Polycystic Ovary and PCOS

Polycystic Ovary means there are many small cysts on the ovaries of some women which are found by ultrasound scan. Polycystic Ovary may cause a prolonged menstruation, or occasional occurrence of amenorrhea, also be possible that no symptoms at all. It is found by a regular examination for Infertility. There is a higher incidence, that around of one in fifth women have this sign is reported [1,2].

Polycystic Ovary Syndrome (PCOS) is a disease which is related with a disorder of sexual hormone. It appears amenorrhea, infertility, habitual miscarriage, obesity, hirsutism (unwanted hair) and virilism (some male type's signs) as its main complaints; it is caused by oligo-ovulation which means the ovaries can't produce sufficient amount and mature eggs, even fail to ovulate.

I believe that Polycystic Ovary is the early, or the gentle stage of PCOS; it belongs to a pre-clinical condition. TCM which Acupuncture and herbal medicine are involved will be possible to treat it, even easy to cure it. But PCOS is an organic disease, it need to be identified carefully to find a proper pattern, and make a longer comprehensive treatment to make an efficacy to it.

The Cause of Polycystic Ovary and PCOS

Normal ovulation

There is a sexual hormonal axis in a female reproductive system which hypothalamus, pituitary and ovaries are involved. In a normal cycle, the hypothalamus gland at the base of brain produces a hormone called gonadotropin release hormone (GnRH). Under of GnRH stimulating, the pituitary releases two hormones: follicle stimulating hormone (FSH) and luteinising hormone (LH); both of these hormones have a direct effect on the ovaries during menstrual cycle.

FSH stimulates the growth of small sacs in the ovaries to a mature follicle which contains an egg and produce additional hormones. LH supports FSH to stimulate the growth of the follicle which it enables the egg to become mature, spurs out and ready for fertilization by sperm, both before and after ovulation. A small egg cell is gradually growing up in the ovary to a mature follicle, which becomes into the ovulation around of the 14th days of menstrual circle. This mature egg swims to the uterus by passing a fallopian tube. If it meets a sperm to take place fertilization, it will be developing into a pregnancy procedure; if no egg fertilizes, the endometrium will shed as a menstrual period 14 days after ovulation. So it is a perfect menstrual circle if it lasts 28 days.

Polycystic ovary and PCOS

Polycystic Ovary (PCO) can be found many small cysts in the ovaries. The cysts are quite small, usually no bigger than 8 millimeters [3], which are seen by an ultrasound scan. A normal follicle should be 20 millimeters in diameter. From a blood account for the patient with PCO, or PCOS, LH may increase and the ratio of LH / FHS may disorder. Due to the follicle grows and be mature slowly, it may be the reason that LH increases to release; or it may be lack of vitality of LH which cause the follicle growing and be mature slowly. So the sufferer appears a prolonged menstrual circle. In normal, it needs 14 days to appear an ovulation; these girls with PCO will need 18-20 days, even more.

If LH increases to extra high, or too poor for the vitality of LH, she will manifest oligo-ovulation, even amenorrhea. (Some of women can have their period, but no egg in it). Polycystic Ovary can occur in the women in every pregnancy ages and may develop to the PCOS in any time.

The Cause of slow ovulation and oligomenorrhoea

A. Heredity: some girls, even most women in some family suffer from an irregular menstrual circle since they start their period. Their menstrual circles tend to longer, even amenorrhea. These may be caused by impairment, or illness of gene.

B. Discontinue use of oral contraceptive pills (Estrogens type) may cause hormonal disorder, or decrease the vitality of LH.
Clinical symptoms of polycystic ovary and PCOS

Conventional western medicine (CWM) defines there are many cysts on the ovaries, but no more clinical symptoms as Polycystic Ovary, and defines manifestation of some clinical symptoms, such as amenorrhea, obesity, appearance of male type signs and so on as polycystic ovary syndrome. In actually, it is quite rigorous that doctors make a diagnosis as a PCOS in the clinic. Some of women who suffer from regular prolonged period, occasional amenorrhea are not diagnosed as a PCOS. So I believe it is necessary to identify the differentiation between PCO and PCOS, and put TCM treatment as early as possible.

