

CASE REPORT

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Treatment of Menstrual Disorder, Depression and Sexual Dysfunction in a 27-year-old Woman with Polycystic Ovary Syndrome based on Iranian Traditional Medicine

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ABSTRACT

Background: Polycystic ovary syndrome and oligomenorrhea which is one of its complications are considered as the most common causes of menstrual disorders which increases the risk of depression and psychological effects complications. The prevalence of oligomenorrhea is predicted to be 12 to 15 percent. This syndrome occurs with symptoms such as obesity, impaired glucose metabolism, dysmenorrhea, oligomenorrhea and other symptoms. In addition, incidence of decreased libido, painful sexual intercourse and decreased libido are also observed in the patients concurrently which must be considered during the treatment.

Case Presentation: The case is a 27 year old woman married 2 years ago without children, unprotected, housewife who has been referred to the clinic of traditional medicine in June 2016 with palpitation complaints, dizziness, extreme tiredness, poor sleep, fatigue, darkening of skin along with syncopal attacks. She was the candidate for standard treatment for depression with diagnosis of depression by a psychiatrist. Based on the history of the patient, she has experienced delayed period for up to three months, severe pain prior to and during menstruation, dyspareunia and fear of sexual intercourse, decreased libido and progressive lack of sexual satisfaction over the past two years. She suffered from epileptic attack every 7-10 days without falling resulting in organ and head damage. After taking history, medical tonic treatment of ovarian and treatment using sitz-bath and training for sexual intercourse were conducted simultaneously from the perceptive of modern and Iranian medicine and menstruation was regulated in the first three months and sexual intercourse gradually became possible in the next three months and patient experienced regular menstruation and complete sexual intercourse with sexual pleasure at the end of six months.

Conclusion: Treatment of this patient by modification of her uterus and ovaries function, creation of menstrual regularity and possibility of sexual intercourse along with sexual pleasure based on sexual pleasure highlights the necessity of more attention to the connection between the different organs in the human body. A woman's uterus and femininity functions make her sick in the case of disorder, one of such is termed strangulation of uterus (Ekhtenagh in Persian) in Iranian medicine.

Keywords: Polycystic Ovary Syndrome, Oligomenorrhea, Strangulation of Uterus, Libido, Iranian Traditional Medicine

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Introduction

Polycystic Ovary Syndrome (PCOS) is one of the most common endocrine disorders in women, affecting 5 to 10 percent of women of reproductive age [1, 2]. This syndrome which was introduced in modern medicine for the first time in 1935 by Stein Leventhal is associated with menstrual disorders, including oligomenorrhea and amenorrhea, hyperandrogenism and polycystic ovaries. In addition to menstrual dysfunction, this disease can be associated with vaginal dryness, dyspareunia, decreased libido and sexual interest as well as increased risk of depression [3, 4]. PCOS is a common cause of menstrual disorders [5]. Menstrual disorders commonly witnessed in PCOS are oligomenorrhea, amenorrhea or menstrual bleeding even though 30% of patients with PCOS experience regular menstruation [6]. The event that occurs in polycystic ovary is chronic anovulation in addition to several consequences such as infertility, increased risk of endometrial hyperplasia, the risk of endometrial carcinoma, decreased libido and depression. Depression is apparent with different psychological states of increased sense of sadness, impatient abnormalities such as lethargy and imitation of fainting [4, 7]. Besides, infertility and poor results of pregnancy are the most important problems of patients with PCOS [8]. Menstrual disorders and oligomenorrhea are increasing in recent decades as a result of increasing incidence of obesity and decreased mobility, dietary changes, stress, changes in lifestyle and among others [9-11]. The precise etiology of PCOS is complex and is not well known, but in any case, three basics for diagnosis of PCOS are hirsutism without biochemical hyperandrogenism, anovulatory and polycystic ovarian morphology [12]. Treatment of PCOS includes an extensive range of solutions and lifestyle interventions to special medical treatments. Medicines presently use for controlling and treating the clinical symptoms of PCOS are oral contraceptive pills for menstrual disorder and hirsutism and spironolactone and finasteride for symptoms of increased androgen [13]. Treatment of oligomenorrhea

