

# Sweet Bee Venom Pharmacopuncture May be Effective for Treating Sexual Dysfunction

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### **Key Words**

pharmacopuncture, sexual dysfunction, sweet bee venom, urogenital disease

#### **Abstract**

Sexual dysfunction (SD) is a health problem which occurs during any phase of the sexual response cycle that keeps the individual or couple from experiencing satisfaction from the sexual activity. SD covers a wide variety of symptoms like in men, erectile dysfunction and premature or delayed ejaculation, in women, spasms of the vagina and pain with sexual intercourse, in both sexes, sexual desire and response. And pharmacopuncture, i.e. injection of subclinical doses of drugs, mostly herb medicine, in acupoints, has been adopted with successful results. This case report showed the effect of bee venom on SD. A 51-year-old male patient with SD, who had a past history of taking Western medication to treat his SD and who had previously undergone surgery on his lower back due to a herniated disc, received treatments using pharmacopuncture of sweet bee venom (SBV) at Gwanwon (CV4), Hoeeum (CV1), Sinsu (BL23), and Gihaesu (BL24) for 20 days. Objectively, the patient showed improvement on most items on the International Index for Erectile Dysfunction (IIEF) like 28 to 29 out of perfect score 30 for erectile function, 10 to 10 out of perfect score 10 for orgasmic function, 6 to 8 out of perfect score 10 for sexual desire, 10 to 13 out of perfect

score 15 for satisfaction with intercourse, and 6 to 8 out of perfect score 10 for overall satisfaction; subjectively, his words, the tone of his voice and the look of confidence in his eyes all indicated improvement. Among the variety of effects of SBV pharmacopuncture, urogenital problems such as SD may be health problems that pharmacopuncture can treat effectively.

#### 1. Introduction

Sexual dysfunctions (SDs) frequently affect the elderly and can lead to dissatisfaction with interpersonal relationships and have an adverse impact on overall well-being and mood [1]. SDs include erectile dysfunction, orgasmic dysfunction, lack of sexual desire, dissatisfaction with intercourse, etc. [2]. Among these, the majority of patients of both sexes report a lack of sexual desire, and men, especially, report erectile dysfunction [3]. Epidemiological data have shown that about 40% - 45% of elderly women and 20% - 30%of elderly men may have SDs [4]. Furthermore, as men get older, the prevalence of SDs continues to skyrocket. The prevalence of SDs in men younger than 40 years of age has been reported to be 2% whereas that in men over 80 years of age has been reported to be 86% [5]. Therefore, many patients with SDs tend to seek current medical intervention for management of their SDs, especially erectile dysfunction (ED), such as medication, intraurethral suppositories or intracavernosal injec-

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tions, implantation of a penile prosthesis, and hormonal therapy or psychotherapy [6].

Pharmacopuncture as a new and unique modality of treatment in Korean medicine has had a promising effect on many kinds of diseases [7]. However, until now, the focus of experiments and case reports has been musculoskeletal diseases, and to the best of our knowledge, no studies on the use of pharmacopuncture to treat SDs exist. Therefore, this study reports one case of Sexual dysfunction (SD) treated with only sweet bee venom (SBV) pharmacopuncture.

# 2. Case Report

A 51-year-old man complaining of SD was administered udenafil (phosphodiesterase 5 inhibitor) for 15 days. He had low back pain since 2009, and his symptom, such as numbness in both leg and feet, which had been severe, deteriorated. He underwent a magnetic resonance imaging (MRI) scan of the lower back, and the intervertebral disc space between L5 and S1 was found to be narrowed and a herniated disc was manifested. Thus, he decided to undergo surgery to insert artificial cartilage between L5 and S1. After surgery, the numbness in both legs and feet and the lower back pain were decreasing. During his admission period from October 10th to October 30th, he asked if SD could be treated with Korean medicine. After receiving our response, he decided to undergo 20 days of treatments without any kinds of herbal medicines and western drugs for SD. After the treatment he expressed better feelings about his sexual behavior. He completed the International Index for Erectile Dysfunction Questionnaires (IIEF, appendix) [2] before and after treatment.

# 2.1. Treatment protocol

Only SBV pharmacopuncture was administered. Firstly, Gwanwon (CV4) and Hoeeum (CV1) were used at doses of 0.1 cc and 0.2 cc, respectively, as well as Sinsu (BL23) and Gihaesu (BL24) at a dose of 0.1 cc at each site bilaterally. The pharmacopuncture treatment using these 4 points was conducted for 10 days. After that procedure, CV4 and

CV1 were selected to maintain the sexual function effect, and the SBV pharmacopuncture was administered at doses of 0.1 cc and 0.2 cc, respectively, every other day for 10 days (Fig. 1).

#### 2.2. Evaluation

To evaluate the sexual function, we had the patient complete the IIEF questionnaire before and after treatment. In this study, no medical diagnostic devices were used to measure erectile dysfunction. Sexual dysfunction involves several factors concerning mental satisfaction, so although completing and interpreting the results of a questionnaire are easy, no absolute and discrete values exist for individuals with and without SD. In a study, the IIEF questionnaire was tested in 111 men with sexual dysfunction and 109 age-matched normal volunteers. Therefore, mean scores for controls (normal volunteers) and patients could be obtained [2]. In this study, those mean scores were adopted and the scores for this case, both pre-treatment and post-treatment, and the control's scores and the patient's scores are presented in Fig. 2.

