Anti-Inflammatory, Analgesic Activities, and Composition of ZCSSWE, an Ethanol Extract Derived from the Anti-Arthritic Chinese Herbal Formula Zha Chong Shi San Wei Pill

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SUMMARY. The classical Chinese herbal formula Zha Chong Shi San Wei pill (ZCSSW) has been commonly used in traditional Chinese herbal medicine for hundreds of years to alleviate pain and inflammation. The anti-inflammatory effects of the ethanol extract were examined by using albumin egg-induce paw edema in mice assay and xylene-induced ear edema in mice method. Analgesic activity was evaluated by three models of acetic acid-induced writhing, formalin test and hot-plate test in mice. In addition, the total flavonoids (TF), total polysaccharide (TP) and total alkaloids (TA) in ZCSSWE were determined. The result suggested that ZCSSWE possesses excellent anti-inflammatory activity as well as peripheral and central analgesic properties, TF and TA may be the active ingredients. It also showed that ZCSSWE would be a valuable candidate for further investigation as a new anti-arthritic drug.