Antioxidant Activity of Avocado Puree on Blood Urea Nitrogen and Creatinine Level in White Rats (Rattus norvegicus) Induced with Toxic Doses of Meloxicam

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Abstract : Nowadays, there are so many incidences had been reported in pet animals regarding drug overdose caused by incorrect doses of a non-steroidal anti-inflammatory drug (NSAID), for instance, meloxicam. As supporting treatment, the avocado is used in traditional medicine to treat or prevent some health cases. The study was aimed at providing the basis for the antioxidant activity of avocado puree in animal medicine. Experimental animals used in this study were 24 male rats that were randomly divided into 4 groups (n=6). Control Group I got 1 ml CMC 1% and control II got meloxicam 30 mg/kgBB and 1 ml CMC 1%. Treatment group I got meloxicam 30 mg/kgBB and avocado 5 g/kgBB/day and treatment II got meloxicam 30 mg/kgBB and avocado 10 g/kgBB/day. The study was conducted over 8 days, then the level of Blood Urea Nitrogen and creatinine of the white rats were examined in 1st day and 8th day. The results were analyzed by ANOVA Two Way With Replication, then followed by T-test ($\alpha = 0.05$) if there were a difference. Comparison test among the four groups after treatment with avocado using Anova Two Way With Replication test showed that there were significant differences between the mean of the four groups either decreased levels of Blood Urea Nitrogen and creatinine with p < 0.05. Treatment group I and II received treatment showed remarkable (p < 0.05) decreases ini Blood Urea Nitrogen level by 27,17 mg/dl and 17,83 mg/dl respectively. There was also significant decrease in the values of creatinine in Treatment group I and treatment group II by 0.983 mg/dl and 0.713 mg/dl respectively. The conclusion of this study was that avocado decreases level of Blood Urea Nitrogen and creatinine in white rats which are exposed to toxic doses of meloxicam.

Keywords: avocado, blood urea nitrogen, creatinine, meloxicam

Conference Title: ICASVM 2017: International Conference on Animal Science and Veterinary Medicine

Conference Location : Tokyo, Japan Conference Dates : September 07-08, 2017