



## Letter to the Editor

**Are changes of prolactin levels the effectors of vitex agnus castus beneficial effects on the pre-menstrual syndrome?**

## ARTICLE INFO

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Dear Editor,

He and colleagues recently reported an interesting study showing that a vitex agnus castus (VAC) extract works as a safe, well tolerated, and effective drug for the treatment of pre-menstrual syndrome (PMS) [1]. The biological mechanism by which the VAC therapeutic effects occurred is unknown. Many theories and hormonal alterations, including hyperprolactinemia, have been considered to explain PMS etiology but this issue has not been fully elucidated so far.

A mixture of dopaminergic diterpenes isolated from VAC extracts has an effective in vitro dopaminergic activity [2] and the possible application of VAC extracts for the treatment of hyperprolactinemia has been hypothesized [3]. In patients with cyclic mastalgia and mild hyperprolactinemia, a VAC-derived compound performed similarly to bromocriptine for improving mastalgia and lowering serum prolactin (PRL) [4]. A VAC extract was effective in lowering PRL concentration in a group of healthy men, depending on the administered dose and initial PRL levels [5].

Unfortunately, the PRL levels in the VAC- versus placebo-treated group of patients studied by He and colleagues have been not reported. I think that changes of PRL concentration could occur in the VAC-treated patients, at least partially accounting for the beneficial effects of the VAC extract for controlling PMS symptoms. The disclosure of PRL changes in patients with PMS treated with VAC might represent an extremely relevant report to understand better the pathophysiology of PMS and, conversely, to clarify further the mechanisms of action of VAC extracts and its possible effect in lowering serum PRL.

**Conflict of interest**

Neither conflicts of interest nor funding sources affect the content of this letter.

**References**

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