Escitalopram-induced Subconjunctival Hemorrhage: A Case Report

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ABSTRACT

Escitalopram, one of the newer selective serotonin reuptake inhibitors (SSRIs), has been found slightly more effective than the other SSRIs in treating major depressive disorder. Although SSRIs exhibit a favorable safety profile, some case reports and studies associate SSRIs with increased risk of bleeding events. Evidence suggests that such bleeding occurs in vulnerable individuals, due to blockade of serotonin reuptake in platelets and subsequent platelet dysfunction. A case of recurrent attacks of subconjunctival hemorrhage with escitalopram 20 mg/day, and its remission after lowering the dose, is reported for its rare occurrence. A need for cautious use of escitalopram has been stressed.

INTRODUCTION

Escitalopram is the pure S-enantiomer (single isomer) of the racemic bicyclic phthalane derivative citalopram. It is one of the newer selective serotonin reuptake inhibitors (SSRIs), found to be more effective than other SSRIs in the treatment of major depressive disorder (MDD). Although SSRIs exhibit a favorable safety profile, there are case reports and uncontrolled studies reporting bleeding events in the form of ecchymoses, purpura, epistaxis, and gastrointestinal bleeding. SSRIs, like paroxetine, act on the serotonin transporter located on the platelet cell membranes. This leads to a depletion of serotonin in the platelets which decreases coagulation and may lead to a bleeding tendency in vulnerable individuals.

Caution has been advised about the risk of bleeding associated with coprescription of escitalopram with non-steroidal anti-inflammatory drugs (NSAIDs), aspirin, or other medications that affect coagulation. Subconjunctival hemorrhage, a rare bleeding event, has been reported with a paroxetine and limaprost alfadex combination, but not with escitalopram.

CASE REPORT

A 40-year-old housewife was diagnosed with MDD. Her past and family history was negative for affective disorder. She was prescribed escitalopram 5 mg/day, which was increased to 10 mg/day after 5 days. After finding no improvement after 2 weeks, escitalopram was increased to 20 mg/day, at 5 mg increments every week. The patient improved significantly and was continued with the same treatment. After 6 weeks, the patient noticed subconjunctival hemorrhage in her left eye. She ignored it and it cleared within 2 weeks. However, as soon as the eye cleared, the patient had the recurrence of the hemorrhage. She ignored it again, and the eye cleared on its own. Surprisingly, after

FOCUS POINTS

• Escitalopram has been found effective in treating major depressive disorder.
• Selective serotonin reuptake inhibitors (SSRIs) are associated with increased risk of bleeding.
• Blockade of serotonin reuptake in platelets and subsequent platelet dysfunction has been labeled as one of the causes of SSRI-induced bleeds.
• Subconjunctival hemorrhage might be a rare bleeding event associated with SSRI use.
- 2 weeks there was a second recurrence of subconjunctival bleed. The patient consulted an ophthalmologist who prescribed topical antibiotic drops.

Upon informing her psychiatrist (R.C. Sharma, MD) of these subconjunctival bleeds, the patient was interviewed in detail. However, there was no history of hypertension; any bleeding disorder; or recent intake of NSAIDs, warfarin or antiplatelet agents. No attributable physical cause, such as excessive sneezing, coughing, ocular trauma, or infection, could be found. Her blood counts and blood coagulation tests were within normal limits. As escitalopram-induced bleed was a possibility, the dose was decreased to 15 mg/day for 1 week, and then 10 mg/day thereafter. The patient maintained remission on this dose and did not get any further subconjunctival or other bleeds attributable to escitalopram for the next 8 months.

CONCLUSION

In the present case, when escitalopram was increased to 20 mg/day, recurrent subconjunctival bleeds had occurred, which subsided after decreasing the dose of escitalopram to 10 mg/day. There was neither obvious bleeding or clotting disorder nor any drug interaction responsible for the causation of subconjunctival hemorrhages in the index case. It may be argued that these subconjunctival hemorrhages occurred spontaneously and without any obvious cause. However, as the subconjunctival bleeds were temporally related to escitalopram use and did not recur after decreasing the dose of escitalopram, escitalopram seems to be the likely offending agent. A possibility of escitalopram use must be considered when treating subconjunctival hemorrhage in a patient.

REFERENCES