Case Report

A Clinical Report on Treatment of Two Soyangin Cases of Complications of Post-hysterectomy

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Hysterectomy can lead to various symptoms threatening decent quality of life. As the frequency of hysterectomy increases, there are many patients who want to take oriental medicine treatments for complications. Several clinical studies have reported the effectiveness of oriental medicine treatment for post-hysterectomy complications. Out of these symptoms, postoperative nausea and vomiting (PONV, hereafter) are indicated at about 20-40% of frequency within patients with general anesthesia, and they may occur not only during recovery from operation, but also after discharge. Although the incidence of PONV has decreased now thanks to the usage of antiemetics, PONV still causes some difficulties for patients returning to daily life. This study reports two cases of post-hysterectomy complications such as nausea, dizziness, vomiting, general weakness, and coldness of the limbs, which had good responses to herbal medication and acupuncture.

Key Words: Post-hysterectomy complications, herbal medicine.

Introduction

Hysterectomy is second only to Cesarean section as the most frequently performed major operation in obstetrics and gynecology (OB & GYN, hereafter)

1). It was reported that the ratio of women having Hysterectomy reached about 13.5% in Korea, 8.5% in France, 17% in Australia and the US, their average age was about 40.9 years old², and 75% of them were between ages of 20 to 44 ages¹). The indications of hysterectomy are uterine leiomyomas, tumor of the adnexa, dysfunctional uterine bleeding, genital prolapse, adenomyosis and endometriosis³). Thus it is the case that most hysterectomies are operated on benign tumors of the uterus, with malignant tumors representing fewer than 10% of all.

Most patients having a hysterectomy were able to

move from the day after operation and they generally were discharged in 4 or 5 days, but some were delayed in their hospitalization due to post-operational complications¹⁾. Examples of the complications were mostly infection, gastrointestinal complications, and thromboembolic disease¹⁾. Other complications preventing patients from returning to a normal life after operation were bleeding, pain, hypertension, airway complications, headache, muscle pain, oropharyngeal pain, dizziness, general weakness, nausea and vomiting⁴⁾. 70% of patients having hysterectomy experienced depression, red flash, urinary discomfort, or fatigue and 50% of them suffered from headache, dizziness, insomnia, or pelvic pain⁴⁾. However, as there were often no significant physical examinations, these symptoms were usually thought of as neurosis, which Richard dubbed "Post-hysterectomy syndrome",5).

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Kaitreider and others also considered them a stress response syndrome that appeared after hysterectomy⁶⁾.

In oriental medicine, the uterus is in charge of menstruation and pregnancy and in addition works as extraordinary fu organs, which are all born of the earthly *gi* and store substantial substances⁷⁾. In *Dong-ui bogam, Bao* (恒) is considered as a blood chamber, where penetration and conception meridians originate. [It is also the space for baby's blood, and plays a constructive and defensive role as the sea of meridians and collaterals⁸⁾. Consequently, damage to the uterus can impact blood, constructive and defensive, m]eridians⁹⁾.

There can be two modes of treatment of oriental medicine for patients having hysterectomy. One is promoting restoration from operation by balancing or supplementing *gi* and *Hyeol*, the other is treating sequela or preventing possible complications. Treatment can vary with the length of episode. While immediate post-surgery treatments should be focused on reducing discomfort caused by surgery, in the case of prolongation of contraction of disease, medical treatments are needed considering both physical symptoms and psychological aspects¹⁰.

In women, the uterus is related to reproduction and controls overall physiology and has a sense of feminine features and attraction¹¹. It's presence and function may affect a woman's ego identity¹².

Practically speaking, in oriental medicine, the uterus is acknowledged as the main system that arranges most of women's physiology; it manages metabolism, activities and mental state beyond just genital functions for menstruation and pregnancy¹³. In terms of oriental medicine, as hysterectomy leads to problems of body-identity, breaks in the meridian system, deficiency of *gi* and *Hyeol*, and damage to internal organs¹⁴), active management for those effects after surgical process is highly required.

In conclusion, this study is reporting two clinical cases in that patients due to their relatively severe post-hysterectomy complications got proper effect from management of oriental medicine in a complementary clinic at the Department of OB & GYN,

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Reports of the cases

1. Case 1

A. Character of patient and diagnosis

The first case, a 40-year-old woman diagnosed with myoma, ovarian cyst, and endometrial hyperplasia in 2005, being kept to observation afterwards. Undergoing hysterectomy on January 5 of 2009, she started to suffer from dyspepsia, nausea and vomiting, but was discharged without any other treatment. After operation, the symptoms worsened and she couldn't eat anything at all from January 19. She wanted to be treated with management of oriental medicine due to such symptoms as stuffiness in the gastric fullness, dyspepsia, nausea, vomiting, retching, and general weakness from January 21 to 28.