Clinical features of polycystic ovary

A. Irregular or regular prolonged menstrual circle, or occasional amenorrhea which is not over 2-3 months in general. A normal or light period without dysmenorrheal (Pain in period) lasts 4-6 days.
B. It is possible to have infertility.
C. Many small cysts (immature follicles) are found in the ovaries by Ultrasound scan.
D. Normal blood account or minor increased of LH.

Clinical features of polycystic ovary syndrome

A. Irregular menstruation: a prolonged menstrual circle, amenorrhea, heavy period. In general, there is more long times of amenorrhea, more severe of case.
B. Infertility.
C. Miscarriage easily during a pregnancy occurs.
D. Hirsutism (More unwanted hair), acne on the face, chest, arms and legs.
E. Obesity, the BMI (Body Bass Index) is over than 25 kg/m
F. Ultrasound scan: large ovaries which more than 10 cysts (immature follicle) are found.
G. Blood test: elevation of LH, disorder of ratio LH / FSH, elevation of testosterone [2,4].

The regular treatment of CWM to the women who have not wish to become pregnancy is the contraceptive pills; to the women who expect to become pregnancy is Clomifene Citrate 50-100 mg; and some relevant treatment to particular symptoms. Due to women with PCOS who do undertake IVF are at risk of the ovarian hyperstimulation syndrome, so doctor isn’t kind to suggest doing IVF to them.

TCM’s Perspective to Polycystic Ovary and PCOS

Due to the prolonged period and amenorrhea as main complaints, so TCM recognize and differentiate Polycystic Ovary and PCOS to be the patterns of Qi and Yang deficiencies, accumulation of phlegm-fluid and blood stasis. The common patterns are indicated as below:

Qi deficiency of Spleen and Kidney, accumulation of fluid and stasis of blood

Above pattern will often seen a case with a early, gentle stage who may be only having a longer menstrual circle, fatigue, pale tongue with teeth marks and white-slippery coating, and rolling-fine pulse.

Analysis: Due to an excessive physic work, or a bigger changed of life and study environment, or a weak constitution after a long term of illness, or a miscarriage, she appears a weak condition in general. The spleen and kidney Qi deficiencies fail to transport fluid; Accumulated fluid obstructs the Qi and blood flowing in the uterus to cause disharmony menstrual circle which lasts longer; if the Qi-fluid and blood stasis in the uterus has severely been accumulated to cause an amenorrhea.

Kidney Yang deficiency and accumulation of fluid and phlegm

This pattern is a typical and the commonest one. Prolonged menstrual circle, amenorrhea, cold limbs, aversion to cold, darkened complexion, acne on the face, chest and back, even obesity, swelling at low legs, more unwanted hair, heavy feeling in general. Pale tongue with white-slippery coating, deep-rolling pulse should be manifested.

Analysis: This pattern is often seen in a case with a congenital weak, or a long term use of oral contraceptive pills which restrain the Kidney Qi. The kidney Qi fails to push the fluid flowing which remains for a longer to damage the kidney Yang. The Kidney Yang fails to warm the uterus to produce blood stasis in it. Cold and stasis in the uterus brings out a longer menstrual circle, even amenorrhea and infertility; the fluid accumulates for a longer to become a phlegm; fluid-phlegm remain under the tissue to make an obesity; fluid-phlegm obstruct defensive Qi to cause aversion to cold, heavy in general and cold at limbs.

Liver Qi Stagnation and Blood stasis

Stress, nervous, depression, restlessness, grievance, weep, swelling breasts and dysmenorrheal; acne occur at cheeks, headache, prolonged menstrual circles, even amenorrhea, infertility; light red tongue with thin white coating, wiry, or wiry-fine pulses.

Analysis: This pattern is often seen for the women with stress work, unhappier life, which make Liver Qi move slowly, and tend
to be stagnated; or after a miscarriage which breaks artificially down a normal pregnancy procedure, she hard to recover her Liver and Kidney Qi; or undergoing a hormonal treatment before a IVF, her hormonal system has been influenced by it; additional, she suffers from frustrated feeling after a failed IVF treatment. All of above reasons can cause the liver Qi stagnation and blood stasis in the uterus to make menstrual sluggish, even amenorrhea; Due to the liver fails to push the Qi moving, so she always has many emotional symptoms.

