INTRODUCTION
Aging and hormonal regulation differences can trigger oxidative stress which is mainly due to an increased production of oxygen free radicals and a suppression of antioxidant defensive. *Momordica charantia* (MC) is composed of special biologically active chemicals. The present study was designed to investigate the effect of MC on anti-apoptotic proteins and oxidative stress status on a postmenopausal rat model.

MATERIALS and METHODS
In the study, ovariectomy model was composed by ligature method and gavage with 2g/kg fruit extract of *Momordica charantia* (MCE) applied on the rats during 30 days (Fig 5). Oxidative stress markers (8-OHdG,MDA,GSH,SOD,MPO) were measured. For apoptotic status in tissue were analyzed pro-caspase-3, cleaved caspase-3, caspase-9, cleaved caspase-9, Bcl-2 by western blotting.

RESULTS
Concerning extrinsic and intrinsic apoptosis, the caspase-3 protein expression levels increased in OV group rat uterine tissue (p<0.05) and decreased with MCE treatment (p<0.01). At the same time, our data showed that pro-caspase-9 protein expression in the OV group elevated (p<0.05) while this increase was reversed with MCE treatment (p<0.01). MCE treatment Bcl-2 protein expression was higher than that in OV group (p<0.01, Fig 1). In our findings, increasing serum 8-OHdG levels on ovariectomized rats were reduced by MCE application (Fig 2). It was observed that the MCE increased SOD,GSH considerably that had been reduced in ovariectomy; and reduced increasing MDA,MPO (p<0.05-0.001, Fig 3).

CONCLUSION
This study showed that MC fruit extract has a potential antioxidant effect as radical scavenging activity of the extract against radicals which include bioactive molecules. In addition to MCE treatment decreased uterine apoptotic stimulation in ovariectomy rats.

Acknowledgement : This study was funded by the Marmara University Research Unit (Grant No. SAG-C-YLP-101012-0315 ).