P16

Effects of *Jingansikpungtanggagam-bang*, a Korean Traditional Prescription on Central Nervous System

Byung-Soo Koo, Kyung-Hee Heo¹, Heu-Jeoung Lim¹, Ho-Kyu Choi¹, Jae-Chul Lim¹, Jong Hee Park² and Dong-Ung Lee¹

Department of Oriental Neuropsychiatry, College of Oriental Medicine,
Dongguk University, Seoul 135-010, Korea

Department of Biotechnology, College of Natural Science, Dongguk University,
Gyeongju 780-714, Korea

College of Pharmacy, Pusan National University, Pusan 609-735, Korea

Jingansikpungtanggagam-bang, a Korean traditional prescription, was evaluated for its anticonvulsant effect, hypnotic activity, analgesic action, anxiolytic effect, memory enhancement in mice, and MAO inhibitory activity in vitro and determined the contents of neurotransmitters in brain by HPLC method.

The extract increased potently anticonvulsant effect at 1g/kg by 5.6-fold extention of onset time against control group and showed no death by PTZ-induced convulsion, potentiated hypnosis at 500mg/kg by ca. twofold length of sleeping time compared to control, showed a significant analgesic effect with 86.0% inhibition on phenylquinone-induced writhing frequency at 500mg/kg, and inhibited dose-dependently the activity of monoamine oxidase. This prescription increased the brain levels of serotonin and 5-hydroxyindoleacetic acid by 3.3% and 1.4%, respectively. Furthermore, the extract exhibited the anxiolytic effect with 21.3% decrease of the immobility duration against control group, and enhanced memory recovery on scopolamine-induced impairment of passive avoidance performance at 1g/kg pretreatment by 20.2% increase of latency time.

As a result, *Jingansikpungtanggagam-bang* can be used effectively as a sedative prescription in Korean traditional medicine.