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## ANTI-DIARRHEA AND SPASMOLYTIC ACTIVITIES OF A HERBAL ANTI-DIARRHEA FORMULA

Seung-Duk Ryu<sup>1</sup>, Chang-Shin Park<sup>1</sup>, Sun-Hye Baek<sup>2</sup>, Sung-Yeoun Hwang<sup>2</sup>, Woon-Gye Chung<sup>1</sup>

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 Ca<sup>2</sup> + 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

<sup>&</sup>lt;sup>1</sup> Department of Pharmacology, Inha University, Inchon

<sup>&</sup>lt;sup>2</sup>Korea Medical Science Institute Co., Ltd. Seoul