form at ascendhealthcenter.com/referrals helps us 1) determine whether the patient is appropriate for our practice, and 2) be sure that we schedule patients with the right provider. Except for therapists, we also ask that you include a copy of your last note (at a minimum) with the referral form. This will help us provide a thorough, targeted assessment and develop a meaningful treatment plan.

Ascend has been the leader in TRD treatment in Northeast Ohio for over five years. Over that period, we have helped hundreds of patients improve their lives. We embrace a collaborative approach towards treatment and encourage referring professionals to maintain their clinical relationship with patients. In our experience, this improves outcomes for patients while allowing us to work with colleagues who share our passion for helping them get better. In short, a win-win for all involved.

For your reference, we have enclosed brief “snapshot” summaries of our services, including an explanation of the treatment, treatment criteria, and contraindications. Our goal is two-fold. First, to inform you about the services available and provide a brief description patients can also understand. Second, to provide you with information to help you determine whether our services are appropriate for your patients (and whether they are likely to qualify). Ultimately, we want to do everything possible to help you improve patient outcomes.

Our practice welcomes inquiries, so please feel free to call or email us with any questions. We stand ready to help and look forward to working with you. Thank you for your time and consideration!

Sincerely,

Carlos Molina, MD, Medical Director

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Frequently Asked Questions About Transcranial Magnetic Stimulation (TMS) and Ketamine/Spravato

**Why does TMS work?**

TMS has been shown to produce changes in neuronal activity in regions of the brain implicated in mood regulation, such as the prefrontal cortex. As each magnetic pulse passes through the skull and into the brain, this induces brief activity of brain cells underlying the treatment coil.

The frequency of pulse delivery also influences whether brain activity is increased or decreased by a session of TMS. Recent studies also suggest that stimulation over the left and right sides of the brain can have opposite effects on mood regulation (depression vs anxiety/OCD).

**When is TMS used?**

Antidepressant medications and psychotherapy are the first line treatments for major depression. These treatments, however, do not work for all patients. In these instances, TMS might be used as an alternative treatment, or to augment antidepressant medications, ketamine/Spravato, or psychotherapy. Patients who have failed to achieve an adequate response from at least 2 to 3 antidepressants, or who are unable to tolerate medications, might consider TMS therapy.

**What happens during a TMS procedure?**

Because TMS uses magnetic pulses, before beginning a treatment, patients are asked to remove any magnetic-sensitive objects (such as jewelry). TMS produces a loud clicking sound with each pulse, much like an MRI machine. Patients are seated during each session of TMS.

During the first TMS session, several measurements are made to ensure that the TMS coil will be properly positioned over the patient’s head. Once this is done, the TMS coil is suspended over the patient’s scalp. We then measure the patient’s motor threshold, by administering several brief pulses. The motor threshold is the minimum amount of power necessary to make the patient’s thumb twitch, and varies from individual to individual. Measuring the motor threshold helps the physician personalize the treatment settings and determine the amount of energy required to stimulate brain cells.

Once the motor threshold is determined, the coil is then brought forward so that it rests above the front region of the patient’s brain. Treatment commences. During the treatment, patients will hear a series of clicking sounds and will feel a tapping sensation under the treatment coil.

Motor threshold is not checked at every treatment but may be reassessed if there is concern it may have changed, for example, because of a change in medication.

**Who administers TMS?**

TMS is prescribed by our psychiatrist here at Ascend Health Center. The treatment itself is administered by an experienced TMS technician under the supervision of the TMS physician, or by the nurse anesthetist.

The TMS technician or physician will always be present to monitor the patient during the treatment. The patient can stop a treatment at any time by asking the staff member present.

**How long is a TMS procedure?**

TMS therapy involves a series of treatment sessions. Treatment sessions vary in length depending on the TMS coil used and the number of pulses delivered but typically last around 1-3 minutes. Patients receive TMS up to 5 days a week. A typical course of TMS is 4 to 6 weeks. However, this can vary depending on an individual’s response to treatment.

**Do I need to be hospitalized for a course of TMS?**

Unlike ECT, TMS does not require any sedation or general anesthesia, so patients are fully awake and aware during the treatment. There is no “recovery time,” so patients can drive home afterwards.

**What are the side-effects of TMS?**

TMS is well-tolerated and associated with few side-effects, and only a small percentage of patients discontinue treatment because of these. The most common side-effect, which is reported in about half of patients treated with TMS, is headaches. These are mild and generally diminish over the course of the treatment. Over-the-counter pain medication can be used to treat these headaches.

About one third of patients may experience painful scalp sensations or facial twitching with TMS pulses. These too tend to diminish over the course of treatment although adjustments can be made immediately in coil positioning and stimulation settings to reduce discomfort.

Some patients may still complain of hearing problems immediately following treatment. No evidence suggests these effects are permanent, and earplugs can be worn during the treatment.

TMS has not been associated with many of the side-effects caused by antidepressant medications, such as gastrointestinal upset, dry mouth, sexual dysfunction, weight gain, or sedation.

