

[P-28]**ANTI-DIARRHEA AND SPASMOLYTIC ACTIVITIES OF A
HERBAL ANTI-DIARRHEA FORMULA**

Seung-Duk Ryu¹, Chang-Shin Park¹, Sun-Hye Baek², Sung-Yeoun Hwang²,
Woon-Gye Chung¹

¹ Department of Pharmacology, Inha University, Incheon

² Korea Medical Science Institute Co., Ltd. Seoul

The anti-diarrhea and spasmolytic activities of Soonkijangquebo (SKJQB), a Korean herbal anti-diarrhea formulation, were subjected to pharmacological evaluation. SKJQB, at a dose of 50-200 mg/kg, inhibited castor oil-induced diarrhea in mice. The median effective dose (ED₅₀) of the anti-diarrhea effect was 93 mg/kg. In isolated rabbit jejunum preparations, SKJQB produced a spasmolytic effect by the relaxation of spontaneous contractions in a dose-dependent manner. The median effective concentration (EC₅₀) for the spasmolytic effect was 3.6 mg/ml. In isolated guinea pig ileum preparations, SKJQB also produced a spasmolytic effect by reduction of acetylcholine-induced contractions. When tested against calcium channel blockade in rabbit jejunum, SKJQB caused a dose-dependent rightward shift in the Ca²⁺ + dose-response curves, similar to that produced by verapamil, a well-known calcium antagonist. In an acute toxicity study in Sprague-Dawley rats, the median lethal dose (LD₅₀) of SKJQB was greater than 2000 mg/kg, and no pathological changes were noticed in macroscopic examination by necropsy of rats treated with SKJQB. Thus, SKJQB may be safely used as a spasmolytic as well as an anti-diarrhea agent.

keyword : Anti-diarrhea, Spasmolytic, Calcium antagonist