CASE 8.3
Depression | Level 2

Kristen Lamberjack and Christine Prusa

1. What subjective and objective evidence supports the diagnosis of pediatric depression?

SUBJECTIVE FINDINGS: The patient presented with a chief complaint of depression, which is improving on her current therapy. She described symptoms of depressed mood (sadness) most days, anhedonia (inability to experience pleasure from activities usually found enjoyable), irritability, lack of motivation (she missed 50 days of school), low self-esteem, appetite changes with weight loss, guilt, sleep disturbances, and crying episodes. To meet the diagnosis for a major depressive episode, patients must have five of nine depressive symptoms for 2 consecutive weeks with one of those symptoms being depressed mood or anhedonia.

OBJECTIVE FINDINGS: Thyroid function tests rule out thyroid disorder as a diagnosis for her symptoms of fatigue and sleep disturbance. Her normal hemoglobin and hematocrit levels also help to eliminate anemia as a likely cause for her low energy levels. Physical exam displays moderate anxiety and nervousness.

She also has a family history of depression (mother, maternal grandmother, and aunt).

2. Assess the pharmacologic therapy for the patient's depression treatment and provide a treatment plan to optimize therapy.

The patient is responding to therapy with fluoxetine; however, she is not yet in remission of symptoms. The fluoxetine dose was increased at her last visit by the PCP, and she is now experiencing adverse reactions from her therapy. Anxiety and nervousness is a common adverse reaction of fluoxetine with a rate of 3% to 15%. The patient is responding to therapy with a selective serotonin reuptake inhibitor (SSRI); therefore, keeping her on a medication in the same class would be the best course of action.

Depending on the length of time a patient is taking an SSRI, he or she may have withdrawal symptoms when stopping therapy. When switching SSRIs, patients may have to cross taper (decrease one while increasing the other) therapy; however, fluoxetine has a long half-life and the patient is taking ≤20 mg; therefore, when changing therapy from fluoxetine to another SSRI, the patient should stop the fluoxetine 20 mg capsules and wait 4 to 7 days before starting the new SSRI at the initial dose.

The best option in this patient would be escitalopram 5 mg daily, increasing to an effective dose of 10 to 20 mg and a maximum dose of 20 mg. The dose can be increased every 4 to 6 weeks to effective dose based on response to therapy and if the patient experiences no intolerable adverse reactions. Escitalopram is the only other FDA-approved antidepressant in patients 12 and older for major depressive disorder (MDD) other than fluoxetine, and it is less likely to cause anxiety and nervousness. It is also recommended as first line after fluoxetine for patients 12 and older according to the Guidelines for Adolescent Depression in Primary Care (GLAD-PC).

Other potential alternatives that would be considered second line are sertraline 25 mg daily, increasing to an effective dose of 100 mg with a maximum dose of 200 mg or citalopram 10 mg daily, increasing to an effective dose of 20 mg with a maximum dose of 60 mg. Although not FDA-approved in pediatrics, both medications have been studied in pediatrics with evidence supporting their use. They are also less likely than fluoxetine to cause anxiety and nervousness. Paroxetine has the least data supporting its use in pediatrics and is more likely to cause adverse reactions and would not be considered a potential option in this case.

Although venlafaxine, a serotonin norepinephrine reuptake inhibitor (SNRI), can be used in pediatrics, it does not have as much evidence supporting its use in pediatrics, and according to the Texas Children's Medication Algorithm Project, it should be reserved for pediatric patients that fail two trials of SSRIs or can not tolerate SSRIs as a class.

3. Provide a follow-up schedule for pediatric patients initiating antidepressant therapy.

The previous FDA black-box warning regarding the risk of suicidality with antidepressants use in pediatrics recommended the following follow-up schedule for all pediatric patients initiating antidepressant therapy:

- ❑ Weekly face-to-face contact with the treating provider for the first 4 weeks
- ❑ Biweekly face-to-face contact with the treating provider at weeks 5 to 8
- ❑ Face-to-face contact with the treating provider at week 12
- ❑ After 13 weeks, the patient should be seen by the treating provider as clinically indicated.

The current FDA black-box warning no longer provides recommendations for the frequency of monitoring but instead states that treating providers should closely observe patients who are on antidepressant therapy. The best follow-up schedule can be debated, but pediatric patients should be seen at the start of therapy at the minimum of every 2 to 4 weeks to determine efficacy and to review adverse reactions of therapy until dose is optimized with minimal or tolerable adverse reactions. Depression is a disease state where studies have shown up to 50% of subjects demonstrated suboptimal adherence (missing greater than 30% of doses); therefore, close follow-up is often needed to ensure continued adherence to therapy. Once a patient is on an effective dose of an antidepressant and is in remission of symptoms, follow-up visits may be scheduled out longer, but some guidelines still recommend close follow-up with monthly visits in order to monitor for relapse of symptoms. As always, schedules should be individualized based on patient need and response. For this patient, the best follow-up schedule would be every 2 weeks until dose is optimized and she is in remission of symptoms, then monthly thereafter to monitor adherence and for relapse of symptoms.

4. Discuss nonpharmacologic therapy and patient education for pediatric patients receiving antidepressants.

Treatment of depression in pediatric patients should always include education and family involvement. This should include education about the causes, symptoms, and treatments of depression. Patients can also be referred for psychotherapy or talk therapy with a counselor. A Cochrane review of the literature found limited evidence that antidepressant medication was more effective than psychotherapy on obtaining remission from depression. There is also limited information that combination therapy is more effective than antidepressant medication alone. However, the conclusion was