by regulating menstrual cycles and protecting against the development of endometrial dysplasia and endometrial carcinoma are very important among the symptoms of PCOS. Currently, progestins alone or in combination with oral form of estrogens are the main treatment of oligomenorrhea and on the other hand, estrogens modify sexual desire in some cases [14-15]. In addition, metformin decreasing medicine can modify menstrual regularity. Also in some cases, anti-androgens are used alone or in combination with oral contraceptives [15-16]. Generally, the treatment of this syndrome is performed with the objective of ovulation of patient after which menstruation is also regulated. Iranian medicine also attempts to modify the function of uterus and ovaries by strengthening these organs. From the perspective of Iranian traditional medicine (or traditional Persian medicine), this strengthening of functions which results in healthy functioning regulates menstruation and leads to the experiencing of normal cervical secretions and ultimately having normal sexual willingness.

Case Presentation

Medical History and Examination according to Modern Medicine

A 27-year-old woman, housewife, management expert, married, nulliparous has been referred to the clinic of traditional medicine of Rasoul Educational Hospital in June 2016 with palpitation complaints, dizziness, extreme tiredness, poor sleep, fatigue, darkening of skin along with syncopal attacks. More than two years have elapsed from the date of her marriage. She experienced her first menstruation at the age of 12 which was accompanied with severe pain and spotting for a month. Then, she did not experience menstrual periods for about six months and has hardly been on period every month. She mentioned that her maximum retard has been three months. Drug for preventing pregnancy was prescribed after a doctor diagnosed polycystic ovary and has not been used after six months owing to increased bloating and repeated headaches at the top of the head. Fluoxetine 20 mg was prescribed for her during her recent referral to a gynecologist which

she has not taken.

The patient was 1.60 m tall, weighed 62 kg, has a body mass index (BMI) of 23.63 and had a very low daily mobility. She had medium skeletal structure, dark wheat complexion and has not used protection for six months because she wanted to have a child. She expressed her faints in this way that they are usually repeated every week or every ten days. She stated that she hears tinnitus, her calf muscles are pulled and she becomes lightheaded thereby becoming unconscious. She has not suffered severe complication from these attacks due to falling. No symptom of anemia was found in clinical practice. During abdominal examination, the upper part of her pubis was found to be slightly stiff and sore. A stiff and painful spot was also detected on the left side of her belly button. Her tongue had a dark load at its end with drought. In the case of sexual intercourse, even after more than two years from the date of marriage, penetration of penis was not described. Her husband has experienced premature ejaculation and she was scared of penetration and has been treated by gynecologist and sexologist for several sessions with a diagnosis of dyspareunia using prosthetic penetration which has not achieved much success until then. Sexual desire of the case has become extremely low in the past six months and she has no sexual desire. She does not have a history of specific illness or surgery in the past. No signs of thyroid disorder, anemia and lack of vitamin D3 were detected in routine test. Thyroid Function Test, Liver Function Test, and hormonal profile were normal.

Medical History and Examinations according to Iranian Traditional Medicine

A 27-year-old woman, dark wheat complexion, high forehead, narrow face, thin eyebrows, acne scar visible on cheeks, 1.60 m height, 62 kg weight, average joints, average width of shoulder, thin wrist and ankle, slightly prominent abdomen, slightly sparse hair, thin lips with dark hair and eyebrows and eyelashes, relatively calm tone of voice, not using hand and head gestures while speaking, she expressed her problems without

