

## **A CLINICAL STUDY TO EVALUATE THE EFFICACY OF YOGBASTI AND YOGBASTI WITH HERBOMINERAL COMPOUNDS IN THE MANAGEMENT OF PCOS**

**<sup>1</sup>Dr. Bhagyashri Mahavir Khot and <sup>2</sup>Dr. Vaishali Ramesh Chikhale\***

<sup>1</sup>Asso. Professor, Streerog, Prasutitantra Dept, R. A. Podar Medical College Worli,  
Mumbai.

<sup>2</sup>P.G. Scholar, Streerog, Prasutitantra Dept, R.A. Podar Medical College Worli, Mumbai.

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**\*Correspondence for  
Author**

**Dr. Vaishali Ramesh  
Chikhale**

P.G. Scholar, Streerog,  
Prasutitantra Dept, R.A.  
Podar Medical College  
Worli, Mumbai.

### **ABSTRACT**

In today's age of social equality, women carry many responsibilities of their families as well as their career. Due to various stress factors faced by women during this journey, many women suffer from Infertility. Infertility is a common problem of about 10% of women aged 15 to 44. It is a significant problem that affects many couple's mental & physical health. The causes of female infertility is multifactorial, a systematic approach is used typically & involves testing for ovulatory factor, uterotubal factor. Polycystic ovarian syndrome (PCOS) remains one of it's leading cause. The present study was conducted to evaluate the efficacy of Yogbasti and Yogbasti with herbomineral compounds in treatment of PCOS.

**KEYWORDS:** Infertility, Polycystic Ovarian syndrome, Yogbasti, herbomineral compounds.

### **INTRODUCTION**

Polycystic ovarian syndrome (PCOS) also known by the name of stein – leventhal syndrome. PCOS is a condition where a hormonal imbalance affects follicular growth during ovarian cycle causing the affected follicles to remain in the ovary. Ayurveda suggests that this is vata type disorders (apan vayu) and also involves pitta & kapha dosha. The selected trial drug was decided according to dosha dushya dushti and hypothesized samprapti.

## AIMS AND OBJECTIVES

- To verify the efficacy of ayurvedic treatment regimen on polycystic ovarian syndrome (PCOS).
- To study the effect of yogbasti with oral administration of herbal drugs.
- To provide safe, cheapest, non surgical, non HRT and side effect free management of PCOS.

## MATERIALS AND METHODS

Total 60 patients were registered from O.P.D. of the streeroga & prasutitantra dept. of R.A. podar Medical College, Worli, Mumbai fulfilling the criteria of selection which were included into study. Approval of the institutional ethics committee was taken. The patients were divided into two groups Group A and Group B.

**Group A:** 30 patients of PCOS were given oral herbomineral drugs.

- **Dosage:** Rajapravartini vati 2 tab were given two times a day.
- **Pushpdhanva Ras:** 2 tab were given two times a day.
- **Phalghrit:** 15 ml twice daily with milk.
- **Duration:** 3 months.

**Group B:** 30 patients of PCOS were given combined therapy of oral herbomineral drugs and yogbasti.

**Dosage:** As above herbomineral drugs for 3 months. Yogbasti for 8 days for 3 consecutive cycles after cessation of menstruation.

1. Anuvasana basti with til oil.
2. Nirooha basti with Dashamoola Kashaya.

## Inclusion Criteria

- 1) By USG all PCOS patient showed – 10 follicles of 3-8 mm diameter in one ovary and increased ovarian volume.
- 2) Menstrual abnormalities (oligo or anovulation)
- 3) Clinical or biochemical evidence of hyper androgenism. 4) LH : FSH ratio  $> 3$

## Exclusion criteria

- 1) Ovarian cyst  $\rightarrow$  15 cm
- 2) systemic illness.

- 3) Post menopausal stage.
- 4) Ca cervix, polyp, cervical tumour, tubercular endometritis
- 5) Congenital adrenal hyperplasia.

### Subjective and objective parameters

**Subjective parameters:** Menorrhagia, Oligomenorrhoea, Hypomenorrhoea, Dysmenorrhoea, Acne and Hirsutism.

#### 1. Duration of bleeding – (Table 1)

Duration	Grade	Score
3-5 days	Nil	0
1-2/6-7 days	Mild	1
1/8-9 days	Moderate	2
Spotting → 9 days	Severe	3

Bleeding 1 or above days are considered as bleeding throughout the day spotting is considered as bleeding just 2 or 3 drops.