#### 2.3. Results

Objectively, the patient showed improvement on most items on the International IIEF like 28 to 29 out of perfect score 30 for erectile function, 10 to 10 out of perfect score 10 for orgasmic function, 6 to 8 out of perfect score 10 for sexual desire, 10 to 13 out of perfect score 15 for satisfaction with intercourse, and 6 to 8 out of perfect score 10 for overall satisfaction; subjectively, his words, the tone of his voice and the look of confidence in his eyes all indicated improvement (Fig. 2).

# 3. Discussion

In this study, four acupuncture points were used, CV4, CV1, BL23 and BL24 [7]. CV4 is the front collecting point (Mu point) of the small intestine and represents the intersection of the interior branches of the three Yin channels of the foot. It can explain the broad effect on gynecological syndromes and disorders of the urogenital tract. Also, it can

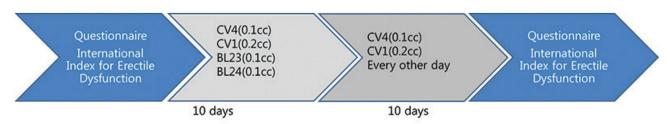
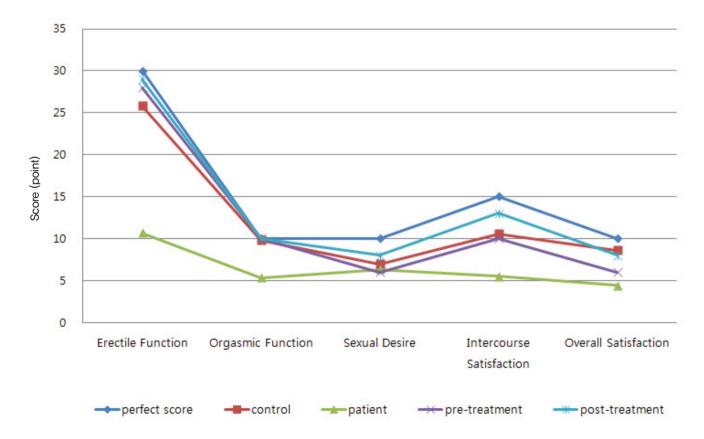


Figure 1 Treatment protocol.

play an important role in tonifying in cases of emotional and physical exhaustion. In traditional chinese medicine (TCM), it can nourish Blood and Yin, warm the uterus and lower Warmer, invigorate Kidney, Yang and Original Qi (Yuan Qi), and expel dampness and cold from the lower Warmer [8]. CV1 is the beginning point of the Governing vessel, the Penetrating vessel and the Conception vessel. It can regulate the two lower orifices and genitalia and resolve Dampness. Also, it can promote resuscitation, calm the Mind and nourish Yin. Thus, its effect lies in difficult urination and defecation, enuresis and impotence, pain in the penis, sweating of genitals, etc [9]. BL23 is the Back Shu point of the Kidney, so its indication lies in strengthening the renal function and circulation, and its point is used for all chronic diseases including disorders of the urogenital tract [8] BL24 is one of the Back Shu points, and its action strengthens the lower back, regulates menstruation, and invigorates Blood; especially, it is useful for lower backache and stiffness of the lower back [9].

The IIEF has been used for evaluations. The IIEF questionnaire is composed of 15 questions, and it is a useful tool in a clinical setting. It is a validated, multidimensional, self-reporting questionnaire and can be used to eval-

uate erectile function and treatment outcomes [2]. The 15 questions can be classified into 5 categories: erectile function, orgasmic function, sexual desire, intercourse satisfaction and overall satisfaction. For example question numbers 1, 2, 3, 4, 5 and 15 can be categorized as erectile function. The perfect score differs according to the category, being 30 for erectile function, 10 for orgasmic function, 10 for sexual desire, 15 for satisfaction with intercourse, and 10 for overall satisfaction. In this case study, the patient's scores in each category were similar to those of the control group, except for sexual desire, where the patient's scores were very low. As the treatments continued, the symptoms of SD improved. After treatment, the results showed improved erectile function, sexual desire, satisfaction with intercourse, and overall satisfaction. Based on the patient's subjective self-evaluation, he also showed improvements in the duration of erection, hardness (vascularity) of the penis, and shortening of recovery period (re-action), his lower back pain decreased, the flow of urine when urinating was not interrupted, and generally he felt more confident in his life. Although such sign as eye contact, brightness of eyes, volume of his voice, etc. are subjective, in this circumstance, a personal problem,



**Figure 2** Treatment outcomes on the international index for erectile dysfunction. control, mean value for the control group; patient, mean value for patients; pre-treatment, value obtained in this case study before treatment; post-treatment, value obtained in this case study after treatment; The control and the patient were categorized according to [2].

observing such features may be helpful.

This study has limitations in that the result of 1 case cannot be generalized because of loss of control and insufficient number of subjects. Besides the IIEF questionnaire, no other signs of improvement, such as pulse diagnosis, digital thermal imaging test, etc., existed. Nevertheless, this study could be regarded as helpful to broaden the scope for using SBV pharmacopuncture to treat urogenital diseases. In the future, additional systematic research or randomized clinical trials in this area will be needed to find the ways to treat sexual problems using pharmacopuncture and Korean medicine treatments.

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#### Conflict of interest

The authors delare that there are no conflict of interest.

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