

Topic : Biomedical

THE EFFECT OF EXTRACT YELLOW PUMPKINS SEED (*CUCURBITA MOSCHATA*) ON HISTOLOGY OF ENDOMETRIAL GLANDS IN OVARIECTOMIZED RATS

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Abstract

Menopausal symptoms turn out to be a health problem threatening the quality of women's life. These symptoms are triggered by the decrease of estrogen produced by ovaries. Treatment using phytoestrogens could be expected to reduce the symptoms. Pumpkin seeds (*Cucurbita moschata*) contain secondary metabolites isoflavones that have a structure similar to endogenous estrogen and it can occupy estrogen receptor. The purpose of this study was to analyze the effects of *C. moschata* seeds in ovariectomized rats on the histology of endometrial glands. An experimental study in vivo with only post-test with control group design was conducted using 30 female Spraque-Dawley rats, 8 weeks old, weight 148-280 g. The rats were divided into 6 groups: control group (Normal), only ovariectomized group (OVX), ovariectomized rats given the extract of *C. moschata* 100, CM 200 and CM 400 mg / kg body weight for 30 days (OVX-CM100; OVX-CM200; OVX-CM400), and ovariectomized rats given estradiol 2 µg/kg as a positive control (OVX-E). Rats were sacrificed on day 31. Uterine was removed and an analysis on the number of endometrial glands, diameter of lumen's glands and the thickness of the endometrial glandular epithelium was carried out. Statistical analysis was using One Way ANOVA. The conclusion is *Cucurbita moschata* extract was significantly increase the number of glands and diameter of lumen's endometrial glands ($p < 0,05$).

Keywords: menopause, *Cucurbita moschata*, histology of the endometrium, endometrial glands.