



Research Article

## A COMPARATIVE STUDY TO EVALUATE THE EFFECT OF YOG BASTI (LEKHANA AASTHAPANA BASTI & LAHSHUN TAILA ANUVASANA BASTI) AND SHAMANA AUSHADHA (VISHWADI GUGGULU & AARTAVA PRAVARTAKA YOGA) IN THE MANAGEMENT OF POLYCYSTIC OVARIAN SYNDROME (PCOS)

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### ABSTRACT

**Background:** Polycystic Ovarian Syndrome (PCOS) is a multifactorial endocrine disorder characterized by menstrual irregularities, anovulation, hyperandrogenism, and metabolic imbalance. Ayurveda describes PCOS as a manifestation of *Artava Dushti* and *Kapha-Meda* vitiation, where both *Shodhana* (purificatory) and *Shamana* (palliative) therapies are advocated. The present clinical study was undertaken to comparatively evaluate the efficacy of *Yog Basti* (*Lekhana Aasthapana Basti* & *Lahshun Taila Anuvasana Basti*) and *Shamana Aushadha* (*Vishwadi Guggulu* & *Aartava Pravartaka Yoga*) in the management of PCOS. **Aim:** To evaluate and compare the therapeutic efficacy of *Yog Basti* and *Shamana Aushadha* in the management of PCOS with respect to clinical, hormonal, and metabolic parameters. **Materials and Methods:** A total of 30 female patients with PCOS were enrolled and evenly distributed into two groups, comprising 15 patients per group. Group I received *Yog Basti* therapy consisting of *Lekhana Aasthapana Basti* and *Lahshun Taila Anuvasana Basti* for three consecutive cycles. Group II was administered *Shamana Aushadha*, comprising *Vishwadi Guggulu* and *Artava Pravartaka Yoga*, orally for the same duration. Assessment was carried out before and after treatment and during follow-ups based on clinical parameters (acne, hirsutism, menstrual irregularity, pain), anthropometric measures (BMI), ovarian morphology, hormonal profile (LH, FSH, AMH, testosterone), and metabolic indices. **Results:** Both groups showed statistically significant improvement ( $P < 0.001$ ) in major clinical and hormonal parameters such as acne, hirsutism, intermenstrual interval, BMI, ovarian morphology, and LH:FSH ratio. In Group I, maximum relief was observed in no. of follicles (80%), ovarian volume (84.54%), pain (75%), and acne (60.55%) by the third follow-up. In Group II, significant improvement was noted in acne (50.62%), hirsutism (44.22%), pain (73.62%), and ovarian morphology (~82%). Laboratory findings revealed improvement in lipid profile ( $\downarrow$ LDL,  $\uparrow$ HDL), reduced ESR, and better insulin regulation in both groups, with Group II showing greater anti-inflammatory response, while Group I showed slightly superior lipid and hormonal correction. Overall, 46.67% of patients were markedly improved, 43.33% moderately improved, 6.67% mildly improved, and 3.33% cured. **Conclusion:** Both *Yog Basti* and *Shamana Aushadha* proved effective in managing the multifactorial aspects of PCOS, including clinical, hormonal, and metabolic parameters. However, *Yog Basti* (Group I) demonstrated better overall therapeutic response and a higher rate of marked improvement and cure, highlighting the superiority of *Shodhana Chikitsa* in addressing the root cause and systemic imbalance in PCOS, while *Shamana* therapy provided supportive, stabilizing, and sustainable results.

### INTRODUCTION

Polycystic Ovarian Syndrome (PCOS) is a multifactorial endocrine disorder that primarily affects women of reproductive age and is characterized by menstrual irregularities, hyperandrogenism, obesity, and polycystic ovaries on ultrasonography. It is one of the most common causes of infertility due to anovulation and hormonal imbalance in modern

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times<sup>[1]</sup>. The global prevalence of PCOS is estimated to range between 5–15% among reproductive-aged women, and the incidence is steadily increasing due to sedentary lifestyle, faulty dietary habits, and mental stress<sup>[2]</sup>.

In the Ayurvedic perspective, PCOS cannot be directly correlated to a single disease entity, but it can be understood under the concepts of *Artava-dushti*, *Artavavaha-srotodushti*, *Nashtartava*, or *Yonivyapad*, depending on the predominance of dosha and symptoms<sup>[3]</sup>. According to Charaka Samhita, the origin of all diseases begins with the vitiation of *Dosha* and obstruction of *Srotas* (channels) (*Charaka Samhita, Sutrasthana 28/9*)<sup>[4]</sup>. Hence, *Srotorodha* (obstruction) plays a crucial role in the pathogenesis of menstrual and ovarian disorders.

Acharya Sushruta has described that the *Artava-vaha srotas* has its root in *Garbhashaya* (uterus) and *Artavavaha dhamani* (reproductive channels) (*Sushruta Samhita, Śarirasthana 9/12*)<sup>[5]</sup>. Any obstruction or imbalance in these *Srotas* leads to disorders such as Anartava (amenorrhea) and *Yonivyapad* (gynecological disorders). Similarly, Ashtanga Hrdaya mentions that vitiated *Vata* obstructed by *Kapha* and *Meda* (*Avrta Vata* condition) causes irregular or absent menstruation (*Ashtanga Hrdaya, Nidanasthana 15/24*)<sup>[6]</sup>.

