The effect of Etlingera elatior (Kantan) inflorescence aqueous extract on aberrant crypt foci in Sprague dawley rats

ABSTRACT

This study investigated the effect of Kantan flowers (Etlingera elatior) aqueous extract on aberrant crypt foci (ACF) in Sprague dawley rats. They were divided into 8 groups; four groups each for cancer and normal. The rats were fed with respective concentrations of the flower extractions according to their groups. At the 17th week, the rats were sacrificed. The colons were removed and examined grossly and microscopically followed by scoring of aberrant crypt foci. Result showed no significant difference (p> 0.05) in the body weight increment, colon weight and colon pH among all groups also in the aberrant crypt foci (ACF) scores in proximal colon of cancer groups as well as in distal colon. Besides that, comparison between ACF score of proximal and distal colon using ANOVA and posthoc test revealed no significant differences (p> 0.05) in the ACF numbers between proximal and distal colon of rats. Histological result showed that no abnormal structures were seen in crypts of normal treatment groups Etlingera elatior inflorescence aqueous extract did not have significant effect in reducing aberrant crypt foci formation in Sprague dawley rats.

Keyword: Etlingera elatior; Kantan flowers; Aqueous extract; Aberrant crypt foci (ACF); Sprague dawley rats