Salience
TMS Neuro Solutions

Medication Management with TMS

2019

Important to Note

- TMS works in combination with medication or talk therapy. Best results when patient is actively following treatment guidelines for multiple recommended treatments
- TMS is not a cure or ‘magic bullet’ for all patient’s MDD, but when combined with medications or psychotherapy can give them a new opportunity to find response/remission through improved cognition and symptom relief.
- Prescription requirements for TMS can easily change if med intake changes. Can adjust MT Amplitude or response from patient.

When to Consider rTMS – According to Dr. Downar

- The Case for Early Intervention:
  - rTMS remission rates 30-35% in trials, can be >52% in community practice
  - STAR*D remission rates:
    ~33% for first antidepressant agent
    ~20-25% for second agent
    ~ <7% with fourth agent
  - Remission rate for rTMS > remission rate for meds after 1 failed trial
  - Tolerability:
    Dropout rates ~25% for medications in RCTs, vs. 3-8% for rTMS

Medications that Might Lessen the Efficacy of TMS Therapy:

- GABAergics
- Benzodiazepines
- Antiepileptics/anticonvulsants
- Pain Medications, Narcotics
- Current or Recent Stimulant Abuse (cocaine, methamphetamine, pills, etc)– Brain needs dopamine for neuroplastic effect. If dopamine is exhausted/depleted, cannot produce dopamine enough for neuroplastic change
  - Stimulants taken as prescribed like Adderall or Vyvanse should not hinder response, may possibly help
- Prazosin – Blood pressure medication

Dr. Downar's Recommendations Regarding Medication Management Leading up to TMS Course:

- Try and avoid changes to any GABAergic med dosages (non-prn) for at least 4 weeks
  - If unrealistic due to severity of illness, can attempt MT & Treatment with expectation of slower response as more likely
- Ideally taking less than 2mg/day of Clonazepam or benzodiazepine comparable dosages
  - Tapering off benzos and anti-epilepectic meds prior to TMS could increase the efficiency and likelihood of response
  - When unable to taper off GABAergic medicines, attempt to diminish dose if clinicially appropriate.
- Encourage active participation in counseling.

Medication Mgmt at time of Referral

When evaluating a patient that has had 1-2+ failed medications and is showing treatment resistance, TMS should be a part of the patient education and discussed as a viable treatment option.

- When discussing treatment options with the patient, determine their priorities
- Dr. Downar breaks down the patient's priorities into outcome vs convenience
  - If outcome is patient's priority, prepare for TMS consult with Patient Advocate
    - Trending past 60 days (6/1/19) = Over 53+% of patients find remission in 7 weeks, over 75%+ patients respond to TMS
  - If convenience is patient's choice, another antidepressant with TMS educational consult may be appropriate
    - Determine which antidepressant trial they are on to determine realistic expectations on outcome, refer to STAR*D

Management of Medications During TMS (Dr. Downar):

- Avoid any changes in non-prn psychiatric medications during TMS
- Defer stopping or starting medications during the course of TMS
- Consider schedule as a factor – Ideally want medications and TMS taken at consistent times daily for the prescription to be the most accurate.
  - Reinforce compliance for medications and TMS for patient's benefit. MT Check may be needed if variables change.
  - Consider half-lives of medications with TMS treatment time. Review prn medications and make recommendations for TCM/patient on how to manage
    - Can ask outside patients to take prn meds at set time (typically after TMS appt)
    - Recommended to call and coordinate med changes with outside provider if affecting MT or TMS response.
- If the patient is not responding by session #15, consider total factors including medications
  - is the patient on a medication that could lessen the efficacy of TMS? Benzos, anti-convulsants, gabaergic
  - Refer to the MDD Decision Tree for non-responders

When are Medication Changes Appropriate during TMS?

- The patient is having a serious side effect or allergic reaction
- If MT cannot be determined, likely due to high dose GABAergic medications
  - Caffeine in system can lower MT. Patient must have caffeine daily to recreate
  - If MT is so high that the patient cannot tolerate treatment, can adjust medications that decrease motor threshold
- The patient is having a new crisis and might need a brief prn medication
  - Attempt psychosocial interventions first
- A patient has a toxic level of the prescribed medication as evidenced by blood levels
- Ideally want to hold off on med changes until 4+ weeks after their final TMS appt. To have opportunity to ensure a durable response before changing variables.

Possible Negative Effects of Medication Changes on TMS Outcome:

- Medication change leads to further loss of efficacy and clinical worsening. (Primarily GABAergic medications)
- New medications may take 4-8 weeks for response and patient may perceive this as a failure of TMS
- New side-effects of a new medication may be associated with TMS
- Patient could lose any possible benefits they were having on the previous drug and lead to clinical worsening during TMS