Effect Of CDP-Choline To Reduce
The Amount of Necrosis Fibrous Astrocyte in Cerebral Medula of White Rats (Rattus novergicus) Exposed by Methylmercury

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ABSTRACT

The aim of this research was to find out the amount of necrotic fibrous astrocyte that exposed by methylmercury (II) chloride in 30 days, then treated by CDP Choline in 14 days. This research using 25 adult female Wistar rats about 100-160 g of body weight. Before treatment is given, the white rats adapted in a week, then randomly divided into 5 groups, and every treatment consist of 5 repetitions. All groups were given treatment per oral with sonde. P0 as control were given 0.5 ml aquades in 30 days, P1 were given methylmercury (II) chloride 0.02 mg/kg/bw in 30 days, P2 were methylmercury (II) chloride 0.04 mg/kg/bw 30 days, P3 were given methylmercury (II) chloride 0.02 mg/kg/bw in 30 days, then treated by CDP-Choline 100mg/kg/bw in 14 days, P4 were given methylmercury (II) chloride 0.04 mg/kg/bw in 30 days, then treated by CDP-Choline 100mg/kg/bw in 14 days. The data was analyzed by ANOVA method based on Completely Randomized Design and to analyze the mean differences among treatments tested by Duncan's multiple range (Duncan's Multiple Range Test). Results that the amount of necrosis fibrous astrocyte had a significant differences between P0, P1, P3 with P2 and P4. The amount of necrotic fibrous astrocyte in P1 is higher than P3, as well as with the P2 group, that showed the highest amount of necrotic fibrous astrocytes, when compared with P2, was seen reduction in the amount of necrotic fibrous astrocytes. So the conclusion from this study is CDP-choline 100 mg/kg/bw can decrease the amount of necrotic fibrous astrocytes that have been exposed to methylmercury (II) chloride at a dose of 0.02 and 0.04 mg/kg/bw.

Keyword : Astrocyte, Methylmercury, CDP-Choline, Necrosis.