

SKLJI was tested for analgesic effects in the acetic acid-induced writhing test and the Randal-Sellitto model. At 0.1, and 1 mg/kg (i.v., i.m.), SKLJI significantly reduced the writhes number induced by acetic acid injection in mice. Higher dose of diclofenac (4.5, 45 mg/kg) was needed to elicit a similar effect. In the paw pressure test, SKLJI showed a significant effect at 10 mg/kg (i.v.), similar to potency of 100 mg/kg (p.o.) acetaminophen or 5 mg/kg (i.v.) diclofenac. To search for the mode of action, arachidonic acid cascades and other inflammatory mechanisms were investigated. SKLJI significantly inhibited LTB₄ production induced by calcium ionophore A23187 in human whole blood, and also significantly reduced TNF- α release in human whole blood. The major components of SKLJI were LO and SW, which also showed potent anti-inflammatory and analgesic effects.

These results suggest that SKLJI is a new herbal injectable agent with anti-inflammatory and analgesic effects and that its two active major ingredients are LO and SW.

[PA1-45] [04/17/2003 (Thr) 14:00 - 17:00 / Hall P]

Inhibitory effects of berberine on morphine-induced behavioral sensitization in mice

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The present study was investigated the effect of berberine on the development of behavioral sensitization by morphine, methamphetamine, and cocaine. Repeated administration of morphine (10 mg/kg), methamphetamine (2 mg/kg), and cocaine (15 mg/kg) produced behavioral sensitization in mice. Pretreatment with berberine (2 mg/kg) did not inhibit methamphetamine- and cocaine-induced behavioral sensitization. However, Pretreatment with berberine significantly inhibited morphine-induced behavioral sensitization.

In this experiment, pretreatment with berberine did not decrease postsynaptic dopamine receptor supersensitivity induced by apomorphine 24h after morphine sensitization, suggesting that inhibition by berberine of morphine-sensitization is not related to the dopaminergic system. However, berberine was significantly reduced the morphine-induced NR2A and NR2B expression in the cortex and was tend to decrease morphine-induced NR1 expression, compared with morphine-treated group.

These results indicate that NMDA receptor subunit expression plays an important role in modulating of morphine-induced sensitization and suggests that inhibitory effect by berberine of morphine-induced behavioral sensitization are mediated by the inhibition of NMDA systems.

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[PA1-46] [04/17/2003 (Thr) 14:00 - 17:00 / Hall P]

Anti-angiogenic activity of mycelial extracts from *Cordyceps militaris*, *Cordyceps scarabaeicola* and *Paecilomyces tenuipes*

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Dongchunghacho is traditionally believed to be effective against various diseases. It includes many different genera such as *Cordyceps*, *Paecilomyces*, *Torrubiella* and *Podonectria*. The three fungus strains, *Cordyceps militaris*, *Cordyceps scarabaeicola* and *Paecilomyces tenuipes* were