

Abstrakt:

Veronika Fuxová

The study of endoglin and eNOS expression in normocholesterolemic mice

Diploma thesis

Charles University in Prague, Faculty of Pharmacy in Hradec Králové

Pharmacy

Background:

The aim of this diploma was describe the expression of endoglin and eNOS in the aorta in two strain of mice with different predisposition to atherosclerosis.

Methods:

We used female normocholesterolemic mice from strain C3H/HEJ and from strain CB57BL/6J, which is more susceptible to atherosclerosis. Both groups of mice were fed with chow diet for 12 weeks. Then we performed biochemical analysis of blood specimen and imunohistochemical analysis of segments of tissue from the aorta. To detect expression of endoglin was used Avidin-Biotin Method (ABC) with DAB visualization, to detect expression of eNOS was used En Vision Method again with DAB visiualization.

Results:

Biochemical analysis showed increase levels of total cholesterol, VLDL, TG and HDL in the strain C3H/HEJ. The imunohistochemical analyse demonstrated expression of endogline and eNOS in endothel of aorta. The results showed that expression of endogline and eNOS is more significant in strain CB57BL/J6 than in strain C3H/HEJ.

Conclusion:

The expression of endoglin and eNOS was higher in strain CB57BL/6J, which is more susceptible to atherosclerosis compared with strain C3H/HEJ.