

Treating And Managing Polycystic Ovarian Syndrome With Ayurveda

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I. Western Interpretation of Polycystic Ovarian Syndrome

A. Polycystic Ovarian Syndrome: Introduction

Polycystic ovarian syndrome, sometimes known as Polycystic Ovarian disease, is a common reproductive disease affecting between “5-10% of women ranging in ages from 18-22.”¹ It is a complex disorder aggravated through diet, emotions, thought patterns and a woman's personal history.² Women with PCOS often times experience symptoms such as infrequent or prolonged menstrual periods, excess hair growth, acne, obesity, and other more serious health conditions such as diabetes and cardiovascular disease. Additionally, an absent or infrequent period in adolescent girls may raise suspicion for the condition.³ Polycystic Ovarian Syndrome is further exacerbated by psychological factors such as stress and anxiety and environmental factors such as toxins and pesticide exposure. “Many clinicians now believe that PCOS may be the most prevalent hormonal disorder women have, and... is one of the most common causes of infertility.”⁴

An understanding of the reproductive cycle and symptoms of typical menstruation is helpful when understanding PCOS. Looking at a typical woman's cycle and symptoms is often times used as a diagnostic tool to compare against the cycle and symptoms a woman with PCOS may experience.

B. The Reproductive Cycle

The female reproductive cycle is comprised of multiple hormonal changes that happen in a woman's body in order to prepare her for fertilization and pregnancy. The female reproductive organs include the vagina, uterus, ovum, and fallopian tubes, as well as the hypothalamus and anterior pituitary glands. The hypothalamus and pituitary glands communicate with the ovaries by releasing hormones, including FSH- follicle stimulating hormone and LH- leutinizing hormone which signal to the uterus and ovaries to prepare for fertilization. The hormones estrogen and progesterone hormones fluctuate during the month preparing the women's body for fertilization Estrogen builds the endometrium of the uterus and progesterone assists in thickening the lining which creates a warm place for a fertilized egg to develop. Progesterone levels increase during the second half of the menstrual cycle promoting a thickening of the endometrium lining in the chance that a fertilized egg is present. If no fertilized egg is present in the uterus there is a drop off in progesterone and estrogen hormone levels which signals to the body for the endometrium in the uterus break down and slough off. This sloughing off of the endometrium sets into motion menstruation and is the beginning of a women's menstruation.

C. Common Symptoms Associated with Menstruation:

Many women experience a variety of symptoms while menstruating. Common symptoms include cramping, premenstrual syndrome (PMS), bloating, anger, acne, breast tenderness, and decreased energy. Common reproductive diseases among women include endometriosis, pelvic inflammatory disease, amenorrhea, menorrhagia, dysmenorrhea, cancers of the reproductive organs as well as poly cystic ovarian syndrome

D. Pathology of Polycystic Ovarian Syndrome

A woman with PCOS will have a reproductive cycle that presents differently both hormonally and symptomatically. PCOS presents with "multiple cysts on the ovaries which most often affect hormonal levels and the ability of a woman to get pregnant."⁵ These cysts within the polycystic ovaries are not actual cysts, but are follicles that have halted the maturation process.⁶ In women with PCOS this process unfolds differently and results in abnormal development of the follicle causing anovulation. PCOS is characterized by an increase in follicles that are not able to mature. This is a possible result of low FSH levels in relation to the circulation LH levels in the body, which are not high enough to stimulate maturation. An increase in LH secretion negatively impacts growth of the follicles and ovulation because it decreases the sensitivity of FSH. PCOS is also partially caused by excess testosterone being secreted by the ovaries, as well as excess in androgen secretion.⁷ Dr. Christiane Northrup articulates that "when woman's hormonal cycle is blocked by chronic androgen overproduction, neither she nor her ovaries will experience the natural cyclic changes associated with normal ovarian function."⁸ This leads to cystic formation

from the underdeveloped eggs within the ovaries. In PCOS the developing follicles that ovulate each cycle become trapped within the ovary and over time they swell with fluid and turn into cysts on the ovarian wall. “The cause of these hormonal imbalances is still not totally understood, although increasing evidence now strongly point to the interaction of high blood insulin levels and insulin- sensitive ovaries.”⁹

Controversy exists in the medical community over the name “Polycystic Ovarian Syndrome” because it does not fully encompass the metabolic dysfunction that is directly related to the disorder. Many doctors refer to PCOS as a disease but it is not truly a disease but more a culmination of an underlying imbalance within the body.¹⁰ An expert panel has gathered the list of symptoms associated with PCOS and is working to rename in to take into account all aspects of this dysfunction.¹¹

