

TAURINE EFFECT ON LUNG HISTOPHATOLOGY OF MICE (*Mus musculus*) INDUCED BY CARCINOGEN BENZO()PYRENE *IN VIVO*

ABSTRACT

By
Arini Pradita Roselyn

Lung cancer is a disease that causes high mortality. Drug used to prevent and cure cancer mostly causes intoxicity to the normal tissues due to its less effectiveness. Therefore, it is necessary to find out any agent or substance which works much more effective and safe for cancer treatment. The aims of the study was to elucidate the role of taurine on the lung tissue of mice (*Mus musculus*) induced by carcinogenic benzo()pyrene. The experiment was conducted in a completely randomized design with 5 replications. Six treatment groups were performed. Group I was given 0,2 ml of corn oil and given akuadest until the end of the study period, group II was induced by benzo()pyrene without administration of taurine, group III before induced with benzo()pyrene, was given taurine dosage 7,8 mg/BWmice/day for two weeks, group IV after induced benzo()pyrene, was given taurine with dosage 3,9 mg/BWmice/day, group V after induced benzo()pyrene, was given taurine with dosage 7, 8 mg/BWmice/day, group VI after induced benzo()pyrene, was given taurine with dosage 15.6 mg/BWmice/day. The results of the *Kruskal-Wallis* analysis and one way ANOVA with LSD ($p>0,05$) showed that taurine reduced lung tissue damage 72,73% due to the administration of benzo()pyrene of 0,3 mg/BWmice/day. In addition, the effective dose of taurine reduced lung tissue damage was 15,6 mg/BWmice/day.

Keywords: benzo()phyren, lung, histhopatology, taurine