Anti-inflammatory Effects of Vietnamese Bee (Alpis melifera) Venom

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The global prevalence of rheumatoid arthritis was 0.24%, DALYs increased from 3.3 million in 1990 to 4.8 million in 2010. The total costs attributable to arthritis and other rheumatic conditions in the United States in 2003 was approximately $128 billion. Interestingly, some kind of bee venom can be a naturally candidate for anti-inflammation in arthritis. In our research, a novel compound, Vietnamese bee venom (VBV), is tested to evaluate the anti-inflammatory effects on arthritis animal model. The arthritis rats were divided to different groups, which were acupunctured on Zusanli sites either one of VBV (1.5 mg/kg); Mobic (1.0 mg/kg) or saline for 7 days. The result showed that VBV has anti-inflammatory effect on arthritis model. By used plethysmometer, data indicated that VBV significantly reduced edema in rat's hindlimb foot comparing to saline treatment. Also, by automatic locomotor analyzed, VBV treated animal improved spontaneous locomotor activities with the distance travel was longer than that in control animal. Anti-inflammation effects of VBV were not significantly different to those of Mobic.

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