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Liver pathomorphology of Mus musculus C57BL6 on atherogenic diet

Gaifullina R., Katina M., Abdulhakov S., Kasimova L., Abdulhakova A., Rizvanov A. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Atherosclerosis is one of the leading causes of disability and death worldwide. Liver plays a huge role in pathogenesis of atherogenic dislipidemia, development and progression of atherosclerotic lesions. We studied the effect of atherogenic diet on liver morphology in animal model of diet-induced atherosclerosis in mice Mus musculus C57BI6. This strain has a natural ability to develop atherosclerosis, while some other mouse stains has not. After 14 weeks on atherogenic diet a severe hepathomegaly (9% of body mass) and lobular structure deformation was found. We also observed signs of micro- and macrovesicular steatosis, cell apoptosis, fibrosis and inflammatory leukocyte infiltration. So, liver not only plays an important role in dislipidemia, but it is also a target-organ in lipid metabolism imbalance.

Keywords

Apoptosis, Atherosclerosis, Dislipidemia, Fibrosis, Inflammation, Liver, Steatosis