E. Aggravating Factors of Polycystic Ovarian Syndrome

Medical research cannot explain exactly how and why PCOS occurs, however there are strong correlations on the occurrence in women with aggravating factors including obesity, lifestyle choices, genetic influences and environmental toxins. In her book “The Path of Practice: A Woman’s Book of Healing with Food, Breath, and Sound,” Maya Tiwari notes, “Unbalanced hormonal levels, along with poor nutrition, stress, excessive exercise, and a general disregard for nature’s rhythms, are the key causes of menstrual disorders such as amenorrhea (lack of menstrual period) or menorrhagia (abnormally heavy menstrual bleeding).”¹²

1. Genetics

PCOS has been found to run in families, however may not manifest in all female members within the family. “20-40% of female first-degree relatives of women with PCOS also have the syndrome, suggesting that the disease is partially heritable and clusters in families.”¹³ Children born of a mother with PCOS present with an increased risk in the development of its pathology, displaying abnormalities in both metabolic and reproductive functioning. One particular study found evidence of an increase in insulin production, progesterone levels, metabolic, basal and DHEA levels in pre- and pubescent girls born of mother who have been diagnosed with PCOS.¹⁴

2. Environmental

Some environmental factors have been found to increase the presence and severity of PCOS. Xenoestrogens, which are synthetically endocrine disrupting compounds can cause disruption within the body’s communication channel between endocrine and hormone producing organs. Xenoestrogens are found in many household items such as plastic water bottles, shampoo, conditioner, makeup, sunscreen, and pesticides. “Studies have associated common household objects (known as plasticizers) with obesity, alterations in puberty, and ovulatory dysfunction.

Specifically, elevated levels of bisphenol A (BPA), an estrogen-mimicking compound, may contribute to the pathogenesis of PCOS...A study of lean and overweight women with PCOS reported that both groups had higher levels of BPA as compared to lean and overweight controls.”¹⁵ These researchers found correlating evidence with increased BPA levels and insulin resistance in some women as well as an increase in insulin production, progesterone, and metabolic levels in girls born of a mother diagnosed with PCOS.¹⁶ Interestingly, exposure of androgens (such as DHEA) in utero or childhood has been shown to exacerbate the development of PCOS within animals.¹⁷

3. Obesity

As many as 80% of women diagnosed with PCOS are obese.¹⁸ “Women with a high waist to hip ratio (apple-shaped figures) are more likely to experience ovarian dysfunction”¹⁹ which exacerbates any sort of hormonal or metabolic dysfunction in women with PCOS. Dietary change to decrease body fat and stabilize blood sugar and insulin levels can help create hormonal balance as well as lower estrogen levels.

4. Other

Elevated stresses have been found to negatively impact the reproductive cycle. This includes “negative feelings about being female and also feeling subordinate or inferior...In some women, these negative feelings may work in the body to cause it to stop ovulating and becoming more ‘androgynous.’ In fact, studies in female monkeys have shown that those who are in a position of social subordination will often undergo ovulation difficulties.”²⁰

F. Symptoms of Polycystic Ovarian Syndrome

Common symptoms associated with PCOS include obesity, and hirsutism,²¹ as well as an increased possibility of miscarriage, subfertility, metabolic dysfunction, cardiovascular disease, anxiety, depression, bi-polar disorder, and binge eating.²² Other common signs and symptoms of PCOS include acne, decreased breast size, diabetes, and possible acanthosis, which is dark thick skin in the folds of the skin around the arms, neck, breasts and thighs.²³ Depression, anxiety, and other emotional disturbances, “can be the result of changes of appearance, menstrual irregularities, and possible disturbances in the sexual attitude and behavior which may end in an ambiguous gender identity.”²⁴

G. Cause of Polycystic Ovarian Syndrome

It has been estimated that one in every 10-15 women suffer from PCOS.²⁵ While there is no direct causative factor for PCOS, there are some commonalities in women who suffer from this disease and lifestyle practices that aggravate the symptoms. Dr. Christiane Northrup notes that women with ovulatory dysfunction often present with anxiety, and are less mentally productive

than ovulatory healthy women. She suggests there might be incidences of suppressed anger at their mothers as well as some “guilt and fear about their need for parental care and protection and also fear about losing this protection. As they grow up, this can manifest as amenorrhea- an attempt to ‘halt’ becoming fully mature women.”²⁶ Additionally, there appears to be low-level inflammation in the adipose fat tissue with PCOS. “Studies have shown enlarged abdominal subcutaneous adipocytes in women with PCOS, independent of BMI. Research has shown that enlarged fat cells and reduced serum adiponectin, together with a large waistline, are the strongest factors predicting insulin resistance in women with PCOS, and these appear to be central factors in the maintenance of insulin resistance in PCOS.”²⁷

