

## Siddha Elixir and Aetiology of Polycystic Ovarian Syndrome

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### Abstract

Siddha medicine is a treatment which is followed by an Ancient Tamilians. It has no side effects and cost efficient. Polycystic ovarian syndrome is a hormonal disorder affecting many women nowadays. It is called as syndrome because it shows many symptoms. It is also named as polycystic ovary disease, stein Leventhal syndrome or hyper androgen anovulation syndrome. In this PCOS more than 12 tiny cysts present in the ovary. It may cause due to genetic problem or lifestyle factors. This review interrupts the solution to reduce the risk and ill effects of PCOS with help of siddha medicine which is the best, nil side effects, and cheapest medicinal system.

**Keywords:** Hormonal problems; Infertility; Menstrual problem; PCOS; Poly cysts; Siddha treatment

### Introduction

If we come across the survey of diseases over the world, hormonal problem is the most hear able one. One of them is PCOS, i.e., polycystic ovarian syndrome which affects many women. PCOS is a syndrome characterized by a hormonal imbalance causes enlarged ovaries with large number of cysts which is filled by a fluid. If it is untreated it may result in infertility, which is troublesome.

Menstrual cycle depends on hormone regulation. During this cycle, a hormone is produced from pituitary gland of brain, i.e., FSH (Follicle stimulating hormone). This hormone is responsible for the production of watery sac which surrounds the egg. After the formation of egg, pituitary gland secretes LH (Luteinizing Hormone). This hormone induces the follicle to release egg which settles in fallopian tube for ovulation. After producing egg, the follicle slowly disappears. After ovulation, ovaries produce estrogen and progesterone which strengthen the uterus for pregnancy. At this time ovary secretes small amount of androgen which slowly convert into estrogen.

But for the patients with PCOS this follicle stops its maturity and the ovulation does not occur. Thus, the follicle does not disappear and forms a cyst which settles in the ovary. By ultrasound diagnosis it can be identified by the presence of more than 12 follicles in an ovary. This cyst may result in a hormonal imbalance seems to have elevated level of testosterone which may cause abnormal facial and body hair growth.

### Aetiology of PCOS

In a daily routine, women undergo different food habits and culture which leads to the hormonal disorder but they don't aware of it. Among that factors [1] which cause PCOS are:

### Genetic problems

PCOS is a genetically inheritable disease. There is 50 percent of chance for women to affect by PCOS hereditarily from mother or sister if they had hormonal problems.

### Life style factors

In a daily life, one of the important roles is to maintain the glucose level of body after consuming the food. If the insulin is not regulated properly, glucose level may get increased. This in turn increases androgen such as testosterone in ovaries. Thus, results in excessive hair growth and acne. Thus, the improper insulin level may also lead to PCOS.

### Obesity

Above a healthy weight may affect insulin resistance and may result in menstrual irregularity and excessive hair growth which is the cause for this disease.

### Health issues

Some of the health problems which may cause PCOS are:

- Increased weight gain
- Excess insulin
- Improper diet maintenance
- Low grade inflammation
- Increased androgen level
- Cholesterol and blood fat
- High stress level

### Sleeping disorder

In this busy world work pressure has been increased thus many women thrown to work for a long time so that the sleeping time is

reduced. Due to the lack of sleeping time hormonal imbalance occurs which may be one of the causes for PCOS.

## Effects of PCOS

Some of the symptoms of PCOS [2] are:

- Pregnancy problems
- Abnormal menstrual cycle
- Unwanted hair growth
- Acne formation
- Excess weight gain around hip and stomach
- Decreases insulin resistance so that more chance for diabetes or gestational diabetes.
- Improper cholesterol level
- Imbalance in lipids
- Infertility
- Triglyceride problems
- Increase in androgen level
- Hair loss
- Weight gain
- Skin dryness

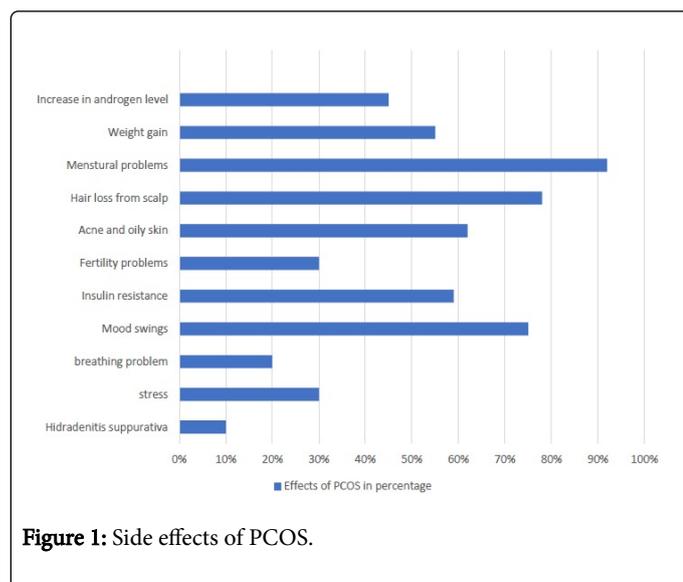


Figure 1: Side effects of PCOS.

