LETTER TO THE EDITOR

Successful Use of Adjuvant Phytoestrogens in Schizoaffective Disorder: A Case Report

To the Editor: Estrogens play a significant role in the pathogenesis of psychoses.¹ Treatment with estrogens has been reported to offer benefit in schizophrenia.² Unlike synthetic estrogen derivatives that are associated with serious adverse effects, phytoestrogens are considered to be safer.³ Soya contains phytoestrogens, mainly isoflavones, which are biologically active.⁴ Isoflavones have structural similarity to estrogen and act at estrogen receptor sites.⁵ We describe the first report, to our knowledge, of a patient with schizoaffective disorder whose psychotic symptoms improved after adjuvant treatment with phytoestrogens.

Case report. Ms A, a 48-year-old woman with a diagnosis of schizoaffective disorder (DSM-IV), presented in September 2006 with complaints of persistent suspiciousness with significant impairment. She was on regular treatment with risperidone (6 mg/d), escitalopram (20 mg/d), and trihexyphenidyl (2 mg/d). She had undergone hysterectomy without oophorectomy for uterine fibroids 10 years before. Otherwise, her past medical history was uneventful. Her mental status examination revealed overvalued ideas of reference and persecution. In addition, she had had perimenopausal symptoms of flushing, cold feet, vaginal dryness, and irritability over the past 2 years.

In view of the associated perimenopausal symptoms, she was started on soya-based phytoestrogen supplements in September 2006. There was a dramatic improvement in her symptoms of persecutory ideas and sadness of mood over a period of 1 week that was sustained over the course of 1 year. Her fasting blood glucose level, lipid profile, and thyroid function were within normal limits.

Apprehensive of side effects, she discontinued the phytoestrogen supplement by herself in February 2008. Following this, she had a relapse of psychotic symptoms (delusions of reference and persecution). Restarting of the supplements led to rapid resolution of symptoms within 1 week, and the patient remained well, without psychotic symptoms, during the next 6-month follow-up period until July 2008. To the best of our knowledge, this is the first report of improvement in psychotic symptoms after adjuvant treatment with phytoestrogens. Though the rapidity of improvement might suggest the possibility of a placebo effect, such an effect is unlikely because of persistent symptomatic improvements at follow-up (since a placebo effect is less likely to persist⁶). Since the psychotic symptoms (in the absence of postmenopausal symptoms) recurred on discontinuation and ameliorated on reinitiation of phytoestrogens, we believe that phytoestrogens had specific "antipsychotic" effects in this patient (rather than the observed clinical benefits being an "epiphenomenon" of improvement in postmenopausal symptoms). Further systematic studies need to examine the "antipsychotic" effects of phytoestrogens.

REFERENCES

- Huber TJ, Borsutzky M, Schneider U, et al. Psychotic disorders and gonadal function: evidence supporting the oestrogen hypothesis. Acta *Psychiatr Scand*. 2004;109(4):269–274.
- Kulkarni J, Riedel A, de Castella AR, et al. Estrogen—a potential treatment for schizophrenia. *Schizophr Res.* 2001;48(1):137–144.
- 3. Munro IC, Harwood M, Hlywka JJ, et al. Soy isoflavones: a safety review. *Nutr Rev.* 2003;61(1):1–33.
- Usui T. Pharmaceutical prospects of phytoestrogens. *Endocr J*. 2006;53(1):7–20.
- Jordan VC, Mittal S, Gosden B, et al. Structure-activity relationships of estrogens. *Environ Health Perspect*. 1985;61:97–110.
- Quitkin FM, Rabkin JG, Ross D, et al. Identification of true drug response to antidepressants: use of pattern analysis. *Arch Gen Psychiatry*. 1984;41(8):782–786.

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