ABSTRACT

INVESTIGATION of THE ENDOPLASMIC RETICULUM STRESS MARKERS IN PLACENTAS and FETUS of DIABETIC PREGNANT MICE

GÖKMEN E. Adnan Menderes University Health Sciences Institute Histology and Embryology M.Sc. Thesis, Aydin, 2016.

In my thesis study, it was aimed to find out if diabetes cause differences in fetal liver and placenta about ER stress markers. For this purpose, experimental design is created which consist of four groups. These groups are; zero control group, pregnant control group, diabetic pregnant group and pregnant citrate group. As investigate the markers, both immunohistochemical techniques and western blot technique were used. According to the results of experimental studies, no statistically significant difference was found (p>0.05) fort he markes that we use; Nrf2, GADD 153, BIP, Xbp1 and Herpud, in fetal liver tissue of the diabetic group compared to the other groups. As a result of western blot done with BIP, Xbp1 and Herpud antibodies in placenta, decreased expression of theese markers was seen in diabetic group compared to the other groups. When we compared the weight of the fetus and placenta between groups, we have found statistically significant decreased weight in diabetic group compared to the other groups.

Key words: ER stress, diabetes, fetus, placenta.