

## Chaste Tree & St John's Wort Combined Therapy Benefit Found in Subgroup of Menopausal Women

by Michelle Morgan

### Initially: No Apparent Effect

A randomised, double-blind trial conducted in Australia involved 100 late-perimenopausal or postmenopausal women experiencing hot flushes and other menopausal symptoms.<sup>1</sup> Ninety-three women completed the study. They received chaste tree (*Vitex agnus-castus*) and St John's wort (*Hypericum perforatum*) or placebo for 16 weeks. The herbs were administered in the form of tablets which were supplied by MediHerb. The herbal treatment consisted of:

- St John's wort: 3 tablets per day, one in the morning, two later in the day. The daily dose corresponded to 5.4 g of dried herb flowering top containing 2.97 mg of hypericins, 27 mg of hyperforin and 54 mg of flavonoid glycosides.
- Chaste tree: 2 tablets per day, both in the morning. The daily dose corresponded to 1.0 g of dried fruit.

The trial measured hot flushes (number and severity of hot flushes and sweating episodes experienced each day and night), menopausal symptoms (using the Greene Climacteric Scale), depression (using the Hamilton Depression Inventory) and quality of life (using the Utian Quality of Life Scale). Hot flush episodes were weighted as 1 for mild, 2 for moderate, and 3 for severe to take into account the severity as well as the frequency. The daily weighted score was calculated by dividing the weekly weighted total by 7. The Greene Climacteric Scale includes the following subdomains: psychological, anxiety, depression, somatic, vasomotor, sexual and sleep.

The results are outlined in Table 1.<sup>1,2</sup>

### Subpopulation Analysis: Benefits for PMS-like Symptoms of Perimenopause

Data on premenstrual syndrome-like symptoms were collected from a small subgroup (14) of late-perimenopausal women who participated in this clinical trial.<sup>3</sup> Participants recorded the severity of their PMS-like symptoms at entry by recall and during the premenstrual phase whenever the impending onset of menstruation

was evident throughout the 16 weeks of treatment. Eight women received herbal treatment and six were in the placebo group.

The information was recorded on Abraham's Menstrual Symptoms Questionnaire which consists of four clusters:

- PMS-A: nervous tension, irritability, mood swings, anxiety
- PMS-C: headaches, cravings for sweets, increased appetite, pounding heart, fatigue, dizziness
- PMS-D: depression, forgetfulness, crying, confusion, insomnia
- PMS-H: weight gain, swelling of extremities, breast tenderness, abdominal bloating

Potentially confounding dietary and lifestyle factors and adverse events were monitored.

At the end of treatment, the herbal combination was found to be superior to placebo for total PMS-like scores ( $p = 0.02$ ), PMS-D ( $p = 0.006$ ) and PMS-C clusters ( $p = 0.027$ ). The herbal treatment group also showed significant reductions from baseline in the PMS-A

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No significant differences between the two groups were found for any of the endpoints at week 16 or at any time point measured (week 4, week 8 and week 12). Subgroup analysis of the clinically depressed group did not change the finding.
Significant improvements were observed in both the placebo and herbal groups for hot flushes, Greene Climacteric Scale scores and depression at week 16. <ul style="list-style-type: none"> <li>Compared to baseline, the decrease in hot flush scores was significant for the placebo group (<math>p &lt; 0.001</math>) and for the herbal group (<math>p &lt; 0.01</math>). Improvements of 50% or more in mean daily weighted hot flush scores were observed in 45.6% of those receiving placebo and in 43.5% of the herbal group.</li> <li>Improvement for both groups was significant (<math>p &lt; 0.001</math>) on the Hamilton Depression Inventory. Herbal treatment resulted in a 36% reduction in depression scores, and a reduction of 41% occurred in the placebo group. A response of 50% or greater was observed in 45% of women receiving herbal treatment compared with 55% of the placebo group.</li> <li>Improvement for both groups were significant (<math>p &lt; 0.001</math>) on the Greene Climacteric Scale for overall scores and all subdomains, except for the sexual domain, which was not significant for the herbal group.</li> </ul>
No significant change was found for either group on quality of life. There was no significant difference between the two groups for adverse events.
<b>Table 1. Results of Chaste Tree and St John's Wort treatment in menopausal women.<sup>1,2</sup></b>

At the end of treatment, the herbal combination was found to be superior to placebo for total PMS-like scores ( $p = 0.02$ ), PMS-D ( $p = 0.006$ ) and PMS-C clusters ( $p = 0.027$ ). The herbal treatment group also showed significant reductions from baseline in the PMS-A ( $p = 0.003$ ) and PMS-H ( $p = 0.002$ ) clusters, although this effect was not superior to placebo.

These results can be considered preliminary because of the research design and small patient numbers, with further research required assessing a larger group of perimenopausal women with a clinical diagnosis of PMS.

The trial was conducted by Dr Diana van Die and involved Kerry Bone and researchers from Victorian universities and medical institutions.

**Key Finding:** Preliminary results suggest that chaste tree and standardised St John's wort extract may provide relief of PMS-like symptoms in late perimenopausal women.

## REFERENCES

<sup>1</sup> van Die MD, Burger HG, Bone KM et al. *Menopause* 2009; **16**(1): 156-163

<sup>2</sup> van Die MD, Burger HG, Bone KM et al. *Menopause* 2009; **16**(3): 616-617

<sup>3</sup> van Die MD, Bone KM, Burger HG et al. *J Altern Complement Med* 2009; **15**(9): 1045-1048