

**P6 SUBCHRONIC EFFECTS OF BARAKOL ON BLOOD CLINICAL BIOCHEMISTRY PARAMETERS IN NORMAL AND HIGH CHOLESTEROL DIET RATS**

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**ABSTRACT**

Barakol is a major constituent extracted from flowers and young leaves of *Cassia siamea*. This study examined subchronic effects of barakol on blood clinical biochemistry parameters in rats fed with normal and high cholesterol diet. Thirty-two male Wistar rats were randomly divided into 4 treatment groups. First and second treatment groups were fed with normal diet and high cholesterol diet, respectively. Third and fourth treatment groups were given barakol orally at a dosage of 30 mg/kg/day for 90 days. Both latter treatment groups were fed with normal diet and high cholesterol diet, respectively. Blood was collected by heart puncture and serum was tested for biochemistry parameters. Normal diet rats treated with barakol demonstrated a significant decrease of TG but an increase of total and direct bilirubin comparing to its corresponding normal diet control group. Normal diet rats treated with barakol shown no effects on these following blood clinical biochemistry parameters: SGOT, SGPT, ALP, BUN, SCr, Hb, Hct, WBC count, differential WBCs, cholesterol, LDL/HDL ratio, and glucose. An increase of some blood clinical biochemistry parameters such as SGOT, SGPT, ALP, cholesterol and LDL/HDL ratio were found in high cholesterol diet rats. No changes of total and direct bilirubin were found in this group of animals. High cholesterol diet rats administered with barakol showed a significant decrease of SGPT and ALP comparing to the corresponding high cholesterol diet control group. This findings were conceivable that both high cholesterol diet and barakol administration cause a liver injury but in the different manner. Further study on the mechanism of which barakol induced liver injury was suggested. Moreover, effect of various doses of barakol on blood clinical biochemistry parameters should be further investigated.

**Key words:** Barakol, *Cassia siamea*, High cholesterol diet, Blood clinical biochemistry parameters