Abstract

The leptin hormone is important to satiety and an important link between the nutritional status and reproductive processes. Owing to the contradictory effects of leptin on the ovary and the failure to clarify the precise mechanism by which leptin affects the ovary, our aim was to contribute to evaluation if leptin can directly regulate the gene expression of leptin itself and its receptors, and the expression of several genes related to the ovary function by a model of tissue culture. Ovaries from Wistar dams were used at 90 days of age and were submitted to medium with presence and absence of leptin. The results can demonstrate that leptin regulates gonadotropins and steroid receptors, which could suggest that the ovarian leptin role could be secondary to the changes in these receptors expression in rats.

Keywords