Figure 1 represents the effects of PCOS whose description are as follows:

- Increase in androgen level: It may cause unwanted hair growth on face, thighs, back, tummy and nipples.
- Weight gain: Women with overweight are more suspected to PCOS than others. However, few women with healthy weight range may also have PCOS. In many cases, overweight may lead to anovulation [3].
- Menstrual problems: Due to disappearance of follicle it results in cysts which lead to increase in androgen level. This cause to irregular menstrual cycle which increase the weight [4].
- Hair loss from scalp: Excessive hair loss from scalp called as alopecia. This may occur due to increased testosterone.
- Acne and oily skin: Increased androgen level may also cause acne which may appear on face, back and other part of the body. It can

be treated with oral contraceptive pills, topical creams and oral antibiotic.

- Fertility problems: The most prominent symptom of PCOS is to bring anxiety. The increased level of androgen may result in irregular ovulation. Not all the women affected by PCOS has pregnancy problem.
- Insulin resistance: The women with PCOS are mostly affected with insulin resistance i.e. the normal action of insulin can be affected. Insulin is the hormone which regulates the blood sugar level. When the high level of insulin remains in the blood, increased androgen will be produced.
- Mood swings: This makes the patient to lack the power of concentration and so the mood may be distracted during their work.
- Breathing problem: The patient with PCOS may have elevated risk of heart disease and high blood pressure.
- Stress: PCOS affects quality of life and can worsen existing anxiety and depression. This depressive symptoms and mood disorder are most common in obese patient.
- Hidradenitis Suppurativa: It is a chronic inflammatory skin condition seen in women with PCOS. It is pea sized lump present in skin which forms around the hair follicles. It may present under arms, thigh, groin, under breasts and between buttocks.

## Treatment for PCOS

By knowing the cause and effects of PCOS, the affected person has to be treated in a proper way which suits them. The methods to treat are

## Mechanical and Surgical Methods

In this method, the physician may suggest two ways:

- Ovarian wedging cuts a pie shape wedge out of the ovary
- Ovarian drilling involves drilling holes in the ovary

In laparoscopy, the physician provides general anesthesia for patients then performs a surgery by drilling various holes in their body. One hole is to inflate abdominal pelvic cavity using gas which helps the surgeon to differentiate organ and so he can easily locate the ovaries. In other holes' surgeon fix the light, camera and surgical instruments which helps to visualize the organs and perform surgery.

If more adhesion causes doctor performs open surgery called laparotomy. This may cause various inflammations for patients. When a patient cause extensive adhesion it may be tough for the surgeon to locate the organ.

Thus, surgeon can unintentionally cut a healthy organ which is closer to ovaries called inadvertent enterotomy (IE). It may cause serious problem or death. Other risk factor is anesthesia complication. Some patients can undergo one or more sessions of general anesthesia which may leads to neurotoxic effects [5].

Though they suffer a lot after doing surgery, it is not a permanent solution and this has to be performing again to become fertile in future.

## Siddha Elixir: A Natural Way

Here, we are describing about the siddha treatment for PCOS based on the patient's symptom.

- Endometrium problem

Lining of uterus develops outside the patient's uterus which is called endometriosis. This is can be treated with the herb nochi which is shown in Figure 2.



Figure 2: Nochi.

The Botanical name of nochi is *Vitex negundo*. It is a shrub or tree which grows up to 6 feet. This is used to cure menstrual problems, stomach ache, decrease prolactin level, and endometric problem. It is also given for the patients who are affected by digestive problem, infertility and acne. Though it causes the reduction in prolactin, there will be no change in serum prolactin. It induces estrogen and progesterone and maintains the level of LH and FSH so that it eases the pregnancy.

The patients are prescribed with the dosage of fluid extract of nochi from 15 to 30 ml daily for at least 4 to 6 months depends on the patient's conditions and the duration since they are affected by. They are gradually relieved from the ailments. But this should not be consumed during pregnancy and lactation period as its ill effects is unknown [6].

