

A CONCEPTUAL STUDY OF ROLE OF ASANA IN POLYCYSTIC OVARY SYNDROME

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ABSTRACT

Polycystic ovarian syndrome has become a common endocrine disorder now a days among female. It is complex condition characterized by elevated androgen level, menstrual abnormalities. Obesity, acne, amenorrhea, excessive hair growth and infertility are associated symptoms of polycystic ovarian syndrome. Women seeking help for all the problems from health care professionals. Here, in this situation Yoga can play an important role in resolving all those symptoms. Ancient science -*Ayurveda* described the role of *Asana* in various diseases as well as in PCOS. Yoga mainly improves reproductive functions by reducing stress and balancing the neurohormonal profile. Also, *Ayurveda* explained involvement of *dosha*, *dhatu* and *upadhatu* in PCOS.

KEYWORDS: PCOS, *Asana*

INTRODUCTION

PCOS (Polycystic ovary syndrome) is a common female endocrine disorder with prevalence ranging from 2.2% to 26% with the age group ranging from 18 to 45 years.¹ Polycystic ovary syndrome (PCOS) is common endocrine system disorder among women of reproductive age most women with PCOS have many small cysts on their ovaries hence it is called PCOS.² It also reduces urinary excretion of catecholamines and aldosterone, decreases serum testosterone and levels, and increases cortisol excretion, indicating optimal changes in hormonal profiles.³

The incidence of PCOS appears to rising in India day by day it is seen as many as 5% to 10 % of women in their reproductive age the incident is increasing may be due to change

in life style to more sedentary existence overcome, lack of exercise, stress, strain, high caloric food & indiscriminate dietary habit result in metabolic, endocrinal, reproductive disturbances. Therefore women face various problem related to reproductive disorder like irregular menstrual cycle, ovarian cyst, miscarriage, irritability, abdominal bloating, hair loss, acne, blemishes, hair growth in face, increase weight etc.⁴ As PCOS becomes a major problem in women and to overcome this people are looking for better option like *yoga* and *Ayurveda*.

In *Ayurveda*, there is no direct reference about PCOS but when we go through the literature there are many references which are nearer to sign and symptom on PCOS.

Clinical features of PCOS are nearer to *Pushpaghni Jataharini*. According to the reproductive point of view, the pathogenesis of PCOS is similar to condition of *Nashtartva*. Vitiation of *vatakaptha* (↑ estrogenic state) leads to Avarana of Artava (inhibition of FSH) leads to *Nashtartva* (no proper growth of follicles and chronic anovulation).⁵

Yoga can play important role in the prevention & management of PCOS. Yoga can maintain the Physiology of H-P-O axis. Yoga is one of the important refreshing and rejuvenating modalities which can content and even root out stress completely. Since stress is playing important factor in exaggerating PCOS. Yoga helps to regulate the endocrine glands in body there by beneficial in balancing of hormones. Yoga is effective in keeping your ovary & Uterus healthy. Yoga is precious gift which can enrich human life.⁶

Yogic life style, a form of holistic mind-body medicine, is known to reduce stress and sympathetic tone randomized controlled trial found holistic yoga program for 12 weeks to be significantly better than physical exercise in reducing Anti-Mullerian Hormone, Luteinizing Hormone and Testosterone, Modified Ferriman and Gallway (mFG) score for hirsutism and improving menstrual frequencies in PCOS patients.⁷

Concept of yoga: -

The word *Yoga* derived from the *Sanskrit* root '*yuj*' meaning to bind, join, attach and yoke, to direct and concentrate one's attention on, to use and apply. It also means union.⁸

Union of mind with super natural power having separated from the disharmonious

worldly objects. Mind is a battle field of *Satva* (the tranquil), *Rajas* (the Passionate) and *Tamas* (the inert) qualities of nature. *Yogik* processes greatly help the development of mental Potentialities and powers. In *Ayurveda Charak Sharir Sthan* Indicate that *yoga* is highly essential for the human being, so he has indicated that isolation of mind from its object leads to *moksha*, which is ultimate end of human life.⁹

