

ABSTRACT

Potential of Ethanol Extract from Pearl Grass Leaf (*Hedyotis Corymbosa* (L) Lamk) to Increase Apoptosis Oral Cancer Cell Induced by Benzo(a)pirene on Male Wistar Rats

Background: Oral cancer is one of the lethal diseases due to its late diagnose and hard yet costive therapy. A therapy using the ethanol extract of leaf from *Hedyotis Corymbosa* (L) Lamk that is low price yet easy to be found. The extract contains of 10% ursolic acid that has pro-apoptotic effect in cancer. **Purpose:** To prove and analyze the best dose of leaf from *Hedyotis-corymbosa* (L) Lamk ethanol extract to induce apoptosis of oral cancer **Methods:** This research is the laboratories experimental with post test only control group design. There are 25 Galur-wistar rat as research samples, and divided into four group, namely KK, KP 1 (375 mg/kg BB), KP 2 (750 mg/kg BB), and KP 3 (1500 mg/kg BB). All of this samples were injected by benzo(a)pirene intra muscular in oral twice a week for a month with the dose 8 mg/kg BB. Furthermore,each group was given *Hedyotis-corymbosa* leaf etanol extract with the dose 375 mg/kg BB, 750 mg/kg BB, and 1500 mg/kg BB for ten days. All samples were sacrificed and processing for histopatological evaluation among group. The data were tabulated and analyze statistically. **Result:** Median scores of caspase-3 amount in oral cancer from Wistar rats on KK, KP1, KP2, and KP3 are 1, 1, 1.3 and 1.171 respectively **Conclusion:** *Hedyotis corymbosa* leaf etanol extract have no effect on apoptosis oral cancer cell.

Keywords: benzopyrene , *Hedyotis corymbosa*, apoptosis, oral cancer.