HISTOLOGY OF MICE’S SKIN TISSUE IN IN VIVO EVALUATION OF ANTICANCER COMPOUND EXTRACTED FROM MARINE SPONGE Aaptos suberitoides

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ABSTRACT

The aim of this research is to know activity of etanol extract from marine spons Aaptos suberitoides in mice skin cancer which induce by carcinogenic agent Benzo(a)pyrene. Mice (Mus musculus) were grouped in 6 group, group I (healthy mice), group II (induce by CMC Na), group III (treatment by cyvlophospamide), group IV (administered by spons extract 500 mg/kg BW), group V (administered by spons extract 1000 mg/kg BW) and group VI (administered by spons extract 1500 mg/kg BW). Benzo(a)pyrene induced for 10 days (5 times). The doses that given is 0.3 gram / 0.2 ml CMC Na. Mice were killed and the cancer tissue were taken. The histological section is made by parafin method and histological examination were do.

The result of this examination is there were fibrosarcoma in mice’s skin that shown with increases thickness in dermis, necrotic, mitotic figure and nuclear polymorphism. Necrotic presentation in group II and group which administered by marine spons extract (group IV, V and VI) ranging on 20-60%. Group I and III were not show necrotic. The number of mitotic figure in group II and group which administered by marine spons extract is 3-4 mitotic cell. Group I and III were not show the appeareance of mitotic figure. Persentation of nuclear polymorphism in group II and group which administered by marine spons extract is 100% perfield. Group I and III were not show the appeareance of nuclear polymorphism. The result of statistical analysis with Kruskal Wallis and Pair Comparison test known that the marine spons extract have no activity in mice’s skin cancer in 500 mg/kg BW, 1000 mg/kg BW and 1500 mg/kg BW concentration.

Keyword: Fibrosarcoma, Benzo(a)pyrene, marine sponge A. suberitoides