Treatment With Phytoestrogens for Depressive Symptoms in Late-Onset Schizophrenia: A Case Report

To the Editor: Sex differences in the course and outcome of schizophrenia are a well-known entity, with females having a relatively favorable course. This difference could be due to the protective role of estrogen in premenopausal women and could explain the second peak of schizophrenia in postmenopausal women.[1] Hence, estrogen is a potential treatment for schizophrenia in elderly postmenopausal women; however, its use is limited by potential side effects.[2] Phytoestrogens are a safer alternative to estrogen, but to date, there have been few reports of the use of phytoestrogens in schizophrenia,[3] and to the best of our knowledge, there is no report of their use for treatment of depressive symptoms in schizophrenia. Here, we report the case of a perimenopausal patient with paranoid schizophrenia whose depressive symptoms were successfully treated with adjuvant phytoestrogens.

Case report. Ms A, a 47-year-old married woman, presented in 2010 with illness of 7 months' duration characterized by delusions of reference and persecution, thought broadcast, and third-person auditory hallucinations. She had sought a gynecologic consultation 2 months earlier for dysfunctional uterine bleeding; she underwent a hysterectomy, following which she developed pervasive sadness, anhedonia, and depressive cognitions. A detailed history was obtained from her husband—the primary caregiver—and her mental status examination results were corroborative. She was diagnosed as having paranoid schizophrenia (*DSM-IV*) and was started on tablet paliperidone 6 mg/d. She showed substantial improvement in her psychosis at the end of 3 months. However, she continued to complain of depressed mood and inability to perform her household chores; thus, tablet escitalopram 5 mg/d was started. She reported no improvement in depressive symptoms after 2 months but developed akathisia, following which escitalopram was stopped. Her akathisia resolved after stoppage of escitalopram.

Because the depressive symptoms had worsened following the hysterectomy, phytoestrogen supplement was started on cessation of escitalopram.[3] Ms A reported improvement in her symptoms during 8 weeks of treatment. She was continued on the combination of paliperidone and phytoestrogens, and improvement was maintained during the last follow-up at the end of 6 months.

The patient had onset of psychotic symptoms during menopause and depressive symptoms after a hysterectomy. Because she developed depressive symptoms only after the hysterectomy, diagnosis of severe depression with psychotic symptoms was unlikely, though such a diagnosis is common in this age group. Estrogen has significant effect on modulation of dopamine and serotonin receptors.[4] However, estrogen replacement is associated with potential complications such as thromboembolism, coronary artery disease, and endometrial cancer.[2] Phytoestrogens are a group of biologically active plant substances with a chemical structure that is similar to estradiol and are a safer alternative to estrogen. Earlier reports indicate use of phytoestrogens as adjuvant treatment for positive symptoms of schizophrenia.[3] Their reported therapeutic effect on depression is yet to be examined.[5] Because our patient did not show improvement on 5 mg/d of escitalopram but instead developed akathisia, we did not give an adequate trial of conventional antidepressant medication.

In conclusion, our report suggests phytoestrogens as a potential treatment for depressive symptoms in schizophrenia, especially in elderly women who are not responding to or are intolerant to conventional antidepressants. Further evaluation in controlled trials is warranted.

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