Treatment of TCM

After a clear diagnosis from CWM, I believe we will be available to make a TCM treating plan which is more specialized and accurate to focus PCO or PCOS, let us more confident to predict the result of the case after she is treated, if we take some reference from CWM.

Acupuncture

Main points: Baihui (Du20), Moxi at Shenque (Ren8), Zhongji(Ren2), or Guanyuan (Ren3), Qihai (Ren6)

Associated points
A. Strengthen the spleen and remove the excessive fluid: Xuehai (Sp10), Yinlingquan (Sp9), Sanyinjiao (Sp6), Taibai (Sp3).
B. Replenish the Kidney and warm Yang: Yinggu (Ki10), Zusanli(SI3), Fuliu (Ki7), Zhaohai (Ki6), Taixi (Ki3).
C. Move the Liver Qi and dissolve the blood stasis: Waiguan (Sj5), Zulinqi (Gb41), Hegu (Li4), Taichong (Liv3).

Herbal Medicine

If a case with many symptoms, or in a complex pattern, an artificial menstrual regulatory treatment with herbal medicine will be elected [5,6] (Table 1).

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<th>Patterns</th>
<th>Herbal Medicines</th>
<th>Patent Herbs</th>
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<tbody>
<tr>
<td>Liver Qi Stagnation and blood stasis:</td>
<td>Chaihu ji plus Taohongsiwu Wan: Chaihu, Baishao, Danggui, Zhiqiao, Chishao, Shengdi, Chuaxiong, Yinmiao, Muxian.</td>
<td>Chaishushugan Wan, Xiaoyao / Jiawei xiaoyao wan, Xuefuzhuuyi Wan, Taohongsiwu Wan.</td>
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Typical cases

Case 1: Polycystic Ovary: H W who is a medical researcher, 32 years old has been trying to be a pregnancy for 3 years without successful result. Her menstrual circle always needs 30 to 50 days; amenorrhea occurs occasionally. She is diagnosed a Polycystic Ovary by the ultrasound scan, but no abnormal signs in her hormonal tests are found. She has accepted a regular acupuncture and patent herbal medicine for 3 months with a treating principle of strengthening spleen and replenishing kidney, warming uterus and expelling the internal cold in it; then she become a pregnancy to labor a health boy in a full term.

Case 2: Polycystic Ovary and pregnancy with some signs of miscarriage: M.M-B who is an IT technician, 29 years old has been trying pregnancy for 3 years without successful result who has a prolonged period and occasional amenorrhea. She also feels fatigue, insomnia, anxiety and constipation. Gynecologist suspects a Polycystic Ovary, but no positive blood results support.

A regular acupuncture and patent herbal medicines with a treating principle of strengthening spleen and kidney, warming uterus and dissolving the blood stasis in it are accepted by her. She is gradually becoming 27-28 menstrual circles, and is conceived in the 5th month. Due to a deficiency of Kidney and spleen, she continues to have irregular vaginal bleeding and low abdominal spasm during her pregnancy, so she has to take regular acupuncture and herbal medicine for protecting fetus until a full term. She has a health boy.

Case 3 polycystic ovary syndrome: R.h is a clerk, 23 years old. Because just graduated from the university, she feels stressful to bear her work, so she suffers from a Hyperthyroidism. From a regular treatment of CWM, she has been clinical controlled; TSH is normal and no symptoms on Hyperthyroidism. After a year, she is getting missing of her periods, even amenorrhea, and getting her weight increased. When she visits me, she has been no her periods for more than a half year. From diagnosis of CWM, she has elevation of LH, larger ovaries; so an early stage of PCOS is confirmed and a course of contraceptive pills is given.

Due to her gained a help from TCM, when she was suffering from a Hyperthyroidism, which made her take a less course of anti-thyroid treatment and heal quickly. So she is kind to accept TCM at priority in this time, and withdraws contraceptive pills. After two months of regular acupuncture and patent herbs, she has still no period come; then she is given a dry herbal prescription to increase the treating power after she take an advice from me. Then she starts her period after another 2 months of treatment and continues a 3 months to maintain this result. Her LH and
ultrasound scan turn back a normal result. She is still taking a regular acupuncture and patent herbs at present.