excitement, her temperament was moderate with signs of coldness and dryness, she complained about dry skin in winter, her main complaint was dizziness with voices in her ears which would result in her fainting. These attacks were repeated sometimes twice a week and sometimes once a month and would delay menstruation to a maximum of three months and along with inaction of ovary with severe pain below her abdominal and lower back. She also complained about restless syndrome in her legs and fatigue and poor sleep. During abdominal examination, the upper part of her pubis was slightly stiff and sore. A stiff and painful spot was also noticed on the left side of her belly button. Her tongue had a dark load at its end with drought. Tongue had different levels of load. She also complained about reduced tolerance threshold and not being able to forget the talks of her husband. In case of sexual intercourse, even after more than two years from the date of marriage, penetration of penis was not described. Her husband has had premature ejaculation and she was afraid of penetration and has been treated by gynecologist and sexologist for several sessions with a diagnosis of dyspareunia using prosthetic penetration which has not achieved much success until then. Sexual desire of the case has become extremely low in the past six months and she has no sexual desire. She experiences pain during vaginal examination but examination was conducted and papsmear was taken. Opening of cervix was normal. Cervical tissue was normal in the case of being wet or dry. There was no rigidity and there was normal heat.

Treatment

Measures to Protect Health and Nutrition:

The patient was trained to change her lifestyle and it was decided that she should gradually regulate her hours of sleep within three to four weeks and she should go to sleep between 10-11 pm. She should not read book or magazine half an hour prior to sleep. She should not drink tea and coffee before sleep. Time for eating must be regular. Two breakfast and evening meals along with two snack times were set for her (patient wanted to lose 2 to 3 kilograms in the process).

She was trained not to use yogurt, buttermilk and other pickled drinks with her foods. The use of food with preservatives and a variety of sweets and chocolates was minimized. Fruits were limited to dried berries, almonds, hazelnuts grape syrup and dried fruits. The use of ripe fruit was also recommended. Exercise was planned and executed for 30 minutes in a day. It was also determined that sexual intercourse should be done twice a week with necessary training.

Pharmaceutical Measures:

After diagnosis, uterine strangulation (Ekhtenagh in Persian) as a result of menstrual irregularities and lack of satisfaction during sexual intercourse was treated. Treatment included sitz-bath with 200 grams of malva, 100 grams of rose, 100 grams of mallow and 100 grams of chamomile and she was trained to obtain the flower extract and mix them by wearing kitchen gloves and sit in clear boiled flower extract daily for 15 minutes for three weeks. Note that flower extract should be hot and boiling water must be used to heat it if it is lukewarm or cold and she should not sit in a cold extract. Simultaneously, a tablespoon of the filling "Squill Oxymel" (Table 1) was mixed with a cup of boiling water and was used before breakfast along with 2 "Raha" (or Aslagh) Capsules (Table 2) twice a day (morning and evening) and 150 mg of "moshel samghi" capsule (Table 3) every night before sleeping with a glass of warm water [17-18]. "Raha" Capsules were used in this way that they imitated a normal menstrual pattern and were used for three weeks and were not used for one week irrespective of the occurrence of menstruation. If menstruation should occur during its consumption, it should be continued after the end of menstruation. Abdominal massage using chamomile oil was done every night before sleeping in this way that it was massaged 35 times clockwise and 35 times counter clockwise and 35 times from top to bottom. She was trained after the end of the period of bathing with flower extract to use flower extract with same instructions 2 or 3 hours before determined sexual intercourse. Violet oil with the base of sweet almond was used at the place

of penis penetration prior to sexual intercourse. She was trained for relaxation with speculum in the clinic. Method of lying down was explained. Training was done at the presence of her husband.

Table 1. Ingredients of "Moshel Samghi" Capsule 125 mg

Name of drugs	Part used	Dosage (mg)
Ferula Persica	Oleogumresin	30
Dorema Ammoniacum	Oleogumresin	30
Ferula gummosa	Oleogumresin	30
Citrus Colocynthis	Fruit	35

Table 2. Ingredients of "Raha" Capsule 500mg

Name of Drugs	Part Used	Dosage (mg)
Vitex Agnus Castus	Fruit	166
Foeniculum Vulgare	Seed	166
Daucus Carota	Seed	166

Table 3. Ingredients of "Squill Oxymel"

Name of Drugs	Dosage
Squill	250 mg
Honey	5 g
Vinegar	5 g

Treatment Results

At the beginning of treatment, fainting attacks continued during the first three months. At the end of first three months, the patient experienced two menstruations. Her pain was significantly reduced. She was able to withstand brief penetration. Menstruations were regulated throughout the next three months. Palpitation and poor sleep were resolved. Penetration gradually became possible. Patient had sexual pleasure at the end of the second three months and experienced one orgasm. No fainting attack was reported in these three months. She experienced proper sleep in these three months and was satisfied as shown in the color of her face and its brightness.

