**Original article**

**UDC: 616.831:577.1:57.085**
**doi: 10.5633/amm.2021.0406**

# CATALASE ACTIVITY AND MALONDIALDEHYDE CONCENTRATION IN THE BRAIN TISSUE OF RATS TREATED WITH CARBON TETRACHLORIDE

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Carbon tetrachloride (CCl4) is a potent oxidative agent, used in animal models for the induction of liver and neuronal damage. In this study, we tracked the changes in the concentration of malondialdehyde (MDA) and the activity of catalase (CAT) in the brain tissue of Wistar rats exposed to CCl4. The animals were divided into two groups of six rats each. The control group was treated with vehicle olive oil (10 ml/kg) and the experimental group included CCl4-treated animals (1 ml/kg). The level of oxidative stress was determined in a 10% homogenate of whole encephalitic mass (WEM). The levels of MDA in the experimental group were significantly increased ($p = 0.0009$), while CAT activity was significantly decreased ($p = 0.0143$) in the CCl4-treated group compared to the control group. The results confirmed the theory about the CCl4-induced oxidative damage on the brain tissue in rats and may be a basis for further research related to potentially protective substances in this animal model.

*Acta Medica Medianae 2021;60(4):39-44.*

***Key words:*** *carbon tetrachloride, brain, oxidative stress, malondialdehyde, catalase*