Abstract

This report presents a complex case in which a 17-year-old female patient presenting with panic disorder without agoraphobia, generalized anxiety, severe tremors, and depressive symptoms responded to the selective serotonin reuptake inhibitor citalopram after nonresponse to and/or intolerance of propranolol, paroxetine, and venlafaxine. The depressive symptoms emerged 4 months after the patient's initial visit. A 2-year history of severe tremor complicated psychiatric treatment and prompted neurologic evaluation to determine the origin of the tremors. Trials of paroxetine and venlafaxine were discontinued due to severe sedation and gastrointestinal upset, respectively. Positive response, consisting of improved mood and anxiety level, was achieved with citalopram.

Case Report

A 17-year-old Caucasian female presented with a long history of tremors that had worsened over the last 2 years. Tremors increased with physical activity or anxiety and interfered with daily functioning. The patient reported feeling anxious but denied having depressed mood. Her tremors precipitated teasing by her peers, which increased her anxiety.

Propranolol 60 mg/day and propranolol 10 mg PRN were prescribed to decrease tremors. Neither dose was effective. Propranolol was discontinued and the patient was started on paroxetine 5 mg/day to mitigate anxiety. Dosage was titrated up to 20 mg/day over a 1-week period. Sedation occurred immediately and worsened to the point that the patient felt she could not function in her daily activities. Paroxetine was discontinued and venlafaxine 25 mg BID was initiated. Dosage was increased over a 10-day period to a final dose of 75 mg BID. After the dose was increased, the patient experienced gastrointestinal upset, which she felt was intolerable. Venlafaxine dosage was reduced to 25 mg/day. Approximately 3 months later, venlafaxine was discontinued due to gastrointestinal upset.

After unsuccessful treatment with propranolol, paroxetine, and venlafaxine, the patient was started on citalopram 10 mg/day, which was increased to 20 mg/day after 1 week. After 25
days, the patient reported a much improved mood and anxiety level, with a slight improvement in tremors. She was referred to a pediatric neurologist for a second opinion of her tremors. The evaluation was negative for neurologic problems, and it was suspected that the tremors were psychologically mediated. Family history was positive for benign essential tremors, which were experienced by the patient's biological mother during early adulthood and then resolved. Therefore, both psychological and biological factors may have contributed to the development of tremors in this patient.

Primidone 25 mg/day was prescribed to mitigate tremors. However, the patient experienced sedation and dosage was reduced to 12.5 mg/day. Over the course of the next few months, primidone dosage was increased to a total dose of 100 mg/day with some improvement in sedation. However, as the patient felt the tremors did not respond to primidone, she discontinued the medication on her own with no adverse effects or change in tremors.

A few months later, the patient was seen for follow-up and presented with depressive symptoms including sadness, tearfulness, irritability, and anger over family issues, social isolation, decreased interest in activities, and decreased energy. She also reported increased anxiety with panic attacks and some obsessive-compulsive symptoms such as counting objects. Citalopram dosage was increased to 40 mg/day, and alprazolam 0.25 mg PRN was initiated to mitigate anxiety.

Since this time, the patient has been doing well. Depressive symptoms, generalized anxiety, panic attacks, and compulsion to count objects have resolved. Her energy level and social interactions also have improved. Although tremors are still present, they are less severe. The patient is enrolled in college, works part-time, and attends weekly psychotherapy sessions. Alprazolam has been used rarely due to the effectiveness of the 40 mg/day citalopram dosage.

Discussion

This case illustrates several issues relevant to the treatment of depression and anxiety in adolescence. It is common for individuals with anxiety disorders to manifest physical symptoms. In this case, the patient's family history of tremors may have led to the patient's initial diagnosis of a familial tremor rather than a psychiatric disorder. By focusing only on tremors, the patient underwent trials of propranolol, which were not effective for tremors, anxiety, or depression. She also appeared to be sensitive to medication side effects, causing treatment failure with both paroxetine and venlafaxine.

Due to its low side-effect profile and efficacy for both anxiety and depression, citalopram was well-tolerated and led to significant symptom reduction. Further studies with citalopram in adolescent depression and anxiety are warranted.