Discussion

Menstrual disorders in the form of oligomenorrhea are one of the most common problems of women

which can be associated with decreased libido and sexual interest in a way that the occurrence and incidence of depression and mental protests in women with PCOS is more than other women. Treatment of this syndrome and its related protests in modern medicine is not done in one set and as it was observed in the present patient, contraception medicine was prescribed along with fluoxetine for symptomatic treatment and on the other hand, sexologist had recommended the use of prosthesis to gradually increase the size. Whereas from the perspective of Iranian medicine, lack of occurrence of menstruation, lack of sexual desire and lack of sexual satisfaction result in a set of problems for women that are connected to each other like a chain. In this manner, wastes are accumulated in the body of a woman and repression of uterus occurs owing to lack of regular menstrual periods and penetration and correct sexual intercourse as such patients suffers psychological states such as depression, sadness and fainting after the waste vapors get to her nose. Treatment of these conditions is possible by making a woman's sexual pleasure normal and having menstruation at least every 35 days and she must be visited by psychiatrists and gynecologists in the different depression diagnosis. Therefore, Iranian medicine enhances the functioning of uterus and ovaries and female menstrual cycle by employing sexual instigators and tonic ovarian with "Raha" capsule on one hand and cleaning and reducing wastes accumulated in the stomach and uterine and ovarian using "Squill Oxymel"⁽¹⁾ syrup and "moshel samghi" capsules [17,18]. "Raha" capsule which comprises three plants of seeds of *Foeniculum vulgare*, fruit of *Vitex* and carrot seed in equal proportions and is used with dosage of one gram both in the morning and in the evening in Iranian medicine for the treatment of gynecological diseases such as the treatment of PCOS, ovarian cysts, menstrual period regulation, activation of ovaries, increased libido and cure of depression in women and improvement of menopausal feeling and ovulation induction in infertile women [17,18]. *Vitex agnus castus* is used in PMS, menopausal problems, treatment of irregularities in

menstrual periods, menstrual disorders caused by the failure of corpus luteum, amenorrhea, uterine pain, swelling of ovaries, during menstruation and inhibiting the secretion of prolactin, libido control and cystic and hemorrhagic follicles (19-21). According to sources of traditional medicine, this plant is effective in the treatment of hypo monaware cervix swelling and uterine pain and increases the calmness of mothers [17, 18]. *Foeniculum vulgare* has effects such as dysmenorrhea palliative effects, estrogen effects such as creation of estrogen phase mammary glands' weight gain, endometrium, cervix and vagina weight gain and antioxidant effects. Currently, numerous researches have been conducted regarding the effects of *Foeniculum vulgare* in the treatment of amenorrhea [22, 23]. In traditional medicine, this plant is a productive source of milk, a regulator of menstruation, it reduces uterine pain and increases sexual desire [24]. *Daucus carota* (Carrot) increases milk secretion and mildly regulates menstruation and has estrogen which has harmonic effect on female sexual organ. It is also used as an agent of sexual energy for men. Carrot seeds are used as antioxidants and also to stimulate menstruation [25, 26]. In traditional medicine, carrot seeds initiate menstruation and help in pregnancy and are also effective in increasing libido [18, 27]. Another medicine which was utilized is named "Squill Oxymel". The extract of "Squill" which is known as *Urginea maritime* has positive inotropic effect on heart and has antioxidant effects. "Squill Oxymel" has been termed "Squill Oxymel" in British Pharmacopoeia [28, 29]. In traditional medicine, it is used to initiate menstruation and it is effective in the induction of ovulation and treatment of ovarian cysts [24]. The other medicine is "moshel samghi" capsule which contains *Dorema ammoniacum*, *Ferula gummosa*, *Ferula persica* and *Citrulus colocynthis*. *Dorema ammoniacum* enhances and initiates menstruation. *Ferula gummosa* has properties such as treatment of gastrointestinal disorders, anticonvulsant, spasmolytic, anti-cytotoxic and antioxidant properties [30, 31]. It has been mentioned in traditional manuscripts that this

