

Role of Suryanamaskara in Polycystic Ovarian Disease- A Case Study

Case Study

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Abstract

The patient of Polycystic Ovarian Disease(PCOD) came at hospital, had complaint of irregular menstrual cycle, stress, obesity, hairfall. Sedentary lifestyle and *Apana vayu vikruti* were observed in patient which is responsible for vitiation of *Tridosha* and *Rasa, Meda*, *Artava Dhatu* as well as their *Srotasa*. In such condition *Yoga* posture of *Suryanamaskara* were advised and follow up taken for four month. Some significant results were observed. By practicing *Suryanamaskara* with *Pranayama* exercise were helpful to rejuvenation of physical and mental health by increasing the metabolic function of *Agni* and *Satva Guna* in the body. Also facilitate to regulate menstrual cycle, reduce BMI (obesity) and hairfall by removing obstruction in the *srotasa*. So it is advisable in the management of PCOD.

Keywords: *Suryanamaskara*, PCOD, *Apana vayu*, Obesity

Introduction

Polycystic Ovarian Disease (PCOD) is an endocrine disorder associated with metabolic alteration in women of reproductive age. It is most common cause of infertility, with physical, psychological & hormonal imbalance. The prevalence rate of Polycystic Ovarian disease (PCOD) in India is 9.13%. It is characterised by irregular, scanty menstruation, depression, obesity, acne, hair fall cystic ovary, blood sugar imbalance etc. various factor responsible for Polycystic Ovarian Disease, but stress & lack of exercise are also most important factor in exaggerating Polycystic Ovarian Disease(1).

Stress, anxiety & lack of exercise are etiological factor of *Rasavaha* & *Medovah Srotodushti* respectively (2). According to *Ayurveda*, term *Granthi* is nothing but cyst. *Sushrut Acharya* stated that vitiated *Rasa, Rakta, Meda Dhatu* & vitiated *Kapha* and *Vata Dosha* are responsible to create *Granthi*. But *Meda dhatu* also have main role to create *Granthi*(3). Today's changing lifestyle, irregular diet, regimen, habits are etiological factors for vitiation of *Tridosha* & *Rasa, Rakta, Meda Dhatu* & *Vega-dharana* also responsible for *Apana Vayu Vikruti*. Results-*Artavavaha Srotodushti* & irregular menstrual cycle(4). *Acharya Vagbhata* stated that regular *Vyayama* strengthens body, makes it flexible, increases the biochemical function of *Agni* and burns excess *Meda Dhatu* (5).

So, *Suryanamaskara* (12 yoga poses) as *Vyayama* may help to regulate biochemical function of *Agni*, correct the fat metabolism i.e. *Meda dushti* & improve the lymphatic & circulatory function of body i.e. *Rasa, Rakta dushti*. Also by synchronisation of breathing

exercise with chanting of *Mantra* in each 12 *yoga* posture helps to increase the *Satva Guna* & decreases the *Tamasik* & *Rajo Guna* in the body(6). Thus it is effective in keeping ones ovary & uterus healthy along with solving of issues such as infertility, especially weight gain & psychological problems.

For this purpose, *Surya Namaskara* is advised to the patient having Polycystic Ovarian Disease and it was observed that 12 *yoga* poses of *Surya Namaskara* were effective in prevention & management of Polycystic Ovarian Disease. It is one of the important refreshing & rejuvenating modalities which can root out stress completely. It also helps to reduce the hair fall & excess weight gain in Polycystic Ovarian Disease.

Aims and Objectives

To evaluate the role of *Suryanamaskara* in management of Polycystic Ovarian Disease.

Materials and Methods

The study was conducted in a single female patient of 25 years came at hospital on 25/6/16.

Case Report

Personal History-

Name- xyz, Occupation- private job, *Prakruti* - *Kaph Pradhan Pittanubandhi*, Age -25 yrs, Education- MCA, *Agni- Madhyam*, Sex- Female, Height - 5ft, *Koshth- Madhyam*, Marital status- 2yr.before, Weight- 70 kg (BMI-30.14), Diet - Mix diet, *Bala- Madhyam*, *Nidra- Atinidra*.

