POTENCY OF Andrographis paniculata EXTRACT ON ALVEOLAR HISTOPATHOLOGICAL FEATURE OF CIGARETTE SMOKE EXPOSED MICE

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ABSTRACT

The purpose of this study was to prove potency of sambiloto (Andrographis paniculata) water extract on alveolar histopathological feature of cigarette smoke exposed mice. The cigarette smoke has side effect on alveolar which is caused Inflammatory. The andrographolide in water extract of Andrographis paniculata had possibility to be used as a treatment. Twenty male mice (Mus musculus) aged 3 months old with 25-30 g of body weight were randomized and divided into four groups with each treatment had five replications. There were P1 (cigarette smoke), P2 (56.04 mg/kg body weight of Andrographis paniculata water extract and cigarette smoke), P3 (70 mg/kg body weight of sambiloto Andrographis paniculata water extract and cigarette smoke) and P4 (75.88 mg/kg body weight of Andrographis paniculata water extract and cigarette smoke). In this research, 56.04 mg/kg BB, 70 mg/kg BB and 75.88 mg/kg BB Andrographis paniculata water extract was given orally. This research has been conducted for 14 days. Each alveolar specimen was processed and histopathological changes were observed. Score of congestion, thickening alveolar septal and hemorrhage were analyzed with Kruskal-Wallis test and continued by Mann Whitney test. The result of this study showed that Andrographis paniculata water extract decreased alveolar hemorrhage but did not influence on congestion and thickening of alveolar septa on alveolar histopathological feature of cigarette smoke exposed mice.

Keywords: Andrographis paniculata, alveolar histopathological feature, cigarette smoke