13. Diseases of the Musculo Skeletal System and Connective Tissue

Reference

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, 阳陵泉), Yinlingqun (SP9, 陰陵泉), Dubi (ST35, 犨鼻) 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±15.2 vs. 15.6±16.3, \( P=0.002 \)) and pain relief at the affected site (33.3±8.3 vs. 25.9±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, 5th and 6th treatment), moderate itching (n=3, every treatment and lasting 48 hours), itching (n=4, at 5th and 6th treatment and lasting 24 hours). Adverse events of sweet bee venom treatment were minor edema and flare (n=2, at 1st and 2nd treatments) and minor itching (n=2, at 1st and 2nd 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.