- Amenorrhea

As a result of amenorrhea, follicle remains in a patient's ovary and later it becomes cysts which settle in surface of ovary thus it increases androgen level [7]. We can deal this condition with the herbs such as *Raphanus sativa*, *Nigella sativa*, *Trigonella foenum-gracum*, *Daucus carota*. The common name of *Raphanus sativa* is mulangi, *Trigonella foenum-gracum* is venthayam, *Daucus carota* is wild carrot, *Nigella sativa* is karunjeeragam.

*Raphanus sativa* is a plant which grows early up to 0.5 m. The leaves and seeds of these are also used to cure asthma and cardio vascular diseases. But the patient has to intake specified dose to avoid abnormal effects [8].

*Nigella sativa* is a most popular medicinal herb which is used in various medicinal systems such as Ayurveda, siddha and unani [9]. In Islamic Veda it is specified as the most powerful medicine to heal all diseases except death. It also acts as the anti-diabetic, immunomodulator, anti-inflammatory, bronchodilator, anticancer, antimicrobial, etc. [10]. The patient has to be prescribed with 4 g of seeds of *Nigella sativa*, *Raphanus sativa*, *Foeniculum vulgare*, *Trigonella foenum-gracum*, *Daucus carota* is taken with water. The

Decoction of seeds has to take for at least one cup before breakfast to cure amenorrhea [11] (Figure 3).

- Menorrhagia

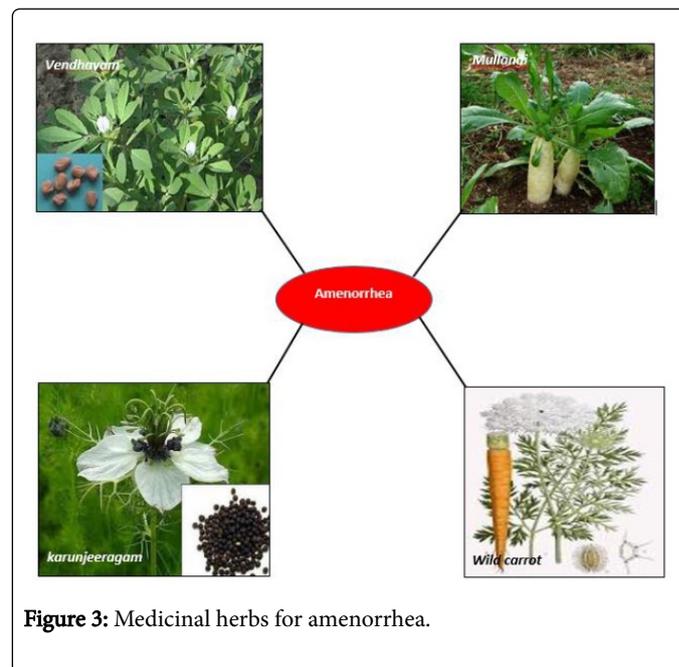


Figure 3: Medicinal herbs for amenorrhea.

The patient who are affected by menorrhagia has periodic menstrual cycle but with heavy flow and increased duration (Figure 4). It can be healed with *Saraca indica* (ashokam), *Glycyrrhiza glabra* (athimathuram), *Cynodon dactylon* (arugampul), *Symplocos racemosa* (vellilothiram).

*Saraca indica* has oxytocic action which strengthens the endometrium of uterus and also useful to cure the disease related to uterus. It reacts on the ovarian tissue and also its action resembles as estrogen and stimulates the normal functionality of uterus thus it arrests bleeding [12].

*Symplocos racemosa* has estrogen activity. It coagulates the blood so that it cures menorrhagia. It amazingly involves in the vasoconstriction of capillaries which helps to controls the increased flow of bleeding and also acts as the deobstruent. *Saraca indica* and *Symplocos racemosa* has the estrogenic activity whose individual plant part are dried, powdered and boiled with water in the ratio 1:4 for at least 2 h. This is filtered in nylon mesh and this extract is given to cure menorrhagia [13].

*Glycyrrhiza glabra* strengthens the uterus as it has phytoestrogen constituent. *Glycyrrhiza glabra* contains iso-flavones (i.e., phytoestrogens) it is used with white peony and saw palmetto for polycystic ovarian syndrome and for menorrhagia [14].