LITERATURE:

Asana: -The third limb of *yoga* is *asana* or posture. Asana brings steadiness, health and lightness of limb. A steady and pleasant posture produces mental equilibrium and prevent fickleness of mind. *Asana* have been evolved over the centuries so as to exercise every muscle, nerve and gland in the body. They secure fine physique, which is strong and elastic without being muscle bound and they keep the body free from disease. They reduce fatigue and soothe the nerves. But the real importance lies in the way they train and discipline the mind.¹⁰

***Bhujangasan*¹¹:**

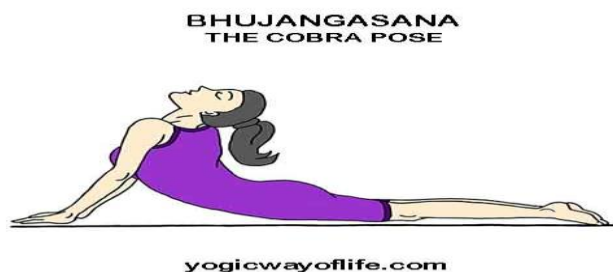
Technique: -

1. Lie on the floor face downwards extends the legs, keeping the feet together. Keep the knees tight and toes pointing.
2. Rest the palms by the side of the pelvic region.
3. Inhale, press the palms firmly on the floor and pull the trunk up take two breaths.
4. Inhale, lift the body up from the trunk until the pubis is in contact with the floor and stay in this position with the weight on the legs and palms.
5. Contract the anus and the buttocks tighten and thighs.

6. Maintain the pose for about 20 seconds, breathing normally.

7. Exhale, bend the elbows and rest the trunk on the floor. Repeat the procedure two to three times and then relax.

IMAGE-1¹⁷



Effects:

Sacroiliac, lumbar, dorsal region of the spine benefit along with the neck and shoulder muscle which are fully stretched. In this pose more blood circulates in the pubic region which is kept healthy. The thyroid, parathyroid, adrenals and gonads receive a copious supply of blood result in increased vitality.

Upavishta konasan¹²:

Technique:

1. Sit on the floor with the legs stretched straight in front.
2. Move the legs sideways one by one and widen the distance between them as far as you can keep the legs extended throughout and see that the back of entire legs rests on the floor.
3. Catch the big toes between the respective thumbs and index, middle fingers.
4. Keep the spine erect and extend the ribs pull the diaphragm up and hold the pose for a few seconds with deep breaths.
5. Exhale, bend forward and rest the head on the floor. Then extend the neck and place the chin on the floor

6. Then clasp the feet with the hands and try to rest the chest on the floor stay in this position from 30 to 60 sec with normal breathing.

7. Inhale, raise the trunk off the floor and release the hold on the floor bring them together and relax.

IMAGE-2¹⁷



Effects:

The asana stretches the hamstring and help the blood to circulate properly in the pelvic region and keep it healthy. Asana controls and regulates the menstrual flow and stimulates ovaries it is a boom to women.

BaddhaKonasan¹³: -

Technique:

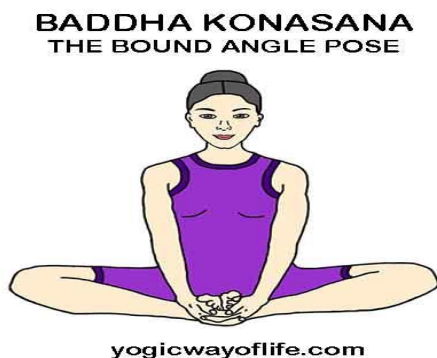
1. Sit on the floor with the legs stretched straight in front.
2. Bend the knees and bring the feet closer to the trunk.
3. Bring the soles and heels of the feet together catching the toes bring heel near the perineum, the outer side of the both the legs should rest on the floor and the back of the heel should touch the perineum.
4. Widen the thigh and lower knees until they touch the floor.
5. Interlock the fingers of the hands, grip the feet firmly stretch the spine erect and gaze straight ahead or at the tip of the nose. Hold the pose as long as you can.
6. Place the elbows on the thigh and press them down. Exhale, bend forward, rest the

head, then the nose and lastly the chin on the floor hold this position from half a minute to a minute with normal breathing.

