ABSTRACT

HEPAR HISTOPATHOLOGY RESPONSE OF MICE INDUCED BY BENZO(α)PHYREN TO THE ADMINISTRATION OF TAURINE AND LEAF SOUR SOP EXTRACT (Annona muricata)

By

Annisa Agata

Cancer is a disease that is characterized by the existence of damage and cell abnormality in growth and differentiation. Liver cancer is a disorder of hepatic tissue derived from its tumors. Taurine is known as an antioxidant but its role as an anticancer needs to be explored more as well as the role of Annona muricata leaf soursop extract, which was believed to have an anticancer role. This research, therefore, aimed to explore the effect of taurine and Annona muricata leaf soursop extract on the hepatic histopathology of male mice (Mus musculus) induced by benzo(α)phyren in vivo. This research was carried out by using a complete randomized design, which consisted of 5 treatment groups which were repeated 5 times. Group I was given 0.2 ml corn oil for 15 days, group II was induced by benzo(α)phyren without taurine or A. Muricata leaf soursop extract for 10 days, group III was given 7.8 mg taurine/bw/day (twice a day) starting from the 15th day before the induction of benzo(α)phyren, group IV, after induced with benzo(α)phyren, taurine was given with dosage of 7.8 mg/bw/day, group V, after induced with benzo(α)phyren, soursop leaf extract was given with amount of 277.8 mg/bw/day). Data analyzed by Kruskal-Wallis test and one way ANOVA with Fisher test ($p>0.05$). The results indicated that taurine had the ability to recover the liver tissue induced by benzo(α)phyren as (carcinogenic) while, Annona muricata leaf soursop extract had not shown any recovery of tissue damage.

Keywords : benzo(α)phyren, hepatic, histopathology, leaf soursop (Annona muricata), taurine