

### 13. Diseases of the Musculo Skeletal System and Connective Tissue

#### Reference

Kim SC, Na WM, Lee SY, et al. A study on pain relief effects and allergic responses for the osteoarthritis of the knee joint between sweet bee venom and bee venom pharmacopuncture. *Daehan-Yakchim-Hakhoeji (Journal of Pharmacopuncture)* 2008; 11(1): 31–40 (in Korean with English abstract).

#### 1. Objectives

To compare the effect of sweet bee venom (enzyme removed) pharmacopuncture with that of bee venom pharmacopuncture on knee osteoarthritis.

#### 2. Design

Randomized controlled trial (RCT).

#### 3. Setting

One Oriental hospital (Oriental Medical Hospital at Gwangju, Wonkwang University), Republic of Korea.

#### 4. Participants

Patients with degenerative knee osteoarthritis (age, >50; n=30).

#### 5. Intervention

Arm 1: Sweet bee venom (SBV) pharmacopuncture (n=15).

Arm 2: Bee venom (BV) pharmacopuncture (n=15).

Three treatments a week for 2 weeks.

One cc (total) was applied to the Yanglingquan (GB34, 陽陵泉), Yinlingqun (SP9, 陰陵泉), Dubi (ST35, 犢鼻) Heding [EX-LE2, 鶴頂]), Xiyan (EX-LE5, 膝眼), and pressure pain point (壓痛點) acupuncture points. The side of the body with the most pain was treated.

During the clinical trial, use of any Western and Eastern drugs was restricted.

#### 6. Main outcome measures

Pain self-assessed on a visual analogue scale (VAS).

#### 7. Main results

Treatment in Arm 1 provided significantly more pain relief throughout the body ( $18.2 \pm 15.2$  vs.  $15.6 \pm 16.3$ ,  $P=0.002$ ) and pain relief at the affected site ( $33.3 \pm 8.3$  vs.  $25.9 \pm 15.3$ ,  $P=0.000$ ). Delayed-type hypersensitivity responses occurred at a significantly lower frequency in Arm 1.

#### 8. Conclusions

Sweet bee venom pharmacopuncture is a better analgesic than bee venom pharmacopuncture.

#### 9. Safety assessment in the article

No immediate-type and delayed-type hypersensitivity reactions occurred.

Site pain due to treatment began 6 hours after treatment and lasted 6 hours in Arm 1, and began 6 hours after treatment and lasted 24 hours in Arm 2. Adverse events of bee venom treatment were severe edema and flare (n=3, every treatment), moderate edema and flare (n=4, 5<sup>th</sup> and 6<sup>th</sup> treatment), moderate itching (n=3, every treatment and lasting 48 hours), itching (n=4, at 5<sup>th</sup> and 6<sup>th</sup> treatment and lasting 24 hours). Adverse events of sweet bee venom treatment were minor edema and flare (n=2, at 1<sup>st</sup> and 2<sup>nd</sup> treatments) and minor itching (n=2, at 1<sup>st</sup> and 2<sup>nd</sup> treatment and lasting 3 hours).

#### 10. Abstractor's comments

This study evaluated the efficacy and safety of sweet bee venom pharmacopuncture. The study hypothesis was that sweet bee venom pharmacopuncture caused less hypersensitivity. The results showed that sweet bee venom pharmacopuncture was much safer. Although the results were reported according to STRICTA recommendations, the randomization method and study design were not described. Moreover, pain VAS score was the only variable. A quantitative clinical trial is needed.

#### 11. Abstractor and date

Kim JI, 5 July 2010.