⁽¹⁾ Method for producing "Squill Oxymel" with honey; cook 1 unit of "Squill" Vinegar with 4 units of white honey in a Porcelain or silver dish in a way that "Squill" is obtained as much as used honey. The intake of this "Squill" is 15 grams

“moshel samghi” is useful in strengthening the uterus, it heals uterine and menstruation disorder and increases sexual desire [17, 18]. *Ferula persica* with dosage of 30 mg/kg BW has increased testosterone and LH in Diabetic Rats and has protective effect on the reproductive system. It also has anti-spermatogenic effects. It has been mentioned in traditional medicine that *Ferula persica* is useful for the treatment of uterus diseases and initiates menstruation [18, 32]. Additionally, chamomile oil has been used in form of massage at the same time for the relaxation of abdominal muscles and lack of shrinkage and constipation. Flower extract which has led to the relaxation of vaginal muscles due to higher mallow and reduced spasms had led to having better odor and greater flexibility and better discharge for smoothness which gives rise to painless penetration along with practical training for patient. Violet oil reduced the virulence of sperm during penetration and to some extent was able to control premature ejaculation so that her husband would be satisfied. Patient was able to have sexual intercourse along with sexual pleasure without fear and spasm and after six months of patient's visits for every four weeks and using speculum controlled drugs along with training. Her menstrual periods occurred in less than 35 days.

Comprehensive clinical response has been obtained for the advancement of mental state of a woman with faints and depression with correct and logical attention to lack of regular menstruation and failure to achieve the ultimate sexual pleasure, lack of penetration, dyspareunia and gastrointestinal problems along with diet and sleep and physical activity which have been gradually stabilized over a period of six months.

Conclusion

Several uses of medicinal plants have been identified up till now but the effect of these medicine on various diseases due to the fact that these fields are becoming more specialized has made us to forget this fact that various organs of the human body work in relation to each other and mental disorders cannot be separated from

digestive or uterine disorders. Each specialized field heals one organ and this incoherence has made us to be unaware of multi-organ effects of medicinal plants which is useful in the treatment of diseases. When a patient is referred to a doctor with complains of fatigue, palpitations, depression, pain and malaise, all doctors agree on anemia but then, they easily diagnose depression of patient without the knowledge of the patient's sexual history and sexual pleasure. History of regular menstruation and femininity functions result in doctor's mistake due to their neglect by doctors. Femininity functions of a woman are as important as her brain in promoting her mental and physical status and must be considered by the doctor. Iranian medicine has used the word of uterus repression in this cases due to these actions which indicates stopping of sexual functions and returning of these functions will lead woman to good health.

Treatment of mental disorders of women with polycystic ovary syndrome is among these specialized treatments in the same way in which the incidence of depression and altered mood in women with polycystic ovary syndrome is treated with proper treatment without the use of antidepressants. Attention to the importance of menstruation in a period of less than 35 days, teaching of appropriate sexual intercourse to men and women, attention to female orgasm and their satisfaction with their sexual partner, diet, attention to digestive processes and need for proper dispose for women and proper digestion, indicate the necessity of comprehensive treatment of the disease.

List of Abbreviations

PCOS: Poly Cystic Ovary Syndrome

BMI: Body Mass Index

PMS: Premenstrual Syndrome

BW: Body Weight

LH: Lutein Hormone

Competing Interests

The authors have no conflict of interest in the publication of this paper.

Contributing Authors

This article is the outcome of treatment measures by EA, RM, HT and cooperated in documenting and writing the article.

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