B. Course of symptoms and treatments

The treatment was developed focusing on stuffiness in the gastric fullness, dyspepsia, nausea, and vomiting among chief complains. Categorized as Soeumin with external figure, Gwakhyangjeonggisan (藿香正氣散, GHJGS, hereafter) was prescribed from 21 to 22 January. However, the improvement in her condition was so slow that we consulted the department of Sasang constitutional clinic on the patient's constitution test. By means of Sasang Constitution Questionnaire (SSCO, hereafter)³⁴⁾, she was diagnosed as Sovangin exterior disease. Then based on the symptoms of stuffiness in the gastric fullness and retching, we diagnosed a knotted chest syndrome and prescribed Hyungbangdojuk-san (荊 防導赤散, HBDJS, hereafter) from 23 to 28 January. In addition, tea of Fructus Lycii was prepared for Soyangin from 23 to 28 January. By means of acupuncture, there were tonifying Gyeonggeo (LU 8), Burvu (KI 7) and reducing Taebaek (SP 3), Taegve (TI 3) in the process of curing from January 21 to 28.

With the dosage of GHJGS and HBDJS and acupuncture, symptoms caused by hysterectomy like dyspepsia, nausea, vomiting, retching, stuffiness in

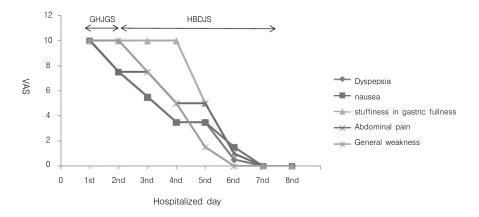


Fig. 1. Diagram for clinical course used; VAS and herbal prescriptions were presented.

GHJGS: Gwakhyangjeonggi-san HBDJS: Hyungbangdojuk-san

the gastric fullness, abdominal pain, diarrhea, general weakness, and insomnia improved over the 9 days. The changes of symptoms were observed by verbal analogue scale every day.

C. Herbs and treatment, LAB examination Laboratory tests were in normal range upon admission.

2. Case 2

A. Character of patient and diagnosis

The second case was a 52-year-old woman who was admitted for treatment of post-hysterectomy complications from January 29 to February 8, 2007. This patient had dyspepsia, cold sweats, coldness of the limbs, lumbago, general weakness, and severe dizziness after operation, and remarkable yellowish

complexion. The patient was diagnosed as anemic in 2003, and has taken medication for it since then.

B. Course of symptoms and treatments

First of all, Jeonsaenghwalhyeol-tang (全生活血 湯, JSHHT hereafter) was prescribed with the diagnosis of syndrome of blood deficiency, focusing on dizziness from January 29 to February 3. The day after taking JSHHT, dizziness was remarkably improved. During the 6 days of taking it, the complications reduced gradually. For caring for health after operation and chronic anemia, we consulted the patient's constitution test. She was diagnosed as Soyangin exterior disease by means of OSCC. Thus Hvungbangjihuang-tang (荊防地黃湯, HBJHT hereafter) was medicated from February 4 to 8. In addition, tea of Fructus Lycii for Soyangin

Table 1. Prescriptions and compositional volume of drugs

GHJGS	Herba Pogostemonis (6), Rhizoma Zingiberis Recens (4), Fructus Jujubae (4), Folium Perillae (4), Rhizoma Atractylodis Macrocephale (2), Pericarpium Arecae (2), Rhizoma Pinelliae (2), Cortex Cinnamomi (2), Radix Glycyrrhizae (2), Rhizoma Atractylodis (2), Rhizoma Zingiberis (2), Fructus Alpiniae Oxyphyllae (2), Pericarpium Citri Reticulate Viride (2), Pericarpium Citri (2)
HBDJS	Radix Rehmannie (12), Caulis Akebiae (8), Radix Scrophulariae (6), Fructus Trichosanthis (6), Radix Angelicae Pubescentis (4), Herba Schizonepetae (4), Radix Peucedani (4), Rhizoma Notopterygii (4), Radix Saposhinkoviae (4)

The number in () represents the weight (in grams) of each herb comprising the prescriptions.

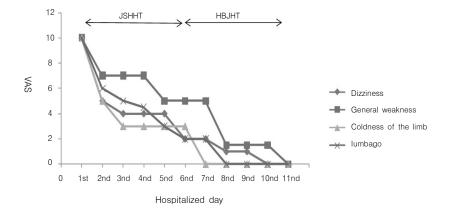


Fig. 2. Diagram for clinical course used; VAS and herbal prescriptions were presented.

