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## Escitalopram-Induced Hair Loss

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Escitalopram oxalate is an orally administered selective serotonin reuptake inhibitor (SSRI) indicated for the acute and maintenance treatment of major depressive disorder (MDD) in adults and adolescents aged 12 to 17 years and for acute treatment of generalized anxiety disorder (GAD) in adults. The recommended dose of escitalopram oxalate is 10–20 mg once daily in the morning or evening with or without food.<sup>1</sup> Escitalopram seems to have a unique mechanism of action in the 5-HT transporter protein. Escitalopram (S-citalopram) is the most selective SSRI offered, whereas the other enantiomer, R-citalopram, is approximately 30 to 40 times less powerful than the S-enantiomer.<sup>2</sup> The elimination half-life of escitalopram is about 27–33 hours and is consistent with a once-daily administration. Steady-state concentrations are achieved at around 7–10 days of administration. Escitalopram has low protein binding (56%) and is not likely to cause interactions with extreme protein-bound medicine.<sup>3</sup> Escitalopram is metabolized by the cytochrome P450 (CYP) isoenzymes CYP2C19, CYP2D6, and CYP3A4.<sup>3</sup> Common reported side effects of escitalopram include diarrhea, drowsiness, ejaculatory disorder, headache, insomnia, and nausea, with rare side effects including coma; convulsion; irregular heartbeat; swelling of face, ankle, or hands; suicidal ideation; mania; and serotonin syndrome.<sup>4</sup> We describe a case of escitalopram-associated hair loss in an adult female patient.

### Case Report

A 23-year-old white woman with no significant past psychiatric history presented to the psychiatry clinic with symptoms of depression and anxiety. The patient reported depressed mood, sadness, low energy, and lack of motivation. She also reported high anxiety associated with muscle tension, fatigue, and distractibility and sleep disturbances. She had been experiencing these symptoms for the past year, but they had worsened over the last 2 months. She denied any suicidal and homicidal ideation, plan, or intent.

She also denied any psychotic symptoms. She reported no recreational drug or alcohol use or other health problems. She had no known drug allergy and was not taking any medications. There was a family history of depression and anxiety in her mother.

The patient was started on escitalopram 5 mg. She reported minor hair loss, but it was not significant. She reported therapeutic benefit from escitalopram and wanted to continue the medication. Her dose was increased to 10 mg in a period of 4 weeks. After a week with the increased 10-mg dose, the patient reported significant hair loss when she brushed her hair. She had not used any shampoo or other hair products. She denied use of any other medication. The patient was referred to her primary care physician to rule out any medical causes of hair loss. All routine laboratory results, including complete blood count, comprehensive metabolic panel, and thyroid, liver function, kidney function, and sex hormone tests, were within normal limits. There was also no nutritional, hormonal, or vitamin deficiency. The patient decided to discontinue escitalopram after 6 weeks of treatment due to intolerable hair loss. Since we assumed escitalopram was a possible cause for hair loss in this patient, escitalopram was stopped, which led to dramatic resolution of symptoms within a week. She was switched to duloxetine 30 mg, and no hair loss was reported.

### Discussion

Hair loss has also previously been reported with citalopram and other serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors (SNRIs) such as venlafaxine.<sup>5–10</sup> A US retrospective cohort study<sup>11</sup> that used a large health claims database from 2006 to 2014 to quantify the risk of hair loss with different antidepressants reported a lower risk with SSRIs. The results of this large population-based study<sup>11</sup> suggest an increase in risk of hair loss with bupropion compared with SSRIs and SNRIs, whereas paroxetine had the lowest risk.<sup>11</sup>

To our knowledge, there are at least 3 published case reports in which escitalopram was shown to cause hair loss. In 1 case report,<sup>12</sup> a 40-year-old woman with moderate major depressive disorder experienced hair loss after starting escitalopram 10 mg, which subsided after discontinuation of escitalopram. In another report,<sup>13</sup> a 25-year-old woman started on escitalopram for her anxiety suffered upper eye lash loss alopecia. She was switched to sertraline, and her symptoms subsided after 5 weeks with full remission after 4 months.<sup>13</sup> A third report<sup>14</sup> featured a 44-year-old woman started on escitalopram to treat her depression, who began to experience hair loss during the third month of treatment. The medication was discontinued and replaced with

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duloxetine 30 mg, and her symptoms subsided within the fourth month.<sup>14</sup>

Escitalopram is commonly used to treat major depressive disorder and anxiety. However, our case report suggests a temporal association between the use of escitalopram and the development of hair loss. Awareness of this potential rare side effect of escitalopram is important, as it allows for early recognition of medication-related adverse side effects. Although the risk of hair loss associated with escitalopram is generally rare, physicians should routinely inquire about hair loss in patients taking escitalopram.

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