

P305. Soybean isoflavone decreases oxidative stress in the uterus and vagina of ovariectomized rats

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The aim of this study was to evaluate the morphometry and the gene expression of Ki-67, VEGF and caspase 3 and the stress oxidative in the uterus and vagina of ovariectomized rats treated with estrogen or isoflavones. We used 30 Wistar rats ovariectomized treated with isoflavones or estrogen during 30 days. At the end of the treatment, the uterus and vagina was removed for subsequent histological studies and the other was used to evaluate gene expression of angiogenesis (VEGF-A), cell proliferation (Ki-67), apoptosis (caspase 3 activated) and oxidative stress. Treatment with estrogen showed a largest increase in the layers of the uterus and vagina than with isoflavones. These hypertrophic effects agree with higher expression elevation of Ki67 and VEGF, which did not occur with the caspase 3, indicating that isoflavones have great proliferative effect on the uterus and vagina. Similar results were also observed on superoxide quantification show that isoflavone has a protective effect against oxidative stress. Our results indicate positively the trophic therapeutic potential of isoflavones has a protective effect and can contribute to the development of effective therapies to decrease the symptoms of menopause.

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