Successful use of modafinil in treatment-resistant bipolar depression in an elderly woman

Sir,

Treatment of bipolar depression in the elderly is challenging due to the presence of medical comorbidities and it is often resistant to treatment. Modafinil with its novel mechanism of action, utilizing multiple neurotransmitter systems such as dopamine, hypocretin, histamine, epinephrine, gamma-aminobutyric acid, and glutamate, is a well-tolerated medication with minimum drug interactions. Lately, studies evaluating the role of modafinil in the treatment of bipolar depression in the adult population have shown encouraging results. However, its use in treatment of depression in elderly is yet to be explored. In this context we present the first case report of successful use of modafinil in an elderly woman with resistant bipolar depression.

Mrs. A, a 61-year-old homemaker, presented to us with 30-year-long episodic illness with around 15 depressive and 3 hypomanic episodes and poor interepisodic functioning. She had received adequate trials of various combinations of mood stabilizers (lithium, valproate, and lamotrigine) and antidepressants (amitryptiline, imipramine, clomipramine, fluoxetine, fluvoxamine, paroxetine, escitalopram, pregabalin, prothiaden, venlafaxine, and reboxetine) and quetiapin with only partial improvement. She had never attained premorbid levels of functioning. For the past eight months, she had worsening of her symptoms-pervasive sad mood, crying spells, anhedonia, easy fatigability, decreased sleep and appetite, and features suggestive of apathy. She had history of hypertension and hypothyroidism for four years and was on treatment for the same. There was family history of hypothyroidism in two children. On physical examination she was overweight (BMI=26.6 kg/m²). Her blood pressure was controlled (116/82 mmHg) on a combination of losartan 50 mg/day and hydrochlorothiazide 12.5 mg/day. On mental status examination, she had psychomotor retardation, depressive cognitions, death wishes, depressed effect with impaired attention, and difficulty in new learning. She scored 31 on the Hamilton depression rating scale (HDRS) and 61 on the apathy evaluation scale. Her thyroid function tests and serum vitamin B12 levels were normal. Magnetic resonance imaging revealed generalized atrophy predominantly temporal with leukoaraiosis. Atherosclerotic changes were noted in bilateral internal carotid arteries. In view of the above, she was diagnosed as having bipolar II disorder without full interepisodic recovery, current episode moderate depression. She was then started on modafinil, titrated to 50 mg/day. She has shown gradual improvement with the same and has reached premorbid levels of functioning. When last followed up, at the end of 16 weeks, she had a score of 8 on the HDRS and 31 on the apathy evaluation scale.

The index patient had resistant bipolar depression with significant apathy which improved significantly after modafinil was started. Modafinil with its apparent two-pronged action on both depressive and apathetic symptoms, and lack of serious side effects, is an important therapeutic option in this, otherwise difficult to treat, population. Indirect evidence implicates the dopaminergic system in the pathogenesis of apathy, and modafinil through its dopaminergic action is reported to be successful in treatment of apathy. However, further systematic trials are needed to elucidate the mechanism of modafinil’s antidepressant and antiapathy actions.

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Successful management of vaginismus: An eclectic approach

Sir,

Vaginismus is defined in DSM IV-TR[1] as recurrent or persistent involuntary spasm of musculature of the outer third of vagina that interferes with coitus causing distress and interpersonal difficulty. Prevalence rates of 5–17% are noted in sexual dysfunction clinics.[2] We describe a successful approach of managing vaginismus based on Keith Hawton’s model.[3]

A 25-year-old woman sought consultation with the psychiatry outpatient services for tightness of vagina and introital pain while attempting sex with her husband for 3 months after marriage. She had become fearful about having sexual intercourse. Immediately after engagement, she had expressed apprehensions about having painful sexual intercourse. After the wedding, the patient had postponed attempts at penetrative intercourse for 10 days. Whenever penetration was attempted, she would not part her legs and begin to cry complaining of spasmodic introital pain. The couple began to engage only in foreplay. She had consulted gynecologists who diagnosed the condition as primary vaginismus, underwent hymenectomy under general anesthesia. After about 6 weeks, couple consulted psychiatry services on advice of the gynecologist. She was described to be shy and sensitive by nature. There was no history of sexual abuse. The family of origin was religious; sex was not openly discussed, the environment was not restrictive. She had normal menstrual history. Physical examination was unremarkable, and she did not permit a local examination. Her mental status examination revealed depressed affect, ideas of hopelessness. She was diagnosed to have vaginismus and moderate depressive episode without somatic syndrome. She was advised behavior therapy and tab Escitalopram 10 mg HS.

The patient underwent five weekly sessions of sex therapy with the first author being the primary therapist. The sessions were based on the model provided by Keith Hawton.[3] The sessions included the husband and the couple initially participated jointly in educative sessions with the primary therapist. The exercises were carried out at home by the couple. In the first session, normal reproductive anatomy and physiology of the sexual act were explained. The patient was made comfortable with her genitals by asking her to see them in the mirror. She was taught Kegel’s exercises that help control pubococcygeus muscle which surrounds the entrance to the vagina. In the next couple of sessions, she was advised to insert her fingers into her vagina and move them around, initially one finger, later two fingers. Penetrative sexual intercourse was prohibited during the period. Only after the patient became comfortable with these over three sessions, vaginal containment with lubrication and local anesthesia provided by 5% lignocaine jelly was advised. Vaginal containment involved the patient in female superior position, guiding penile penetration with her hands and the couple remaining still, concentrating on the pleasant sensatations they experience. After a month of initiating therapy, the patient was able to indulge in normal sexual intercourse without the need for local anesthesia. Her depression also improved. In subsequent follow-up, the antidepressant dose was tapered and stopped over the next 9 months. Vaginismus is a disabling condition that results in significant distress to the couple. A multidisciplinary approach would result in appropriate diagnosis and management. Our case illustration highlights the importance of application of appropriate psychological interventions along with psychopharmacological treatment.

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