JSHHT: Jeonsaenghwalhveol-tang HBJHT: Hyungbangjihuang-tang

was prescribed from 30 January to 5 February.

As for acupuncture enhancing deficiency of the kidney, tonifying *Gyeonggeo* (LU 8), *Buryu* (KI 7) and reducing *Taebaek* (SP 3) *Taegye* (TI 3) was performed from January 29 to February 8.

With the medication of JSHHT and HBJHT, and acupuncture, most of the symptoms such as dyspepsia, nausea, vomiting, general weakness, and dizziness improved over the 11 days. The changes of symptoms were observed by verbal analogue scale every day.

C. Herbs and treatment, LAB examination Since laboratory test at admission warned of a cardiac problem caused by anemia, we practiced ultrasound cardiography, but no problem was found.

Table 2. LAB examination

Lab result	admission	hospitalized day 9
RBC (10 × 3mn ²)	2.59	3.24
WBC $(10 \times 3 \text{mm}^2)$	7.13	5.42
Hb (g/dl)	7.9	10
Hct (%)	24.5	30.7
Platelet (µL)	343	416
PDW (%)	15.0	15.9

Table 3. Prescription and compositional volume of drugs

JSHHT	Radix Paeoniae Alba (4), Rhizoma Cimicifugae (4), Radix Saposhinkoviae (2.8), Rhizoma Notopterygii (2.8), Radix Angelicae Pubescentis (2.8), Radix Bupleuri (2.8), Radix Angelicae Gigantis (2.8), Radix Puerariae (2.8), Radix Glycyrrhizae (2.8), Rhizoma Ligustici (2), Rhizoma Cnidii (2), Radix Rehmannie (1.6), Radix Rehmannie Preparata (1.6), Fructus Viticis (1.2), Herba cum Radice Asari (1.2), Flos Carthami (0.4)
НВЈНТ	Radix Rehmannie Preparata (8), Fructus Corni (8), Poria (8), Rhizoma Alismatis (8), Rhizoma Notopterygii (4), Herba Schizonepetae (4), Radix Saposhinkoviae (4), Semen Plantaginis (4), Radix Angelicae Pubescentis (4)

The number in () represents the weight (in grams) of each herb comprising the prescriptions.

Discussion

In modern medicine, the uterus is associated with feminine sexual function which emerges through interactions among the hypothalamus-pituitary-ovary axis, and the uterus tends to be seen just as a genital organ that works for menstruation and pregnancy with hormones¹⁵⁾. In contrast, in oriental medicine, the role of he uterus is remarkably essential as it is called kwanwon (關元), the very center of the whole body in every direction, being the origin of producing and changing with representing universal creation⁸⁾. It is responsible for menstruation and pregnancy and, in addition, works as one of the extraordinary fu organs which are all born of the earthly gi and store substantial substances⁷⁾. It is being termed variously as womb (子處), the vital portal (命門), uterine gate (胸門), or Kwanwon (關元), which infer that the uterus not only serves as a productive organ but also has meaning of storing body essence, vital energy, and mentality¹⁴⁾. In Dong-ui bogam, Bao is considered as the blood chamber from which penetration and conception meridians originate and [it is taken as the sea of meridians and collateral meaning the space for baby, blood, constructive and defensive⁸⁾.] Consequently, damage to the uterus [can affect blood, constructive and defensive, meridian⁹⁾.] In this context, Polivy posited that the uterus was a reproductive organ which not only functions as a means of menstruation and pregnancy but also arranged most of women's physiology and manages metabolism, activities and mental state¹⁶⁾. Noh and others stated that especially for Korean women, the uterus was the implication of maintenance of femininity, womanly power, the root of health¹⁷⁾.

For these reasons, a lot of concerns are given to the women's physical condition and quality of life having hysterectomy and their usual seguela are depression, hot flush, urinary discomfort, fatigue, headache, dizziness, insomnia, and pelvic pain^{5,18}). Major aftereffects right after operation are bleeding. pain, hypertension, airway complication, headache, muscle pain, oropharyngeal pain, dizziness, general weakness, nausea and vomiting4). Among these, postoperative nausea and vomiting were indicated at about 20-40% frequency in patients with general anesthesia⁴⁾, and it could occur not only within the period of recovery from operation but also after discharge¹⁹⁾. The frequency of PONV has something to do with individual factors, surgical factors and anesthetic factors; individually, when a person was a woman, young, had obesity, had past history of nausea and vomiting, motion sickness, etc; surgically, because of fast time, operating time, transfusion, amount of hydration; as anesthetic factors, an anesthetic and pain killer²⁰⁾. Abdominal hysterectomy and laparohysterectomy, due to the accumulation of gas secretions that degrade bowel movement causing abdominal pain, increase discomfort and prolong the duration of admission²¹⁾. Park and others' survey reported that patients with anemia before operation were with significance prone to get PONV²⁰⁾. It was reported that for the past 40 years, the incidence of PONV was as high as 70-80% but these days it has decreased to 25-30% thanks to the usage of antiemetics²²⁾.