7. Inhale, raise the trunk from the floor and come back to position.

8. Then release the feet straighten the legs and relax.

IMAGE-3¹⁷



Effect:

The pose is a blessing to women it checks irregular menstrual period and helps the ovaries to function properly.

Utkatasana:¹⁴

Ukatameans powerful, fierce, uneven. This asana is like sitting on an imaginary chair.

Technique:

1. Stand in Tādāsana stretch the arms straight over the head and join the palms.
2. Exhale, bend the knees and lower the trunk till the thighs are parallel to the floor.
3. Do not stoop forward, but keep the chest as far back as possible and breathe normally.
4. Stay in the pose for a few seconds, 30 being sufficient. It is difficult to balance in this pose.

5. Inhale, straighten the legs lower the arms, come back to Tādāsana and relax.

IMAGE-4¹⁷

UTKATASANA
THE CHAIR POSE



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Effects

The diaphragm is lifted up and this gives a gentle massage to the heart. The abdominal organs and the back are toned, and the chest is developed by being fully expanded.

Dhanurasana:¹⁵

Dhanu means a bow. The hands here are used like a bow-string to pull the head, trunk and legs up and the posture resembles a bent bow.

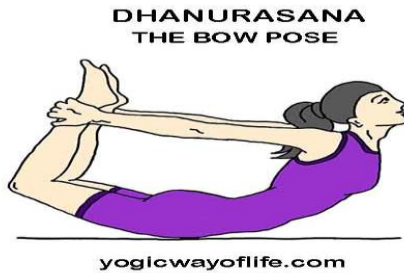
Technique

1. Lie full length on the floor on the stomach, face downwards.
2. Exhale and bend the knees. Stretch the arms back and hold the left ankle with the left hand and the right ankle with the right hand. Take two breaths.
3. Now exhale completely and pull the legs up by raising the knees above the floor, and simultaneously lift the chest off the floor. The arms and hands act like a bow-string to tauten the body like a bent bow.
4. Lift up the head and pull it as far back as possible. Do not rest either the ribs or the pelvic bones on the floor. Only the abdomen bears the weight of the body on the floor.
5. While raising the legs do not join them at the knees, for then the legs will not be lifted high enough. After the full stretch upwards has been achieved, join together the thighs, the knees and the ankles.

6. Since the abdomen is extended, the breathing will be fast, but do not worry about it. Stay in the pose to your capacity from 20 seconds to one minute.

7. Then, with an exhalation, release the ankles, stretch the legs straight, bring the head and the legs back to the floor and relax.

IMAGE-5¹⁷



Effects

In this posture the spine is stretched back. This āsanabring back elasticity to the spine and tones the abdominal organs.

Utthita Pārsvakoṅāsana:¹⁶

Pārśva means side or flank. *Kona* is an angle. This is the extended lateral angle pose.

Technique

1. Stand in *Tādāsana*. Take a deep inhalation and with a jump spread the legs apart sideways 4 to 4 feet. Raise the arms sideways, in line with the shoulders, palms facing down.

2. While exhaling slowly, turn the right foot sideways 90 degrees to the right, and the left foot slightly to the right, keeping the left leg stretched out and tightened at the knee. Bend the right leg at the knee until the thigh and the calf form a right angle and the right thigh is parallel to the floor.

3. Place the right palm on the floor by the side of the right foot, the right armpit covering and touching the outer side of the

right knee. Stretch the left arm out over the left ear. Keep the head up.