The case study was conducted in a patient of infertility due to polycystic ovarian disease complaining - Irregular menses (since 1 yr), Obesity (sudden weight gain in 1 yr), Mood swing (since 6 month), Hair loss (since 1 yr).

History of present illness:

Patient had complaints since last 4 yr, but at the beginning complaints of only irregular menses and

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sudden weight gain were present, USG report with mild small cystic ovary. Patient had taken hormonal treatment & is still going at infertility centre, Bangalore. USG was done again after 2yrs, it showed polycystic ovary. Also severe weight gain, mood swings, irritability, irregular and scanty menstruation were seen. For this purpose, patient came for supportive management of PCOD, then we advised daily 12 posture of *Surya Namaskara* in increasing order for 4 months regularly & results were observed. Past history: History of operative for squint before 2 yr. Premenstrual history: Irregular, 2 to 3 month amenorrhoea, 2 to 3 day scanty bleeding with mild abdominal pain & discomfort. LMP: 3/6/2016. *Ashtavidha parikshan*: *Nadi* - 78/minute, *Mala* - *Samyaka*, *Mutra* - *Samyaka*, *Jivha* - *Nirama*, *Shabd* - clear pronunciation, *Sparsha* - *Samshitoshna*, *Druk* - h/o myopia & squint, *Aakruti* - *Sthulakruti* (obese).

Nidan Panchaka: (in patient)-

(1)*Hetu* - Excess sweet diet, day-sleep, lack of exercise, *mutra* & *purisha vega dharana*. (2)*Purvaroop-Anartava*, *Gaurava* (heaviness feeling), *khalitya* (hair loss). (3)*Roopa* - *Anartava*, sudden weight gain, cystic ovary in USG. (4)*Upshaya* - Regular exercise. (5) *Samprapti*-Harmful *Meda* and *Kapha* causes vitiation of *Artava vaha Srotasa*.

Systemic examination - CVS, RS, CNS - NAD, BP- 130/80 mm ofHg, PR- 80/Min.

Investigation : Hb- 12.8gm/dl.

Treatment planned -

Daily at early morning 12 poses of *Suryanamaskara* were advised with empty stomach beginning with 5 rounds of *Suryanamaskara* and then slowly increasing the number, Duration - 4 month, *Suryanamaskara* were contraindicated during menstruation.

Observations

Table 1: Observation of Body Weight

Exercise started on date:	Days of Suryanamaskara	No. of Suryanamaskara done by patient	Wt. measured
1/July/16	1 st 15 days	5	70 kg
	15 th to 30 th day	8	69.2 kg
	30 th to 45 th day	11	68 kg
	45 th to 60 th day	14	66.8 kg
	60 th to 75 th day	17	65 kg
	75 th to 90 th day	20	64.2 kg
	90 th to 105 th day	23	63.8 kg
	105 th to 120 th day	25	62 kg

Table 2: Observation of menstrual cycle

Before	After <i>Suryanamaskara</i> .
Irregular & at 2 to 3 month interval with abdominal pain.	Menses came at 40 th day (date : 10 aug 2016) 1 day bleeding 2 nd & 3 rd day spotting, 4 th day normal no bleeding Mild abdominal pain
	Menses came at 36 th day (date: 14 sep 2016) 2 day bleeding & 3 rd day spotting, 4 th day normal no bleeding. No abdominal pain
	Menses came at 31 st day (date: 14 oct 2016) 2 day bleeding & 3 rd day spotting, 4 th day normal no bleeding. No abdominal pain.
	Menses came at 31 st day (Date: 13 nov 2016) 2 day bleeding & 3 rd day spotting, 4 th day normal no bleeding. No abdominal pain.