*Cynodon dactylon* is perennial grass which grows up to 20m long. These leaves differ in sizes and sometimes folded and have good odor and hot taste. It acts like an appetizer, antipyretic, alexiteric and expectorant. It can be used for all menstrual problems [15]. The leaf juice of this plant is taken orally during menstruation to prevent excessive bleeding [16].

• Other symptoms

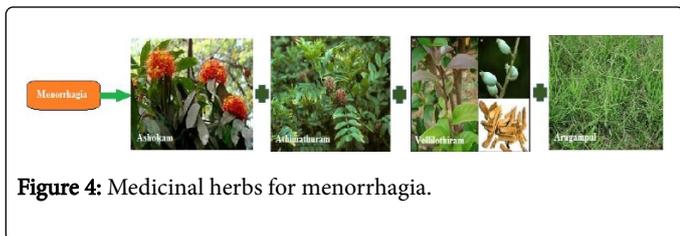


Figure 4: Medicinal herbs for menorrhagia.

There are also many other PCOD symptoms other than above mentioned one. These are cured with some herbs such as *Aloe vera*, kalarchikai, uthamani, veeli, etc. *Ceasalpinia bonducella* is also known as kalarchikai or kechakai or kachuram or clevernut. It is used for treating intestinal worms, fever, tumor, cough, amenorrhea, leucorrhoea, deobstruent, urinary disorder and remove placenta after

child birth. It has a lithotriptic action which helps to remove cysts from the ovary thus it helps to regulate the menstrual cycle [17]. The decoction of *Crataeva nurvala* given with ghee relieves flatulence and abdominal pain [18] (Table 1).

*Aloe barbadensis* is also called as kattrali, kani or kumari. It acts as purgative, emmenagogue, antioxidant, and antibacterial activity. It has oxytocic property which strengthens the endometrium of uterus and resolves the uterine problem [19]. *Pergulara daemia* is also known as uthamani or uthamakanigai. The leaf juice of uthamani is used for treating fever, asthma and gas trouble [20].

*Cadaba indica* is also called as veeli. It is used for treating leucorrhoea, acnes, constipation and uterine obstruction [21]. *Piper longum* is also known as thipili which is used as a good remedy for menstrual pain. It also involved in the relaxation of muscle tension [22].

S. No	Herbs	Botanical Name	Herbal extract	Pharmacological effects
1	Mulangi vithai	<i>Raphanus sativus</i>	Sulforaphene, sitosterol, stearic acid, castasterone, brassinolide	Heals amenorrhoea, asthma, cardiovascular diseases
2	Vellilothiram	<i>Symplocos racemose</i>	Triterpenoids, Estrogenic substance	Acts as deobstruent, control bleeding, cures menorrhagia, strengthen uterus
3	Nochi	<i>Vitex negundo</i>	Ethanol	Cures endometrial problem, minimize prolactin level
4	Karunjeeragam	<i>Nigella sativa</i>	Thymoquinone	Antidiabetic, Anti-inflammatory, Antimicrobial, Anticancer
5	Ashogam	<i>Saraca indica</i>	Zignin, glycoytes, ascorbic acid, phenolic compounds, catechin	Stimulate normal functionality of uterus and arrest bleeding
6	Arugampul	<i>Cynodon dactylon</i>	βsitosterol, βcarotene, palmitic acid, vinylic	Prevent excessive bleeding and cure menstrual problems
7	Thipili	<i>Piper longum</i>	Tannins, piperine, essential oils, alkaloids	Cures menstrual pain and involves in relaxation of muscle tension
8	Vendhayam	<i>Foenum gracaum</i>	Stearic acid, βsitosterol, glucopyranoside, glycerol, mono palmitate	Treats stomach pain, stimulate regular menstrual cycle, anti-diabetic
9	Veeli	<i>Cadaba indica</i>	Cadabicine, aromatic acid, capparisine	Heals acne, constipation and leucorrhoea

Table 1: Herbs and their actions.

Conclusion

Comparing the pros and cons of the treatment of PCOS, Siddha treatment stands supreme. In other treatment, PCOS cysts are destroyed by laparoscopy paving the way for pregnancy. This is the temporary treatment wherein the patient seems cured for the short period. In reality, this problem persists and even continuous for long. On the contrary, Siddha Medicinal system treats the patient paving the way for the permanent solution for the problem. Other systems lead to side effects which persist for very long time leading to recurrent illness and various ailments. Siddha treatment analyses the root cause of PCOS and treat it in such a manner that the patient breathes a sigh of relief thanking not only the almighty but also the personal who solves the problem. Thus, the siddha system gives the complete cure to PCOS without any harmful effects.

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