

ABSTRAK**THE EFFECT OF GRADED DOSES TRIHEXYPHENIDYL ORALLY IN
MICE (*Mus musculus*) RENAL HISTOPATHOLOGY PICTURE**

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Trihexyphenidyl abuse increased in last few years. The use of high doses of trihexyphenidyl potential to cause disturbances in the central nervous system and urinary retention. However, until now there is no data on histopathologic picture that can occur in the kidneys, if trihexyphenidyl overused. This study is aimed to determine differences of mice renal histopathology description between control group and treatment group due to the administration of high-dose oral trihexyphenidyl. This study used 36 mice (*Mus musculus*) that were divided into 4 groups. The control group was given a standard food. The treatment group consisted of three groups were given a dose of trihexyphenidyl with 0,0208 mg/20 gramBW/day, 0,0416 mg/20 gramBW/day and 0.0624 mg/20 gramBW/day for 14 days. The results showed that there were significant differences in the diameter of the proximal tubules of mice between control and treatment groups. In the treatment group, the proximal tubule diameter decreases proportional to doses. The lowest diameter of the proximal tubule obtained at the third treatment group, compared with the other groups. In conclusion, at doses higher than 0,0208 mg/20 gram BW/day, our study show that trihexyphenidyl can cause damage to the proximal tubule, which is a narrowing of the proximal tubule lumen. This is indicated in the second and third treatment.

Keywords: Trihexyphenidyl, Renal Histopathology, Proximal Tubule