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The Joins (SKI 306X) study : Effects on gastric mucosa and the diclofenac-induced gastric lesions

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Joins (SKI 306X) is now clinically used for the treatment of osteoarthritis (OA). In previous reports, Joins, a natural herbal product extracted from three herbs Clematis Radix, Trichosanthes Radix and Prunella Flos, was shown to have good analgesic and anti-inflammatory effects and cartilage protective effects in several experimental models. In this study we characterized the effects of Joins on the gastric mucosa and compared to that of diclofenac. In addition, the gastro-protective effects of Joins were examined at diclofenac-induced ulcer models and attempted to determine the mechanism responsible for its apparent stomach-sparing properties. Acute gastric damaging properties of Joins and diclofenac were examined in the rat model. And the effects of Joins on diclofenac-induced gastric ulceration were investigated. After single or repeated administration, stomach was isolated and optically immuno-histochemically investigated. To study the protective effects of Joins, Joins was administered to rats which previously treated with diclofenac. To know the mode of action, arachidonic acid cascades were examined in gastric mucos and blood.
Joins demonstrated excellent gastrointestinal tolerability after single and repeated administration in animals. Joins did not cause significant gastric or duodenal irritations, erosions, or ulcerations at oral doses up to 4g/kg and at ip doses up to 125mg/kg. In contrast, diclofenac, conventional NSAID, caused mucosal erosion, ulcerations and bleeding in most of the studies when used at doses producing pharmacological effects. Joins inhibited diclofenac-induced erosion and ulceration of gastric mucosa. Joins significantly inhibited gastric and blood LTB4 production of the tested doses. But, Joins showed no effects or preferably slight increase the level of PGE2. These studies demonstrate that Joins did not produce any significant damage up to dose of 4 g/kg and was effective to protect or prevent significantly the damage associated to diclofenac-induced gastric ulcerations. Joins could spare the gastric mucosa through significantly suppressing gastric leukotriene synthesis.

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SKLJI, a new herbal injectable agent with anti - inflammatory and analgesic effects

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Lonicera japonica is widely distributed in Southeast Asia and has been traditionally used as an anti - inflammatory, diuretic, abscessic, antipyretic, and antidotic agent. Lonicera japonica was investigated for its anti-inflammatory and analgesic effects using several in vivo models. SKLJI was purified for i.v. injection from Lonicera japonica as a potent anti-inflammatory and analgesic fraction, after activity-guided fractionation study.
In the croton oil-induced ear edema model, SKLJI showed significant anti-inflammatory effects in all tested doses (0.01, 0.1, and 1 ??/??) at all administration routes (intravenous, intramuscluar routes). Its effect was more potent than that of either diclofenac or mellilotus extracts. Intravenous administration was the most potent route among all administration routes. In the arachidonic acid-induced ear edema model, SKLJI also showed good effects at all administration routes.