The involvement of *Kapha* and *Vata Dosha* is predominant in PCOS. *Kapha*, due to its *Guru* and *Picchila* properties, leads to the formation of cysts and *Meda-dhatu dushti*, while *Vata* contributes to irregularity of menstrual flow due to its *Chala guna*<sup>[7]</sup>. The pathology can be understood as *Kapha-Vata Pradhana Tridoshaja Vyadhi* associated with *Artavavaha-srotodushti* and *Meda-dhatu vriddhi*<sup>[8]</sup>.

The concept of Basti Chikitsa holds a prime place in Ayurvedic management, especially for *Vata-anubandha vyadhi* (disorders involving *Vata*). Acharya Sushruta stated that *Basti* is the most effective therapy for *Vata* dosha and for disorders of the reproductive system (*Sushruta Samhita, Chikitsasthana 35/24*)<sup>[9]</sup>. Ashtanga Hrdaya elaborates that Basti acts as *Ardha Chikitsa* (half of all therapeutic measures) because of its multidimensional action on *Vata* and other *Doshas* (*Ashtanga Hrdaya, Sutrasthana 19/1–3*)<sup>[10]</sup>.

### Yog Basti Concept in PCOS

The combination of *Lekhana Aasthapana Basti* and *Lahshun Taila Anuvasana Basti* is termed as *Yog Basti*, which provides both *Shodhana* (eliminative) and *Brimhana-Vata-shamaka* effects. Charaka has mentioned that in diseases where *Kapha* and *Meda* are involved, *Lekhana Basti* should be used for *Srotoshodhana* and reduction of excess *Meda* (*Charaka*

*Samhita, Siddhithana 12/13–14*)<sup>[11,12]</sup>. *Lekhana Aasthapana Basti* helps in breaking down *Meda dhatu*, enhances metabolism, and regulates *Apana Vata*, thereby promoting normal ovulation and menstruation.

Vangasena Samhita also supports the use of *Lahshuna Taila* in *Yonivyapad* and *Artava-dushti* due to its *Srotoshodhaka* and *Artava-pravartaka* properties (*Vangasena Samhita, Yonivyapad Chikitsa 25/15–16*)<sup>[13]</sup>.

### Shamana Aushadha in PCOS

*Shamana Aushadha* therapy, which pacifies doshas without elimination, plays an important role in chronic metabolic disorders. *Vishwadi Guggulu* as mentioned in *Vrihat Nighantu Ratnakar*<sup>[14]</sup> have herbs known for *Kapha-Medohara*, *Vatanulomaka*, *Agnidipaka*, and *Srotoshodhaka* actions, which aid in weight reduction, hormonal balance, and restoration of normal *Raja Pravrtti*.<sup>[15,16]</sup> Similarly, *Aartava Pravartaka Yoga* mentioned in *Ayurveda Saara Sangraha* stimulate the *Apana Vata* function, regulate menstrual flow, and promote follicular maturation.

### Ayurvedic-Modern Correlation

The Ayurvedic concept of *Meda-dhatu dushti* and *Avrta Vata* closely correlates with the modern understanding of insulin resistance and ovarian dysfunction seen in PCOS<sup>[17]</sup>. *Meda-dhatu vriddhi* leads to excess adiposity, dyslipidemia, and metabolic sluggishness, which further aggravates *Kapha* and obstructs the *Artavavaha srotas*, resulting in anovulation and cyst formation.

Modern studies have shown that *Basti Chikitsa* influences the hypothalamic-pituitary-ovarian (HPO) axis and autonomic nervous system through the gut-brain axis, leading to hormonal regulation and improvement in menstrual regularity<sup>[18]</sup>. The local and systemic actions of *Basti* also facilitate detoxification, metabolic correction, and hormonal balance, which are vital in managing PCOS holistically.

Hence, considering both Ayurvedic and modern perspectives, the combined approach of *Yog Basti* (*Lekhana Aasthapana Basti & Lahshun Taila Anuvasana Basti*) along with *Shamana Aushadha* (*Vishwadi Guggulu & Artava Pravartaka Yoga*) aims to provide *Srotoshodhana*, *Dosha-prasamana*, and *Artava-pravartana*-addressing the root causes of PCOS rather than merely controlling symptoms.

### Aims & Objectives

- To study the etiopathogenesis of PCOS and establish an Ayurvedic approach.
- To study the Effect of *Yog Basti* (*Lekhana Aasthapana Basti & Lahshun Taila Anuvasana*

*Basti*) & *Shamana Aushadha (Vishwadi Guggulu & Aartava Pravartaka Yoga)* in PCOS.

- To provide non-surgical & non-hormonal Replacement Therapy of Polycystic Ovarian Syndrome.
- To assess the safety profile of drugs.