Case 4: Polycystic Ovary syndrome and husband with a low sperm vitality: A C who is a nutritionist, 32 years old has been trying a pregnancy for 3 years without result. Since she starts her period when she was 14 years old, she has always been her menstrual circles between 32 to 56 days. She took contraceptive pills when she was 18 years old and stopped it 3 years ago. Then she has irregular period again, and often occurs amenorrhea.

Gynecologist diagnoses PCOS to her and gives her 10 months of Clomifene Citrate which makes her period regularly come, but it still needs 5-6 weeks of menstrual circles, and heavier period, but no pain. Her husband who is 27 years old is found a low sperm account and poor vitality. This couple is referred to me by the Gynecological consultant.

A regular acupuncture and patent herbal medicine under a treating principle of replenishing kidney and warming uterus, removing dampness and dissolving blood stasis are given to wife; the patent pills for pushing the liver Qi move, replenishing kidney and strengthening essence are given to husband. Until the next month, the wife has her period in 28 days circle and is successfully conceived in another month. The couple is very satisfactory; consultant also sends a letter to express a celebration and sign: (TCM) is very short time to get this success.

Case 5 Polycystic Ovary syndrome and husband with a low sperm vitality: M B who is a housewife, 29 years old, Pakistani British, complains infertility for 8 years. She starts the first of her period when she was 16 years old; and has never been a proper period. In general, she has her period every 2-3 months, always happens amenorrhea which lasts a half to a couple of years. Obesity and more unwanted hair have appeared. Due to trying to be conceived after marriage, she has never taken contraceptive pills. Doctor diagnoses polycystic ovary syndrome to her and refuses IVF to her. Her husband who is also found a low sperm account and poor vitality. This couple is refereed to me by the Gynecological consultant.

I give wife a regular acupuncture and herbal concentrated powder which is guided by the treating principle of strengthening spleen and kidney, and dissolving blood stasis from the uterus; and give husband patent herbs which are guided by the treating principle of pushing the liver Qi move, replenishing kidney and strengthening essences. After 5 months of treatment, they are accepted to have an IVF treatment by reproductive medical doctors.

I stop my herbal medicine, but keep a regular acupuncture to her while she is accepting IVF treatment. Due to the defect of her ovaries still, she is able to be picked up an egg after use of a course of assisting ovulation drug. But it is successful fertilized with the sperm from her husband. She is conceived to labor a health girl in a full term. This couple is very pleasant.

Conclusion

Polycystic Ovary is getting popular in the modern women. It may be result from the elevation and prevalence of the diagnosis technique in CWM which make more and more women have been checked out. So the incidence of polycystic ovary has been increased. Polycystic ovary syndrome is an organic disease with a complex hormonal disorder. Except infertility, all symptoms of obesity, aches, hirsutism (more unwanted hair) and virilism (signs of man’s type) give these women discomfort and sufferance. My experience to PCO and PCOS will be explained as below:

A. Polycystic Ovary is a gentle condition before PCOS is diagnosed, which belongs to a pre-clinical condition. The practitioner of TCM should pay attention to the women who complain as an irregular or regular delayed period and amenorrhea. If we recognize the women who may be in the condition of PCO, we will give them treatment, which are more specialized and accurate to PCO. They will be possible to be barred and cured for a PCO, and not become to a PCOS.

B. TCM should take a key treating principle of strengthening Qi and warming Yang, removing fluid and dissolving blood stasis to PCO and PCOS. We should regulate the menstrual circle. It is a clear and simple target to make shorter of her menstrual circle, which let it to be a perfect one.

C. In general, the women who have only PCO may not appear infertility; if her partner also has a sperm problem, they may explore an infertility to look for treatment. So it is necessary to check the sperm of husband although the woman is diagnosed, which belongs to a pre-clinical condition. The condition of PCO, we will give them treatment, which are more specialized and accurate to PCO. They will be possible to be treated in a safe and effective condition.

D. Although doctors not suggest the women with PCO or PCOS accept IVF treatment, but some of them are regulated by TCM who may have progressed to their hormonal level and ovary state. If her condition fits to the criterion of IVF, she will be possible to be treated in a safe and effective condition.

E. If a woman is conceived before her strong enough, she may show some signs of miscarriage. It is possible to keep TCM treatment for protecting fetus.

References