H. Receiving A Diagnosis of Polycystic Ovarian Syndrome

PCOS cannot be diagnosed by symptoms alone. A medical provider must also analyze hormone levels and reproductive organs. Hormone testing evaluates hormone, glucose and cholesterol levels.²⁸ Physicians will check the ratio of LH to FSH hormone, since women with PCOS will sometimes present with a ratio of 3:1 of LH to FSH which changes the occurrence of ovulation.²⁹ Many physicians look at cholesterol levels when doing blood tests for PCOS. “Women with PCOS have a greater tendency to have high cholesterol, a major risk factor for developing heart disease.”³⁰ Diagnostic criteria for PCOS includes hyperandrogenism, anovulation and the presence of polycystic ovaries.³¹ Discussing signs and symptoms with a physician is one of the most common diagnostic tools for PCOS. This will include the discussion of past medical history, weight and the quality of menstruation. Sometimes a physical and/or pelvic exam will be performed to look for abnormal growths or irregular variances in the reproductive organs. An ultrasound might be used to examine the ovaries and uterus showing any enlargements in the as well as any possible cysts that are present.³² Girls and teens entering reproductive age may be diagnosed based upon signs and symptoms of hyperandrogynism and oligomenorrhea without the use of ultrasound.³³ According to the Androgen Excess/PCOS Society Task Force Report, as many as “85% of women with PCOS have clinical evidence of menstrual irregularities.”³⁴ Considering the high number of girls who experience irregularities, education and meeting with a medical professional about concerns can prove to be very helpful in early diagnosis and treatment of any disturbances. Recognizing and intervening with metabolic dysfunction, diabetes, and any cardiovascular dysfunction can lead to a lessened risk and occurrence.³⁵

I. Short Term and Long Term Effects of Living With Polycystic Ovarian Syndrome

Women who have received a diagnosis of PCOS are at greater risk for a variety of diseases including type II diabetes mellitus, infertility, and other metabolic dysfunction disease. Often times these women are obese or suffer from metabolic dysfunction. Additionally, women with

PCOS have a “greater degree of insulin resistance than patients with the same BMI and visceral adiposity who do not have PCOS.”³⁶ “Women with PCOS have multiple risk factors for endometrial cancer that include obesity, metabolic abnormalities (such as diabetes and hypertension), and a history of oligomenorrhea with prolonged exposure to unopposed estrogen. Studies have noted a 2.7-fold increased risk for developing endometrial cancer versus the general population.”³⁷

J. Western Treatment for Polycystic Ovarian Syndrome

There have been strides made in treatments for PCOS, most of which are geared towards alleviating the symptoms and not addressing the underlying imbalance. Traditional, western treatments include drug therapy in order to stop or alter the hormone production.³⁸ Furthermore, research has found that many women with PCOS have been helped by lifestyle and dietary changes alone.³⁹

1. Drug Therapy

Most treatments involve management for acne, hirsutism, infertility, obesity, and pain with medications prescribed to manage pain, regulate the menstrual cycle, encourage ovulation, lower insulin levels or reduce the growth of excess body and facial hair.⁴⁰ “More recently, there has also been an emphasis on drugs designed to regulate the body’s production of insulin...There have also been promising results with a nutritional supplement called D- chiro-inositol, which also lowers insulin levels and allows for a natural ovulation.”⁴¹

2. Diet and Exercise

Many of the symptoms of PCOS can be relived through weight management, dietary changes, and exercise. Dr. Christiane Northrup articulates “A dietary approach that nourishes the body fully will also help a woman attune herself to her spiritual, intuitive side. This helps reestablish emotional flow and can often help to normalize a woman’s hormone levels.”⁴² A study in Australia noted that lifestyle changes with diet, exercise, help alleviate symptoms associated with PCOS.⁴³ Weight loss through diet, exercise and lifestyle reduces androgens circulating in the body and insulin sensitivity improves as well as reduction in hyperinsulinemia and improved menses cycle and fertility.⁴⁴ A low glycemic index diet can help to normalize hormone levels within the body. This is indicated because highly refined foods increase blood sugar levels and leads to an increase in inflammation and tissue damage in the body. Including foods such as fresh vegetables, fruits, and proteins help to stabilize hormones. More specifically an inclusion of cruciferous vegetables like kale, broccoli, cabbage, collard and mustard greens have shown their ability to reduce estrogen levels.⁴⁵