4. Tighten the loins and stretch the hamstrings. The chest, the hips and the legs should be in a line and in order to achieve this, move the chest up and back. Stretch every part of the body, concentrating on the back portion of the whole body, especially the spine. Stretch the spine until all the vertebrae and ribs move and there is a feeling that even the skin is being stretched and pulled.

5. Remain in this pose from half a minute to a minute, breathing deeply and evenly. Inhale and lift the right palm from the floor.

6. Inhale, straighten the right leg and raise the arms.

7. Continue with exhalation as in positions 2 to 5, reversing all processes, on the left side.

8. Exhale and jump back to *Tādāsana*.

IMAGE-6¹⁷

UTTHITA PARSVAKONASANA EXTENDED SIDE ANGLE POSE



Effects

It corrects defects in the calves and thighs, develops the chest and reduces fat round the waist and hips. It also increases peristaltic activity and aids elimination.

DISCUSSION

Many articles are available on *yoga* in PCOS but no article has explained use of *upavishtakonasana*, *utkatasana*, *utthita parsvakonasana* and *Dhanurasana* in detail.

According to *Ayurveda* sedentary lifestyle, weight gain and mental stress leads to *kaphavidhi* and also *medovidhi* which in turn causes *strotovarodha* / obstruction to *vata*. Vitiating of *doshas* causes *agnimandya*. *Kaphadosha* provides nourishment to channels that carries nutrition to reproductive organs of body. Also *vataadosha* is responsible for movement of follicle in ovarian cycle, rupture of follicle, movement of fimbriae; finger like projection that guides ovum through fallopian tube to uterus. *Apana vayu* is responsible for energy required in menstruation and parturition process. According to *Ayurveda* *kaphadosha* aggravated by use of food also aggravated *kaphadosha* starts affecting digestive fire which in turn causes decrease in *dhatu agni*. Each *dhatu agni* is responsible for nourishment and production of tissue that it resides in.

In PCOS, *kapha* is responsible to block the movement of *vata* and *pitta dosha*. Obstruction in normal process of *doshas* suppresses all transformation. *Agnimandya* and vitiating of *dosha* can be the main reason behind PCOS. *Ama* and *kapha* create *strotodushti* in *artavavaha strotas*, therefore its accumulation leads to obstruction in normal flow of *apanavayu*. Vitiating of *apanavayu* disturbs menstrual cycle, ovulation cycle, affects endocrinology. Accumulation of *kaphadosha*, *ama* tends to formation of cyst in the ovary.

Bhujangasan and *Dhanurasan* exerts pressure on the stomach helps to improve circulation to pelvic region also helps in improving digestive fire. *Upavishta konasan* stretches the hamstring and help the blood to circulate properly in the pelvic region and

keep it healthy. *Asana* controls and regulates the menstrual flow and stimulates ovaries it is a boon to women. *Baddhakonasan* acts as blessing to women by improving function of ovaries. *Utkatasana* also exerts pressure on abdomen and improves tone of abdominal organs which may help in improving blood supply and nutrition to uterus and ovaries. *Uthit parshvakonasana* reduces fats around hips as patient with PCOD develops obesity which leads to accumulation of fat in hip joint therefore practise of this asana may help in reducing fat around hip region.

From above discussion it can be said that *asana* helps in improving blood circulation to pelvic region also decreases *agnimandya*, supports ovaries to function properly, regulates menstrual cycle, initiate normal flow of *apanavayu*, regulates all *doshas* hence relieves all the symptoms related to PCOS.

CONCLUSION

Now-a-days PCOS is a life style disorder and also increasing public health problem causing infertility in large population. Therefore, in this situation practising *Asana* affects each cell of body, regulates blood circulation, improves menstrual function, provides nourishment to organs.

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Source of support: Nil

Conflict of interest: None Declared

Cite this article as

Vd. Pradnya K Vibhute: A Conceptual Study of Role of Asana in Polycystic Ovary Syndrome VI(5): 1886-1892