Table 3: Parameter assessment before & after Surya Namaskara

Before	After
Weight:70 kg (BMI-30.14)	62 kg (BMI- 26.69)
Irregular menses 2 to 3 month amenorrhoea with abdomen pain	Painless ,Regular at 30 to 32th day
Stress/ irritability/ mood swing	Feeling relaxed, fresh & mentally stable.
USG : Bilateral Polycystic ovary (Ovaries are enlarged in size and shows polycystic morphology Rt ovary- 4.19×3.8×3.44 cm Left ovary- 4.10×2.5×3.30 cm.)	Bilateral polycystic morphology Rt ovary - 3.4×2.4×3.4 cm Left ovary- 3.9×1.7×2.6 cm)
Hair Pull - Hair Resistance test (7). 1. Holding hair tuft exerting constant traction. 2. Counted total no. of hairs removed. Score Hair 'n' Removed in 3 Areas of Head 0 >6 1 6 to 4 2 3 to 1 3 0	
Much amount of Hair loss during combing of hair, less voluminous. Hair pull test -score 0 (hair removed >6)	Decreased the hair loss during combing of hair. Hair pull test -score 2 (hair removed 3-1)

Discussion

Polycystic Ovarian Disease (PCOD) is a common endocrine disorder occurring during female reproductive age. It is characterised by number of heterogeneous clinical & biochemical features. Menstrual dysfunction, obesity, alopecia, acne, infertility & cystic ovary, hormonal imbalance are the features of Polycystic ovarian Disease. In addition to these endocrine abnormalities, metabolic alteration is also associated with Polycystic Ovarian Disease & it may predispose the range of diseases with attendant morbidity & mortality risk, So it is important to consider the syndrome in terms of both endocrine & metabolic aspect.

According Ayurveda, Polycystic Ovarian Disease is the *kaphaja* disorder. Here term *Granthi* is used for cyst (8). Stress, anxiety & lack of exercise, sedentary lifestyle were observed in patient which is responsible for *Tridosha & Dhatu Dushti & Ama* (toxin) production in the body (9). As well as suppression of natural urges also found as *hetu* in patient which lead to *Apana Vayu Vikruti* (10). Excess Vitiated *kapha* and *Ama* obstruct *vata & pitta*. Hence *Apana vayu* as well as *Rasa, Artava & Meda dhatu* get vitiated due to sticky properties of vitiated *kapha* and *Ama*, which creates obstruction in *Artava-vaha srotas* (11). So it results in *Pratilom or Mudha Gati of Apana Vayu*, which responsible for inhibition of *Artava Nishkramana*. Excess vitiated *Meda dhatu* get deposited due to similar characteristics of *kapha dosha*. It responsible for *Medovaha Sroto Dusti & result Obesity*. Vitiated *Meda & Rasa Dhatu, Kapha* and *Vata dosha* are responsible for pathogenesis of cyst in the ovary (12). Excess *kapha* and *Ama* obstruct the hair follicle leading to inhibition of hair growth & result in hair loss.

Vyayam karma (exercise) is described in *Dinacharya Adhyaya* (13). The regular practice of *Suryanamaskara* as *Vyayam karma* corrected the *Rasa Dushti* resulting in feeling *prasanna mana, laghvata* (lightweightness) in the patient. It also resulted in burning of excess *Meda dhatu* as well as painless bleeding due to *Apana Anulomana*. Also by synchronisation of breathing exercise with chanting of *Mantra* in each 12 *yoga* posture, it improves the mental clarity by increasing fresh oxygenated blood to brain.

In this way, 12 *yoga* poses of *Suryanamaskara* were helpful in patient to regulate menstrual cycle, reduce excess weight, reduce the size of cyst in ovary & making her mentally stable .

Conclusion

The study revealed that, *Suryanamaskara* exercise is significant in the management of polycystic ovarian disease. With *Pranayama* exercise it is enable to reduce the *Rajasik* and *Tamasik* phase of mind which gives real mental health. Also it act as booster of metabolic function of *Agni* and helpful to remove the obstruction of harmful *Kapha* and *Meda* in *Artava-vaha Srotasa*. So it is preferably advisable in Polycystic Ovarian Disease for physical and mental health.

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