3. Lifestyle Treatments

Sweating and aerobic exercise is a prescribed treatment because of its ability to detoxify the body and increasing endorphins which decreases stress and cellular inflammation.⁴⁶ To help reestablish ovulatory flow such protocols as going on regular walks in nature, waking at the same time, sleeping in darkness, turning off electronic devices by ten o'clock, and eating the largest meal of the day at noon has been recommended by Dr. Lipman, an integrative medicine specialist in New York.⁴⁷ Additionally, stress reduction alleviates many symptoms of PCOS. Meditation practiced between 15-20 minutes twice a day has been suggested by Herbert Benson Director Emeritus of the Benson-Henry Institute (BHI), and Mind Body Medicine, Professor of Medicine at Harvard Medical School.⁴⁸ Ovulatory function can be further restored through reflection on past negative messages that may have been internalized during childhood about fertility and being a woman.⁴⁹

II. Ayurvedic Interpretation of Polycystic Ovarian Syndrome

A. Disease Classification

PCOS is a single disease that presents with a variety of symptoms which have been listed above. While PCOS is not specifically identified in the Ayurvedic texts there are terms that can be used to talk about the symptoms associated with the diseased condition. Diseases of the uterus are referred to “Garbharoga” in Ayurvedic medicine. Under Ayurvedic classification PCOS is often times classified as “gulma.” Gulma has a variety of meanings in Ayurvedic medicine, and in this case refers to an abdominal mass, lump, or cyst due to a vitiation of Vata dosha.⁵⁰ The Charaka Samhita notes that there are five sites of gulma, of which the first is the pelvis.⁵¹ PCOS is included under this classification of “gulma,” and more specifically under “raktagulma” because of the associated symptoms of bloating, pain, delayed or absent menstrual periods, sub or infertility and dysmenorrhea. The Charaka Samhita states, “Raktagulma occurs only in women and not in men because of the specific presence of uterus and menstrual flow in the former... This vitiation of vata having entered into the mouth of the uterus checks the menstrual flow. In every month the menstrual blood being checked enlarges the abdomen. This patient, consequently, suffers from pain.... There is pulsation in the entire mass of gulma.”⁵² PCOS is also sometimes labeled under the classification of “Granthi” which refers to a tumor, cyst, lump, or ulcer. “The main clinical feature of Granthi is swelling or protuberance... Granthi available in Ayurvedic classics can be compared with PCOS.”⁵³

B. Doshas, Subdoshas, and Srotas Involved In PCOS Pathology

Any imbalance or diseased condition is seen as interplay and imbalance between the doshas. Each of the three doshas Vata, Pitta, and Kapha have a specific role in the female reproductive cycle. Vata dosha rules the reproductive system, and the organs are located in artava dhatu, these are the

tissues of the reproductive organs. Artava provides nourishment for the ovum and allows movement of the egg from the ovum to the uterus. Vata, “is responsible for movement of the follicle during the ovarian cycle, the rupture of the ovary wall releasing the matured ovum, the movement of the fimbriae – the finger like projections that guide the ovum into the fallopian tubes and the movement of the ovum towards the uterus.”⁵⁴ Apana vayu, one of the five subdoshas of vata, allows for the downward movement of menstruation fluid and delivery of a child during labor. Pitta is responsible for transformation, and influences hormonal balances. Kapha dosha is responsible for providing nourishment and growth of the tissues such as the growth of follicles, uterus, and the development of an egg and sperm into a fetus. PCOS is a sannipatika or tridoshic condition. The disease begins as a vata imbalance, which pushes kapha and pitta out of balance in the shukra vaha srota, or reproductive channel. When vata becomes vitiated in the shukra vaha srota it manifests as an irregular menstrual cycle. Pitta vitiation in leads to acne, hirsutism, and hormonal imbalances including excess circulating testosterone in the body. Kapha vitiation leads to symptoms associated with cysts, and weight gain.

