INTRODUCTION
Estrogens are 18-carbon steroid hormone which are very high hormone levels in reproductive aged-women. The amount of estrogen produced by the ovary is a significant downward after menopause. In recent years there has been increased the use of phytoestrogens in the treatment of menopause. In this study, we aimed at investigating the effect of Momordica charantia (MC) and structural changes of uterus tissue on experimental ovariectomized rats.

MATERIALS and METHODS
In the study, ovariectomy model (OV) was used and MCE applied with gavage (2g/kg) for rats. The weight of the rats was recorded every the third day and uterine weight was measured after the decapitation. Uterus tissue samples were fixed in 10% formaldehyde and hematoxylin-eosin staining were performed for light microscopic evaluations.

RESULTS and CONCLUSION
It is known that body weight is inversely to relation with uterine weight in ovariectomy. Uterine/BW ratio decreased in the OV group (p<0.001) and reversed with MCE (p<0.05). In ovariectomized rats we detected cell infiltration related with the loss of cytoplasm in epithelial cells. Irregular endometrial stroma was detected in estradiol applied group. Compare with ovariectomized group epithelial cells have more regular morphology and less cell infiltration were observed. In comparison with the ovariectomized group, MCE applied group has more regular surface epithel and uterus glands which are more like control group. In contrast with ovariectomized group very less amount of neutrophil infiltration has observed. MC suppressed cell damage in uterus tissue in ovariectomized rat which has therapeutic potential to prevent the development of cell degenerative complications.

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