Managing Electroconvulsive Therapy (ECT) On the Inpatient Unit

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Introduction:

ECT is one of the most effective treatments in psychiatry, and it's important to keep it in mind for a variety of inpatients—especially those with treatment resistant depression and psychotic depression. In this fact sheet, we are assuming that you are not the one actually doing the ECT treatment, but rather that you will be referring your patient to an ECT program either in your hospital or for transport elsewhere. Thus, our focus will be on how you will discuss ECT with your patient, how you will coordinate with the ECT consultant, and how you will manage your inpatient in between ECT treatments. ***For a separate fact sheet describing technical aspects of ECT, see our Electroconvulsive Therapy Fact Sheet***.

FDA Indications:

Treatment-resistant or severe depression (either unipolar or bipolar); catatonia.

Off-Label Uses:

Psychotic depression; severe schizophrenia; suicidality; neuroleptic malignant syndrome, acute mania

How to decide who might benefit:

- **Depression:** Patients with treatment-resistant depression are the main candidates. Do a careful history to determine that they have already tried the major classes of antidepressants to no avail and collaborate with outpatient providers to obtain this information. Depression with psychotic features is especially sensitive to ECT, and patients with ruminative thought process, especially if they are constantly thinking about suicide, are good candidates.
- **Elderly:** ECT is often particularly helpful for the elderly with severe depression because medications may cause unacceptable side effects in this population. Some evidence suggests elderly patients may respond slightly better than younger patients.
- **Catatonia:** While ECT is very effective for catatonia that doesn't respond to medications, it can be hard to obtain consent for the procedure in a catatonic patient. A health care proxy or court order may be necessary. However, if benzodiazepines are not working, ECT can be lifesaving and response rates are very high.

How to broach and discuss the topic of ECT with patients:

- **Introduce the concept.** "I'd like to chat about another treatment option for patients like you who haven't responded to medications or therapy. It's called electroconvulsive therapy, or ECT. Have you heard of it?"
- **Address myths and misconceptions, if patient refers to them.** "Some people have heard scary things about ECT from movies like *One Flew over the Cuckoo's Nest* but modern ECT is very different, more refined and more scientific. It's actually considered to be the most effective treatment in all of psychiatry."
- **Describe the procedure. "**During ECT, you'll be under anesthesia, so you won't feel or remember the procedure. We place electrodes on one side of your head, called unilateral, or both sides, which is called bilateral and deliver a brief (few seconds) electric current. This causes a short, therapeutic seizure. The whole process, including waking up from anesthesia, takes about an hour and then you'll be brought back up to the unit. We usually do the treatments three mornings a week for 3 or 4 weeks, depending on the response. If you do very well, a taper or maintenance treatments might be suggested for a period of time to try to solidify the response and prevent relapse."
- **Describe potential side effects.** "Most people have some mild side effects, like headache or jaw pain. The biggest concern patients have is about memory loss. It is common to be more forgetful during the course of ECT, but this effect clears usually within a couple weeks after the end of treatment. Sometimes, a few weeks after ECT is done your memory might actually be better than before the ECT if your depression has improved. However, some patients are left with some gaps in their memory for past events. Usually, the events closest to the course of ECT are most at risk, but rarely older memories can be lost. Sometimes these come back with time or prompting. And you'll be in charge every step of the way—if you want to stop the treatments at any time, you can do so."

- **Encourage questions. "**I know this is a lot to take in—let me know if you have any questions. If you want to proceed, the next step is that we'll have our ECT specialist come up and do an evaluation to make sure it's the right treatment for you."

Working with the ECT consultant:

- **The ECT consultant's job.** In most inpatient settings, you will request consultation for ECT, and an ECT specialist will come to do a formal evaluation, order any necessary medical workup (or will ask you to do that), and will have the patient sign an informed consent.
- **Before referring, make sure your patient is a good candidate**. Since ECT specialists are in short supply and often very busy, you want to make sure that your referral is appropriate. In your referral note, document the evidence for treatment resistance, including a list of medications failures. Document the severity of the symptoms and indicate why you think this patient is a good candidate. If your patient has a personality disorder, acknowledge that. There is controversy in the ECT field regarding efficacy of the treatment for patients with borderline or narcissistic personality disorder. Highlight any significant medical concerns, as they may need to be better studied or evaluated before treatment.

Pre-ECT Workup:

No specific labs are required for all patients, but depending on the patient, the consultant may ask for specific procedures. This will typically include a medical consultation, and possibly labs and an EKG.

Medication adjustments related to ECT:

If the patient is taking benzodiazepines or anticonvulsants, collaborate with the consultant on how to manage these medications as they can elevate the seizure threshold, rendering the ECT procedure ineffective. Often the recommendation will be to hold these medications (or lower the dose) on the night before the ECT treatment.

Managing ECT patients on the inpatient unit

- **Order transport**. ECT is typically done early in the morning, three days per week. Orders may include some or all of the following:
    - Medication holds or reductions the night before and the morning of the procedure
    - NPO (nothing by mouth) after midnight
    - Transfer to ECT suite
- **Between treatments.**
    - **Immediately after treatment.** When patients return from ECT treatments they will often have some side effects such as grogginess, head or jaw pain, and transient memory loss. As needed medications like Tylenol should be ordered.
    - **Care between treatments.**
        - Evaluate symptoms of depression daily, either with a formal symptom scale or by simply asking patients to rate their depression on a scale of 1 to 10. Response usually begins after 3–6 treatments (1–2 weeks), and the average of number of treatments is 7–10.
        - Ask about side effects. Attend closely to side effects as some patients may prematurely drop out of treatment, not knowing that side effects are transient and treatable.
        - Psychiatric medications. All psychiatric medications may be continued during ECT. Lithium dose may need to be decreased to minimize cognitive side effects, and benzodiazepines and anticonvulsants may need to be withheld the night before ECT—work closely with the ECT consultant on these decisions.
- **Discharge planning**
    - After discharge, ECT may be continued on a maintenance basis (typically, weekly ECT for 2–4 weeks, then tapering down to monthly or as required based on symptoms). Maintenance ECT lasts 6 months or more, depending on response and side effects.