Evidence/ Symptom	Dosha	Subdosha	Dhatu	Dhatu incr. or decr.	Srota⁵⁵
Irregular Menstruation	Vata	Apana	Shukra	Dec	Shukra vaha srota
Hirtuism	Pitta	NA	Shukra/ rakta		Shukra vaha srota
Acne	Pitta	Ranjaka	Rakta	Inc	Rakta vahhs srota
Thick capsules and cysts	Kapha	NA	Shukra	Inc	Shukra vaha srota
Obesity	Kapha	Avalambaka	Medas	Inc	Medo vaha srota

C. Ayurvedic Pathology of Polycystic Ovarian Syndrome

1. Nidana (Etiology)

PCOS is not mentioned in the Ayurvedic texts as a single disease but rather the individual symptoms and is associated with unhealthy diet, lifestyle, and menstrual irregularities. The Astanga Hridayam states that twenty diseases of the vagina arise because of consumption of bad foods.⁵⁶ Consuming an improper diet leads to the manifestation of all disease, therefore the primary medicine is to consume an appropriate diet for the individual. Any disease related to the reproductive system has an element of Vata vitiation. PCOS includes symptoms associated with vitiation in all three doshas, however is a disease of primary Kapha imbalance. The Charaka Samhita notes kapha vitiation to be seen in heaviness in the body, excess weight and accumulation in the vessels.⁵⁷

Food taken in that aggravates Kapha dosha is the first stage in the disease process. The Charaka

Samhita states that those who indulge in heavy diets and do not exercise will experience diseased conditions caused by the accumulation of too much ama, or toxins, into their body, over-obesity, and obstruction to the channels.⁵⁸ An excess of food can weaken the jathari agni or digestive fire, leading to incomplete and sluggish digestion of food which builds ama or toxins in the body. Consequently each of the dhatu agni, which provides nourishment and growth for each of the seven dhatus layers are effected.

2. Rupa (Symptoms)

Symptoms for Polycystic Ovarin syndrome are the same in the Ayurvedic and Western perspectives. The Charaka Samhita describes symptoms associated with gulma as intense pain, burning sensation inflammation and a decrease in agni or digestive fire.⁵⁹

3. Samprapti (Pathogenesis)

Vata dosha vitiation initiates the manifestation of Polycystic Ovarian Syndrome. According to Charaka, “a woman never suffers from gynecic diseases except as a result of affliction by the aggravated vayu. Therefore, first of all, the aggravated vayu should be alleviated, and only thereafter, therapies should be administered for the alleviation of other doshas.”⁶⁰

Additionally, the Astanga Hridayam notes that “without the aggravation of Vata, the vagina does not get disordered in women; hence this should be won over first and the others treated next.”⁶¹

Vata is understood to control all movement and kapha and pitta doshas require vata dosha to provide movement, otherwise they are immobile. Apana vayu the subdosha of vata governs the downward and outward movement of the body. Apana becomes blocked the increase of kapha dosha in the body. The blockage of vata subsequently blocks pitta dosha. This vitiation interrupts the movement and transformation of hormones, which are thus unable to perform their actions. The Charaka Samhita articulates the samprapti this way, “Vayu gets vitiated in the belly due to excessive discharge of feces, kapha and pitta or compression because of their excessive accumulation or suppression of impelled downward urges or external injury or excessive pressure or excessive intake of rough food and drinks or grief or faulty application of evacuative measures or uneven and excessive movements. That vitiated vayu aggravates kapha and pitta and obstructing the passages through them produces pain in the cardiac region, navel, sides, abdomen, and pelvis and does not move downwards due to blocking of the passage, thus located in pakvasaya (colon), pittasaya or kaphasaya, independent or dependent, known by palpitation acquires the name of gulma (lump) due to its lumpy nature according to the dosa.”⁶² Symptoms associated with aggravated vata is the dysfunction of apana vayu creating amenorrhea or irregular or absent menstruation. Aggravated pitta is seen in acne, and excess body hair.

