"Tofupill (Femarelle®) Lacks Peripheral Estrogen-like Actions in the Rat Reproductive Tract"

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Abstract

Objective: The objective of this study was to evaluate the estrogenic effect of phytoestrogens contained in a commercial food supplement (Tofupill) on the reproductive tract of ovariectomized rats.

Methods: Food supplement (3.4 or 10.2 mg/kg) and conjugated equine estrogens (CEE, 31 or 100 microg/kg) were orally administered, daily during 14 days to ovariectomized rats. At the end of treatment, the following determinations were done: dry and wet uterine weight, vaginal epithelium condition, and uterine serotonin-induced contractile response. A group treated with 17beta-estradiol was included as control for serotonin-induced contractile response.

Results: Food supplement did not display clear estrogenic effects on vaginal epithelium, uterine weight or myometrial sensitivity to serotonin, whereas high doses of conjugated equine estrogens showed estrogenic action.

Conclusions: The present data showed that Tofupill (Femarelle®) displayed a lower estrogenic effect than conjugated equine estrogens, which are one of the most commonly used hormone replacement therapy for postmenopausal women. However, further studies are needed to evaluate the risk associated to the use of Tofupill as an alternative to hormone replacement therapy for postmenopausal women.