

ICR 마우스를 이용한 초석잠, 석창포 단독추출물 및 복합추출물의 단회경구투여 독성시험

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Single Dose Oral Toxicity Test of Water Extracts of *Stachys sieboldii* and *Acorus gramineus*, and their Mixture in ICR Mice

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Stachys sieboldii Miq. (SSM) and *Acorus gramineus* Soland. (AGS) have been used as traditional medicines for thousands of years in parts of Asia, including Korea, China, and Japan. Recent researches on SSM and AGS have documented a wide spectrum of therapeutic properties, including anti-inflammatory, anti-oxidative, neurodegenerative disease effects. However, the toxicity and safety of SSM and AGS, and their mixture (medicinal herber mixture, MHMIX) were not confirmed. Therefore, this study was performed to evaluate the acute toxicity and safety of SSM, AGS and MHMIX. SSM, AGS and MHMIX were orally administered at a dose of 5,000 mg/kg in ICR mice. Animals were monitored for the mortality and changes in the body weight, clinical signs and gross observation during the 14 days after dosing, upon necropsy. We also measured parameters of organ weight, clinical chemistry, and hematology. No dead and no clinical signs were found during the experiment period after administration of a single oral dose of SSM, AGS and MHMIX. There were no adverse effects on clinical signs, body weight, or organ weight and no gross pathological findings in any treatment group. Therefore, LD50 value of SSM, AGS and MHMIX may be over 5,000 mg/kg and it may have no side toxic effect to ICR mice. The results on the single-dose toxicity of SSM, AGS and MHMIX indicate that it is not possible to reach oral dose levels related to death or dose levels with any harmful side effects.

Key words: ICR mice, *Stachys sieboldii* Miq., *Acorus gramineus* Soland. Single-dose oral toxicity, Safety

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