Selective serotonin reuptake inhibitors (SSRI) play an important role in the treatment of psychiatric disorders (1). Common side effects of SSRIs include changes in appetite, irritability, sexual dysfunction and gastrointestinal disorders. Although SSRIs are considered safe medications, severe hematological side effects such as subcutaneous hemorrhage, ecchymosis, prolonged and increased menstrual bleeding and intracranial hemorrhage associated with SSRI therapy have been reported (1). A possible mechanism that may underlie a bleeding effect of SSRIs has been discussed in the literature and different hypotheses have been proposed, such as serotonin's effect on platelet aggregation (2), inhibition of nitric oxide synthase (3) and serotonin's important role in hemostasis, mainly through an enhancing effect on adenosine diphosphate (ADP) and thrombin (4). This might be a consequence of cultural or female gender issues that make it difficult or irrelevant for patients to report vaginal bleeding to psychiatrists. We report on a case of fluoxetine associated vaginal bleeding to heighten clinician awareness for the need to monitor patients treated with SSRIs for unexpected vaginal bleeding.

A 23-year-old woman with a diagnosis of obsessive compulsive disorder started treatment with fluoxetine 20 mg/day. The patient had no history of any chronic medical disease, substance use or allergy to any drug. After one week of fluoxetine treatment the patient reported irregular vaginal bleeding and was referred to a gynecologist. The gynecologic examination revealed no abnormality that could account for a possible cause of vaginal bleeding. The third day after fluoxetine cessation, the patient reported that her vaginal bleeding stopped. One week later she restarted fluoxetine and reported irregular vaginal bleeding again. She had not taken any drug, substance or herbal product other than fluoxetine. Gynecologic examinations still showed no abnormality that could explain vaginal bleeding. The patient was also referred to a hematologist and there was no abnormality in erythrocyte sedimentation rate, hemoglobin level, complete blood count results, bleeding time, prothrombin time, partial prothrombin time, activated partial prothrombin time, INR, or clotting time and fibrinogen level. Liver and renal function tests and urine analyses were also in normal ranges. We used Naranjo Adverse Drug Probability Scale (5) to assess a possible relation between vaginal bleeding and fluoxetine. The patient scored 10 (maximum score is 13). It was then decided that her bleeding was associated with fluoxetine.

There have been previous reports about bleeding abnormalities associated with different types of SSRIs (6). To our knowledge there is one study that reported vaginal bleeding associated the SSRI, sertraline and two studies of fluoxetine associated vaginal bleeding (7-9). Our case also shows that there may be vaginal bleeding associated with SSRI (fluoxetine) treatment. Cultural or female gender issues may make it difficult or irrelevant for patients to report vaginal bleeding to psychiatrists. Routine monitoring of patients using SSRIs should probably include questions about vaginal bleeding.

References