Toxins, or ama accumulates in the digestive tract from the heavy diet. As the ama continues to

accumulate it leaves its original site of kledaka kapha in the stomach and enters into each subsequent tissue of the body penetrating more and more deeply beginning with rasa dhatu (lymph and plasma tissue). The mala, or byproduct of rasa dhatu is menstrual blood. The menstrual fluid is being fed by the ama rich qualities of kapha and blocks the downward movement of apana vayu. Once Kapha has accumulated and is aggravated within rasa dhatu, the rasa then circulates throughout the body and with it circulates the ama that is created during the digestive process due to slow and sluggish digestion. With ama rich rasa circulating through the tissues and cells of the body its heavy dense qualities begins to deplete the agni (digestive fire) of each individual cell by saturating them, this decreases their responsiveness to insulin and other hormones. “Insulin unable to engage cellular receptors begins to build up in the blood stream moving towards artava dhatu where it comes across free receptors that engage its molecular structure.”⁶³ There is a similar effect of Kapha in medas dhatu, or the fat tissue of the body. The agni of medas dhatu is effected by the ama created in the body by excess kapha dosha, which in turn leads to increased medas dhatu or fat in the body this causes obstructions in some of the srotas of the body. Kapha is also observed to relocate deeper into the body entering the mano vaha srota (mind) where it’s heavy dense qualities manifest depression.⁶⁴ As the ama rich medas dhatu enters deeper into the body and feeds the artava dhatu it leads in to an increase in the formation of tissue within the reproductive system creating cysts. It “affect(s) the cellular intelligence of the cell by dampening pithara agni causing error in cellular function and intelligence as seen when insulin engages receptors on the ovaries causing the production of androgens .”⁶⁵ Kapha has thus accumulated in the artava vaha srota and is seen manifested through the formation of a cyst on the ovary and subsequent absent menstruation.

D. Ayurvedic Treatment of Polycystic Ovarian Syndrome

Ayurveda provides a variety of specific and individualized treatments that assist in alleviating and eliminating the symptoms of PCOS. Ayurveda treats disease through diet, herbal medication, and lifestyle changes. Treatments for the disease are indicated based upon the nature, site and eiology of the symptoms.⁶⁶ PCOS affects all three of the doshas, so treatment of all three doshas is cornerstone in being able to treat and manage this disease. Treatment protocol includes clearing the obstruction, regulating menstruation ,and normalizing agni and metabolism. Other symptoms associated with PCOS are seen to improve as the primary symptoms are treated. Primary lifestyle treatments should focus on creating steady routines in both eating and sleeping, which helps in stabilizing vata dosha and the hormone levels.⁶⁷

1. Vata Treatment for Polycystic Ovarian Syndrome

Vata vitiation results in irregular menstruation and pain. A nourishing diet consisting of whole

grains, root vegetables, spiced with warm digestive herbs healthy fats will help to alleviate Vata. Including meditation, breathing exercises, and other grounding practices help to balance Vata. Analgesic and reproductive tonics will be prescribed to assist with pain and restoring a healthy cyclic flow. Herbs such as shatavari and wild yam are helpful with these conditions.⁶⁸

2. Pitta Treatment for Polycystic Ovarian Syndrome

Pitta vitiation can result in hirsutism, acne, cardio vascular and heart problems. Including a Pitta pacifying diet consisting of cool, bitter, and sweet foods is beneficial in balancing the vitiation. Decreasing intensity through play, spending time in nature, and cool pranayama exercises are effective lifestyle practices to aide in alleviating the intensity. Herbs such as manjistha and ashoka are helpful herbs in treating hirtuism as well as neem and kutki in the treatment of acne.⁶⁹

3. Kapha Treatment for Polycystic Ovarian Syndrome

Kapha vitiation results in weight gain, the growth of cysts, and depression. Consuming a kapha reducing diet of light, bitter and astringent foods and tastes is recommended. Digestive spices such as turmeric, cumin, ginger, and black pepper help to increase the agni and decrease ama. The inclusion of exercise is of high importance. Practitioners may suggest a strong vinyasa type yoga classes or other cardio vascular activities. Stimulating kapha through heating pranayama exercises, earlier waking times, and warming activities such as sun bathing or use of a saunas are also recommended. In the treatment of obesity enema or bastis prepared with triphala are recommended.⁷⁰ Triphala and chandraprabha are effective obstruction clearing herbs which can clear the presence of cysts.⁷¹ Treating and managing depression in PCOS is vitally important, the “quality of life in women with PCOS has been reported lower than of normal women and even lower than of people with some diseases such as diabetes, asthma and epilepsy.”⁷² Depression can be treated through the use of exercise and the use of herbs such as shatavari, chandraprabha, shatapushpa, manjistha, and guggul.

