

Vitex agnus-castus and premenstrual syndrome

JOHN EDEN MB BS, MD, FRCOG, FRANZCOG, CREI



Premenstrual syndrome and premenstrual dysphoric disorder are common disabling problems. Many women ask for a herbal therapy. *Vitex agnus-castus* extract has been shown in clinical trials to be superior to placebo for symptoms such as mood swings and cyclical breast pain.

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Premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) are common in women aged in their 30s and 40s. These conditions are often associated with a history of postnatal depression and intolerance to synthetic progestins (such as medroxyprogesterone acetate and norethisterone), which frequently cause symptoms similar to those of PMS in these women.

Selective serotonin reuptake inhibitors are an effective treatment for PMS, but many women ask for a 'natural' therapy for their symptoms. Extracts from the fruit of the shrub *Vitex agnus-castus* (VAC; also known as chaste tree or chaste berry) have been used to treat PMS for many years, especially in Europe. This short review examines the evidence for the effectiveness of VAC in PMS and PMDD.

EVIDENCE ON VITEX AGNUS-CASTUS

A literature review identified four randomised controlled trials (RCTs) of VAC extract used to treat PMS or PMDD. Three trials used specific VAC preparations: VAC extract Ze 440 in two trials and VAC BNO 1095 in another.¹⁻³ The remaining trial used an unidentified extract.⁴ In addition, a recent systematic review of clinical trials of VAC extract for female reproductive disorders was found.⁵

VAC Ze 440 is available in Australia as Premular. A range of other single-ingredient VAC preparations are available in Australia, including liquid oral spray, capsules and tablets. However, the author is unaware of any randomised placebo-controlled trials of these specific products.

Premenstrual syndrome

The first of the two RCTs of VAC extract Ze 440 for PMS was published in 2001 and randomised 170 women to receive 20 mg Ze 440 or placebo daily over three menstrual cycles.¹ Ze 440 was superior to placebo for all endpoints, which included breast pain, headache, anger, mood swings and bloating. Side effects were mild and similar in the two groups.

More recently, a placebo-controlled dose-finding study of Ze 440 was published.² In this study, 162 women with PMS were randomised to receive placebo or Ze 440 at a dose of 8, 20 or 30 mg daily. The total symptom score was significantly improved in the 20 mg Ze 440 group compared with the placebo and 8 mg groups; 30 mg Ze 440 was no better than 20 mg. There was some effect on breast pain with the 8 mg Ze 440 dose. Thus, this study confirmed that 20 mg Ze 440 daily (the standard dose recommended by the manufacturer) is the most effective dosage for PMS.

Ma and colleagues performed a RCT of VAC extract BNO 1095 in Chinese women with PMS.³ They found that all PMS symptoms except abdominal cramping improved in the treatment group.

Associate Professor Eden is Associate Professor of Reproductive Endocrinology at the University of New South Wales, Sydney; Director of the Barbara Gross Research Unit at the Royal Hospital for Women and the University of New South Wales, Sydney; Director of the Women's Health and Research Institute of Australia; and Director of the Sydney Menopause Centre and Medical Co-Director of the Gynaecology Centre at the Royal Hospital for Women, Sydney, NSW.

The systematic review of clinical trials of VAC extract noted that two studies have found VAC extract to be superior to vitamin B₆ and magnesium, respectively, for treatment of PMS.⁵

Premenstrual dysphoric disorder

Atmaca and colleagues compared an unspecified VAC extract with fluoxetine in 41 patients with PMDD.⁴ The authors concluded that both products worked well but that fluoxetine was superior for psychological symptoms, and VAC extract was better for physical symptoms.

However, the recent systematic review found that the comparison between VAC extract and fluoxetine is less clear.⁵ The review cited an Italian study in 57 women with PMDD which concluded that although VAC was a valid alternative to fluoxetine treatment for patients with PMDD, fluoxetine outperformed VAC on all endpoints.

Adverse effects

The literature review failed to identify any severe side effects of VAC or any significant drug interactions. The systematic review of clinical trials concluded that adverse events with VAC were mild and generally infrequent.⁵

CONCLUSION

VAC extracts appear to be an effective and safe treatment for PMS with a reasonable evidence base. VAC extracts do not appear to interact with other drugs and have a good safety profile, making them an excellent first-line option for many women with PMS.

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COMPETING INTERESTS: Associate Professor Eden donates any honoraria received from pharmaceutical companies to a charity, Glory Reborn, in the Philippines.