The most serious risk of TMS is seizures. However, the risk of a seizure is exceedingly low. At Ascend, we follow up-to-date safety guidelines that are designed to minimize the risk of seizures. While TMS is a safe procedure, it is important to point out that because it is a new treatment (first developed in the 1980’s), there may be unforeseeable risks that are not currently recognized.

**Who cannot get TMS therapy?**

Active seizure history and most forms of bipolar disorder or schizophrenia are contraindicated. Patients with any type of non-removable metal in their heads (with the exception of braces or dental fillings), should not receive TMS. Failure to follow this rule could cause the object to heat up, move, or malfunction, and result in serious injury or death. The following is a list of metal implants that can prevent a patient from receiving TMS:

Aneurysm clips or coils

Stents in the neck or brain

Deep brain stimulators

Electrodes to monitor brain activity

Metallic implants in your ears and eyes

Shrapnel or bullet fragments in or near the head

Other metal devices or object implanted in or near the head

TMS is self-pay for anxiety, insomnia, and OCD. Insurance only covers TMS for depression if multiple medications have failed, and like other appointments at Ascend, there could still be co-pays owed.

**Who will benefit the most?**

Existing evidence to date suggests that patients who are less treatment-resistant respond better to TMS than those who are highly treatment-resistant. However, there is much yet to be learned about particular variables that may impact response to TMS. Some studies show TMS with antidepressant medications or Spravato/ketamine is more effective than TMS alone. Like Spravato/ketamine, research shows benefits in PTSD and addiction, and in cases where ECT did not improve depression.

**How can I get TMS treatment?**

TMS is one of the brain stimulation treatments for depression offered at Ascend Health Center. Before scheduling you for treatment, you must first be evaluated by our psychiatry team to determine if TMS would be safe and appropriate for you, compared to alternatives.

**How likely is TMS to cure my depression?**

At Ascend, some patients are able to stop taking their meds and still don’t require additional treatment years later. Historically, about a fourth of patients don’t get better. The majority of patients have depression that lifts by at least 50%, as documented on depression scales, and can reduce the number or strength of anti-depressants they take. Insurance will re-approve TMS if the effects fade after six months, but we haven’t needed to do two series that close together. In 2023, 98.9% of our new patients reported improvement after TMS, Spravato or ketamine.

**Why does ketamine/Spravato work?**

Ketamine and Spravato (an S-ketamine nasal spray), work on the neurotransmitter glutamate, instead of serotonin or dopamine like most antidepressants. Channeled correctly, glutamate starts a helpful chain reaction in the brain that continues long after the drug is metabolized. This leads to new nerve growth, bypassing cycles of pain and depression.

**When is ketamine/Spravato used?**

Antidepressant medications and psychotherapy are the first line treatments for major depression, anxiety, OCD, PTSD, and bipolar disorder. These treatments, however, do not work for all patients. In these instances, ketamine might be used as an alternative treatment, or to augment antidepressant medications, TMS, or psychotherapy. Patients who have failed to achieve an adequate response from at least 2 antidepressants, who are unable to tolerate oral medications, or who suffer from treatment resistant neuropathic conditions such as fibromyalgia or migraine headaches, may want to consider ketamine.

**What happens during the procedure?**

Spravato must be authorized by your insurance in cases of severe depression or, less frequently, bipolar disorder with suicidal ideation. It is a nasal spray delivered to our office weekly by a specialty pharmacy, and patients must remain at the clinic for two hours.

Ketamine is given via an hour long intravenous infusion after an IV is placed, or an intramuscular injection into the arm. At least six treatments are required over several weeks. Monitors are placed, and soft music plays. It’s not in a pharmacy REMS program like Spravato, but patients must be cleared by medical staff before they can go home, and they must have a ride.

**Who administers ketamine/Spravato?**

Our psychiatrist or an advance practice provider is always on site. Our nurse anesthetist has administered almost 10,000 treatments at Ascend, and our nurse assists with injection and Spravato treatments as well.

**What are the side-effects of ketamine/Spravato?**

Ketamine/Spravato can cause disassociation (an out of body experience) and sedation. This is part of the therapeutic process. We may give medicine or supplements beforehand to augment treatment and/or reduce the risk of high blood pressure and nausea. Most side effects fade before discharge, but it is not safe for patients to drive themselves home after treatment.

**Who cannot receive ketamine/Spravato?**

Active mania, psychosis, or seizures are a contraindication, as is a history of uncontrolled blood pressure or hemorrhagic stroke. Also, insurance only covers a small portion of the costs for ketamine infusions and injections—each infusion costs $295-$495. Insurance (including all Medicaid and a few Medicare plans) only covers Spravato for depression if multiple medications have failed.

**Who will benefit the most?**

In our experience, patients struggling with interwoven pain and depression do very well, especially if they’re consistent with psychotherapy. Those with pain and depression of sudden origin (such as postpartum depression) or unknown causes also see results very quickly. Disorders with mood swings can also see improvement since these treatments often increase resilience and curb addictive tendencies.

**How can I get ketamine/Spravato treatment?**

Before scheduling with our nurse anesthetist, you must first be evaluated by our psychiatry team to determine if these treatments would be safe and appropriate for you. They will want a referral from your health care provider, and we also check databases to see what controlled substances you’ve been prescribed.