4. Pancha Karma For Polycystic Ovarian Syndrome

Pancha Karma is a cornerstone in Ayurvedic medicine and can be used in treating PCOS. Pancha Karma consists of five therapies which helps to clear ama and balance agni. A practitioner will look at the level of ama and ojas in a patient to assess if they are strong enough to undergo this treatment. The five treatments include:

-Vamana, which is induced vomiting. It is recommended in the treatment of weight loss as it aids in the removal of excess kapha dosha.

-Virechana, or purgation therapy alleviates pitta by removing heat in the small intestine and liver, which aids in balancing hormonal levels in the body.

- Basti, or enema, is another therapy used in Pancha Karma treatment. Both utara and rectal

bastis are effective in treating disease in the vagina and uterus. “In diseases of the urinary bladder and of vagina and uterus in women, uttarabasti should be administered, to those who have purified by two or three decoction enemas, per rectum.”⁷³ Bastis treat amenorrhea and hypomenorrhea by clearing obstructions and restoring flow to apana vayu⁷⁴ and assist with the elimination of “accumulated impurity stationed all over the body.”⁷⁵ Once a basti is administered the medicine spreads throughout the body and helps to remove excess dosha. Basti regulates the functioning of the hypothalamus which normalizes menstruation.⁷⁶

-Oleation and fomentation help to cleanse purify the body. “Uction destroys vata, softens body and removes retention of excrements. Fomentation (applied) to the unctioed person liquefies the impurity hidden in minute channels.”⁷⁷ Oleating the body internally with ghee and externally with oil the body softens ama and toxins in the body. Fomentation liquefies the toxins and removes it from their sites in the body leading to clearer channels and improved health. Charaka Samhita states that diseases of vata origin in the vagina benefit from oleating, fomentation and enema.⁷⁸

5. Herbal Treatment for Polycystic Ovarian Syndrome

Ayurveda uses herbs as treatments for disease and to balance the dosha. Common herbs used in the treatment of PCOS include: triphala, shatavari, gaduchi, chandraprabha, shatapushpa, aloe, ashoka, manjistha, guggule, wild yam, and vajikaranas or sex tonic herbs.

-Triphala is one of the most commonly prescribed herbs in Ayurvedic medicine, it helps to increase the movement of apana vayu, and clean and detoxify the digestive system.⁷⁹ It also is helpful in weight management.

-Shatavari is known to regulate menstruation, nourishes the reproductive system, corrects hormonal imbalances, treats depression, supports the maturation of follicles, and reduces the incidence high insulin levels.⁸⁰ In their book, “The Yoga of Herbs” David Frawley and Vasant Lad describe shatavari as both nourishing and cleansing for the blood and reproductive organs in addition to being rich in the female hormones. Moreover, it is nourishing to the ovum and increases a woman’s fertility.⁸¹

-Gaduchi aids in lowering insulin resistance, reducing inflammation, and nourishes the tissues.⁸² It works with the body in building ojas, or the strength, vitality, and immunity. The Charaka Samhita recommends the usage of gaduchi when treating gulma, especially in the genital tract.⁸³

-Chandraprabha is a prescribed in the treatment if painful menstruation, amenorrhea, PCOS, anxiety, depression, and stress. It assists with the removal of cysts and corrects ovulatory function. It is a reproductive and “assists other medicines act better and more efficient.”⁸⁴

-Shatapushpa, also known as fennel, is rich in phytoestrogens, which “helps in reducing insulin

resistance and in bringing down the inflammation in PCOS.”⁸⁵ Shatapushpa helps in regulating menstruation and alleviating pain associated with menstruation.⁸⁶ Direct studies using this herb specifically for the treatment of PCOS is discussed under the section labeled “Other Treatment Protocol In he Treatment of Polycystic Ovarian Syndrome.”

- Ashoka is a tonic herb, which can treat almost any reproductive dysfunction. It has been shown to be especially powerful in treatment of PCOS when combined with chandraprabha. Ashoka works with the endocrine system by balancing hormones, thus treating hirtusim, obesity, and acne. It reduces low-grade inflammation, and treats the cysts.⁸⁷

-Aloe, is a potent plant in renewing and rejuvenating the reproductive system. It promotes menstruation, balanced hormones and regulates ovulation and menstrual cycles.⁸⁸ It is a known emmenagogue, treats obesity, amenorrhea, dysmenorrhea and tumors. Aloe tonifies the liver, which helps to balance hormones. Additionally, it regulates metabolism and rejuvenates the uterus.⁸⁹