#### 2. Irregular menstruation – (Table 2)

LMP days	Grade	Score
28 days	Nil	0
28-45 days	Mild	1
45-60 days	Moderate	2
Above 60 days	Severe	3

#### 3. Amount of bleeding and quantity of menstrual blood–(table 3)

No of pad per cycle	Grade	Score
<15	Nil	0
15-19	Mild	1
20-25	Moderate	2
>25	Severe	3

### Objective Parameters

1. Hormonal assay-Serum L.H., serum F.S.H., serum oestrogen, serum progesterone, serum free testosterone, serum prolactin, serum T.S.H.
2. USG for ovarian volume and follicular count was calculated during the follicular phase cycle.

**Criteria for assessment:** All Assessment was done once before start of treatment, twice during the trial & after 3 months, at the end of trial.

To assess the overall effect of therapies a special scoring method was adopted.

## RESULTS

### a) Subjective Parameters

1. Group A: Relief in menorrhagia (61%), oligomenorrhoea (32%), hypomenorrhoea (46%), Dysmenorrhoea (47.37%), acne (60.21%), hirsutism (2.5%).
2. Group B: Relief in menorrhagia (64.37%), oligomenorrhoea (92.36%), hypomenorrhoea (52%), Dysmenorrhoea (92.32%), acne (59.20%), hirsutism (2%).

Intergroup comparison of group A with group B, showed statistically very significant result in improving oligomenorrhoea, dysmenorrhoea,  $P = 0.0022$  and all other profile were found insignificant.

### b) Objective Parameters

1. Group A: serum LH ( $P = 0.6$ ), serum FSH ( $P=0.3$ ), serum oestrogen ( $P=0.9$ ), serum progesterone ( $P=0.8$ ), serum testosterone ( $P=0.1$ ), serum prolactin ( $P=0.2$ ).  
Rt ovarian volume ( $P=0.01$ ), Lt ovarian volume ( $P=0.0052$ ), found significant.
2. Group B: Serum LH ( $P=0.002$ ), serum FSH ( $P=0.0006$ ), serum oestrogen ( $P=0.082$ ), serum progesterone ( $P=0.36$ ), serum testosterone ( $P=0.44$ ), serum prolactin ( $P=0.3$ ).  
Rt ovarian volume ( $P=0.027$ ), Left ovarian volume ( $P=0.0054$ ).

Inter group comparison of Group A with Group B showed statistically significant in serum FSH & LH ( $P=0.01$ ). The other profiles showed statistically insignificant.

## DISCUSSION

All 60 subjects completed the therapy and there was no any side effects noted.

The ingredients pushpadhanva ras stimulates ovaries and cause maturation of follicles. The ingredient in Raja pravartinivati are tankana, hingu, kasis, kalabol all are aartava pravartakas. Due to ushna virya of these drugs increases pitta required for maturation of follicles & help them to ovulation & also helps in dissolution of multiple small follicles which are arrested in maturation phase also. Increase FSH & LH receptors in granulosa and theca cells of ovary respectively. In phalghrit the main ingredient is shatavari it's hormone balancer. Shatavari has chemical constituents such as sarsapogenin, beta sitosterol has effect on peripheral estrogen. It acts on HPO axis & capability to increase the size of follicle and also to dissolve the multiple small follicles which restrict to dominant follicle to grow.

These are the fertility drugs having immune modulator, anti-oxidant properties. It's a hormone regulator in females which react with the receptors over the ovary and thus acts over the HPO axis in a reverse direction to stimulate the hypothalamus to release the needed hormones for follicular growth and ovulation.

**Mode of action of basti:** Yogbasti has both local and systemic effects. The drugs used in basti cross rectal mucosa. Gut is a sensory organ consisting of neural, immune & sensory detector cells and provide direct input to intramural regulatory systems & information that passes to CNS by mesenteric & submucosal plexus of gut also act on the neurohumoral system by stimulating CNS (prana vata) through ENS (apan vata). The visceral afferent stimulation may result in activation of HPO axis (prana vata) leads to timely release of FSH & LH. Spasm is caused by vitiated apana vayu. causing obstruction to the ovum. The tila taila is vranashodhaka, Garbhashaya – shodhan & yonishulprashamana, taila enters into the strotas & removes the sankocha by virtue of its sookshma, vyavayi and vikasi guna.

Dashmoola kashaya is kapha vata shamaka, deepana, aam pachaka, shothhara. The constituents of Dashamoolas have the capability in dissolution of cystic follicle condition hereby establishes the normal HPO axis leading to ovulation.

## CONCLUSION

Yogbasti with herbomineral compound cause de-toxification of the body, pacifies tridosha especially vata & stimulates the HPO axis. No significant complications were evident in this study. It's cost effective, easily accessible, safe ayurvedic therapy for PCOS.

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