Oriental medicine treatment for patients could vary with the length of episode. While right after surgery treatments should be focused to reduce discomfort caused by surgery, in case of prolongation of contraction of disease, medical treatments are needed considering both physical symptoms and psychological aspects. Regarding this, as Kim and others acknowledged the signs as blending of the physical and psychological factors, they regard it as result of stagnation such as stagnation of liver gi, stagnation of gi and of blood stasis or deficiency such as deficiency of both heart and spleen, deficiency of the kidney, mainly being treated properly correspondent to the symptoms²³⁾.

In the first case, the patient started to suffer from dyspepsia, nausea and vomiting, stuffiness in the gastric fullness and general weakness after hysterectomy. GHJGS, a description used for Soeumin's exterior disease and interior disease, had effectiveness of warming the stomach and descending interior eum²⁴⁾. Based on the result of constitution test, Soyangin exterior disease, and the symptoms of stuffiness in the gastric fullness and retching, we diagnosed a knotted chest syndrome and prescribed HBDJS.

Soyangin HBDJS was first made by Dr. Lee in 1894. The prescription had an effect of eliminating the internal heat and sending down external *eum*, so retention of phlegm and fluid was eliminated of itself. It was mainly used in the case of vomiting right after drinking, epigastric rigidity, retching and shortness of breath of Soyangin's knotted chest syndrome^{24,25)}. Some experimental studies reported analgesic effect, anti-inflammatory effect, and a diuretic effect²⁶⁾.

By means of acupuncture, to complement deficiency of the kidney, there were tonifying Gyeonggeo (LU 8), Buryu (KI 7) and reducing Taebaek (SP 3) Taegye (TI 3) in the process of curing. Gyeonggeo has the function to smooth the flow of gi. It has an effect on dyspnea due to gasping cough, desire for vomiting and vomiting²⁷⁾. Buryu has the function to eliminate damp. It has an effect on urogenital problems, coldness of the leg, difficulty in food consumption and exhaustion syndrome²⁷⁾. Taebaek has the function to regulate spleen. It has an effect on abdominal pain, gastralgia, vomiting, dyspepsia, diarrhea, vomiting and diarrhea, coldness of the leg, and headache²⁷⁾. Taegye has the function to replenish the kidney eum. It has an effect on nephritis, cystitis, menstrual irregularities, uterus disorders, and neurasthenia²⁷⁾.

In the second case, the patient had dyspepsia, cold sweats, coldness of the limbs, lumbago, general weakness, and severe dizziness after operation and remarkable yellowish complexion. She was diagnosed with a syndrome of deficiency of blood.

First, JSHHT was prescribed. This prescription helped to supplement blood on body being damaged in *gi* and without enough nutrients, and to complement *Yanggi*⁸⁾. After taking it, her condition improved, especially in dizziness. Henceforth, HBJHT was medicated for caring for health after chronic

anemia and more postoperative care. This prescription was a medicine applicable for symptoms of *Soyangin* exterior disease like collapse of *eun* syndrome, early edema, headache and stomachache, stiffness and fullness, diarrhea, and frailty²⁴. The experimental studies reported the effects of relieving pain, anticonvulsant, antidiarrhetic²⁸, antistress²⁹ and immune reinforcement³⁰. The clinical case studies reported effects of chest discomfort³¹, *Mang-eum* syndrome³², and irritable bowel syndrome³³.

With the acupuncture and dosage of JSHHTJ and HBJHT, all symptoms caused by hysterectomy like dyspepsia, cold sweats, coldness of the limbs, lumbago, general weakness, yellowish complexion and severe dizziness were improved during the hospitalization of 11 days. In addition, the laboratory test showed that RBC and hemoglobin were restored.

We described two cases of treatment for posthysterectomy complications with herbal medicine and acupuncture. Even though there are several reports including case studies about them, they do not provide sufficient scientific evidence for supporting appropriate applications. Thus it is necessary to accumulate various data on herbal medicine and acupuncture in clinical reports. We hope that our report could add useful scientific data to the pavement of development of oriental medicine for complications of hysterectomy.

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