- Manjistha has been used to improve the function of the circulatory and female reproductive systems. It is used in of amenorrhea, dysmenorrhea, and menorrhagia as well as anxiety and depression. Manjistha, “dissolves stones and helps destroy tumors, benign or malignant.”⁹⁰

- Guggul works on all seven tissues of the body and is indicated in treatment of diabetes, obesity, skin diseases, sores, ulcers, and tumors. Guggul calms the nervous system and is helpful in the treatment of depression. It is has a powerful action in regulating menstruation, reducing fats and tumors.⁹¹

- Wild Yam is known to work on the nerve and reproductive tissues and is an antispasmodic and analgesic aiding in the relief of pain and cramping associated with PCOS. Containing female hormones, the American variety of Wild Yam supports the reproductive system.⁹² Additionally, wild yam is indicated for the use of balancing menstrual irregularities.⁹³

-Vajikaranas are herbs that help to rejuvenate sexual function and can be an effective treatment for some of the side effects of PCOS. Women with PCOS has reported difficulty with lubrication and excitation with sex, some women have lower than average sex drives especially with excitation, eroticism and reaching orgasm.⁹⁴

6. Other Treatment Protocol In the Treatment of Polycystic Ovarian Syndrome

-The use of castor oil packs as a treatment for PCOS is recommended in both Western and Ayurvedic modalities. The use of castor oil packs aids in decreasing the size of growths in the body, improving circulation to the uterus and reliving discomfort.⁹⁵ Packs are made by soaking a piece of cloth like flannel or wool in castor oil and placing the oil soaked cloth on the skin of the lower abdominal region and covering with a towel and warm water bottle or a piece of plastic.⁹⁶

-A study in Sri Lanka found a reduction in the appearance of polycystic ovaries, an improvement in follicular maturity, and a return of normal hormone levels with the use of Ayurvedic herbs and body therapies. Triphala, kwatha, chandraprabha, and manibhadra were used to rejuvenate the reproductive system. Other herbs like Shatavari, shatapushpa, gaduchi, Krishna jeeraka atibala , and rasayana kalpa were also used. The inclusion of abhyanga and utara basti were also administered in the treatment. Success of this protocol in treatment is quite profound. After treatment concluded irregular menstruation was present in only 25% of the patients. 75% experienced relief from dysmenorrhea, 87.5% were relieved from skin discoloration, 85% returned to a normal BMI, 85% were considered cured from PCOS, and 75% were able to conceive. After 1 year of treatment 90% of these women were considered cured of which 85% were able to conceive.⁹⁷

-The International Quarterly Journal of Research in Ayurveda in 2012 published a study finding a positive results in the treatment of all symptoms of PCOS with the use of a Shatapushpa Taila Matra Basti. When treated with Shata Taila Matra Basti 33.33% of patients completely resolved PCOS and considered in remission, 8.33% showed moderate improvement, 16.67% mild improvement and 41.68% reported no significant improvement. Menstrual regulation was improved, weight loss achieved, follicular growth and ovulation were observed. This specific treatment proves hopeful for women who are looking for relief from the symptoms of PCOS.⁹⁸

-One particular study titled “Clinical Efficacy of Ayurveda Treatment On Polycystic Ovarian Syndrome,” conducted a three month treatment proving successful treatment of PCOS through Ayurvedic protocol. Herbs such as: ashoka, manjistha, salmali, lodhra, rasanjan, sariva, gokshura, punarnava, nagkeshar, chandan, amalaki, haridra, dugmar, gaduchi, methi and vijayasar were administered with great success. Uttara basti, oleation, and fomentation alleviated many symptoms including a reduction the appearance of polycystic ovaries and improvements in follicular maturity. 76% of women treated saw symptoms of improvement in their menstrual cycle, 92% were relieved from dysmenorrhea, and 85% reported normal BMI levels, 62% were able to conceive after 6 months and 87% were considered cured.⁹⁹

E. Conclusion

Ayurveda has shown great success in treating all symptoms associated with PCOS. The inclusion of herbs, diet, and lifestyle changes has completely transformed women’s lives as it restores ovulation, fertility and reduces the presence of cysts and other symptoms of the disease. Utilizing one or more of these therapies can help to alleviate and eliminate the symptoms. Some of these therapies such as improved diet and increased exercise can be initiated by women independently, while other therapies such as herbal medications and body therapies should be administered while

under the care of a well- versed Ayurvedic practitioner. With the implementation of one or more of the above therapies a woman will see an improvement in one if not all of her symptoms.