### Study Design

To study the above objectives, the research work had been planned as follow:

- It was an open clinical study.
- Review of literature-The available literature pertaining to Aartavakshaya and *Pushpaghani jataharini* and other conditions relatable to PCOS in classics and PCOS in modern text was thoroughly looked over.

Clinical Study- Clinical study was done in patients under direct supervision, taking account of inclusion and exclusion criteria.

### Material and Method

The patients were the material for present clinical study. Random method of selection of patients was observed.

### Inclusion and Exclusion Criteria

Criteria	Details
<b>Inclusion Criteria</b>	<ul style="list-style-type: none"> <li>• Patient willing to participate in the study.</li> <li>• Female patients aged between <b>16–35 years</b>.</li> <li>• Diagnosed as per <b>ASRM/ESHRE (Rotterdam) Criteria, 2003</b>, meeting at least <b>two out of three</b> of the following: I) Oligomenorrhoea / Amenorrhoea / Anovulation II) Hyperandrogenism / Hirsutism / Acne III) Polycystic ovaries on sonographic examination.</li> <li>• Clinically diagnosed and confirmed cases of <b>PCOS</b>.</li> </ul>
<b>Exclusion Criteria</b>	<ul style="list-style-type: none"> <li>• Women aged <b>below 16 years</b> or <b>above 35 years</b>.</li> <li>• Patients with systemic diseases such as <b>hypertension, tuberculosis, renal disorders</b>, or associated <b>gynecological conditions</b> (fibroids, polyps, etc.).</li> <li>• Patients with <b>congenital adrenal hyperplasia</b> or <b>androgen-secreting tumors</b>.</li> <li>• Patients <b>unable to give informed consent</b>.</li> <li>• Patients <b>not fulfilling inclusion criteria</b>.</li> </ul>

### Laboratory Investigations

Type of Investigation	Parameters Assessed	Purpose / Remarks
<b>A. Blood Investigations</b>	i. Complete Haemogram (Hb%, TLC, ESR)	To assess general health status and detect any underlying infection or inflammation
	ii. Fasting Blood Sugar (FBS)	To assess glucose metabolism and detect insulin resistance
	iii. Lipid Profile	To evaluate metabolic status and dyslipidemia associated with PCOS
	iv. Serum Testosterone (Free)	To assess hyperandrogenic status
	v. Serum Insulin (Fasting)	To evaluate insulin resistance and metabolic function
	vi. Anti-Müllerian Hormone (AMH)	To assess ovarian reserve and PCOS-related ovarian dysfunction

**Selection of patients:** The patients were selected from OPD/IPD of Post Graduate department of Prasuti Tantra Evum Stree Roga R.G.G.P.G Ayurvedic College & Hospital, Paprola.

A detailed selection criteria was worked up.

### Protocol of research

**IEC Approval:** Approval from Institutional Ethical committee was obtained before the commencement of research work vide certificate no. Ayu/IEC/2021/1283.

**CTRI Registration:** The study had also been registered in Clinical Trial Registry of India vide CTRI Reg. No. CTRI/2022/08/045045.

**Consent** of the patient was taken after making her aware of merits/demerits of the study with duration of the proposed clinical study.

- Fulfilment of inclusion criteria.
- Registration of the patients.
- Investigations mentioned were advised to her before presenting Ayurvedic formulation.
- Data so available and deducted clinically was statistically analysed.

	vii. Thyroid Function Test (T3, T4, TSH)	To rule out thyroid disorders mimicking menstrual irregularities
	viii. LH: FSH Ratio	To determine hormonal imbalance characteristic of PCOS
<b>B. Urine Examination</b>	Routine & Microscopic	To rule out urinary tract infections and systemic involvement
<b>C. Ultrasonography (Pelvic)</b>	Assessment of uterus and ovaries	To confirm polycystic ovarian morphology and exclude structural abnormalities

### Informed consent

The purpose of the study, the potential risks and benefits were explained to the patients in detail in non-technical terms and in their language. Thereafter their written consent was taken before starting the medicaments.

### Treatment protocol

The patients were randomly divided into 2 different research groups and treated as follow after taking written consent.

### Grouping

**Group A:** *Lekhana Aasthapana Basti and Lahshun taila Anuvasana basti in Yog krama.*

**Group B:** *Vishwadi Guggulu and Aartava Pravartaka Yoga.*

	<b>Group A</b> <i>Lekhana Aasthapana Basti and Lahshun taila Anuvasana basti in Yog Krama</i>	<b>Group B</b> <i>Vishwadi Guggulu and Aartava Pravartaka Yoga</i>
<b>Dose</b>	950 ml <i>Aasthapana basti</i> + 120 ml <i>Anuvasana basti</i>	<i>Vishwadi Guggulu</i> - 1 gm BD <i>Aartava Pravartaka Yoga</i> - 500 mg BD
<b>Route</b>	Rectal route	Oral route
<b>Duration</b>	After cessation of menstruation for three consecutive cycles.	For three consecutive cycles.

### Follow up:

In both the groups, there were three follow ups each after 1st month during clinical study, 3rd month i.e., on completion of clinical study and after 4th month of drug free period.

### Do's and Don'ts Advised to Patients

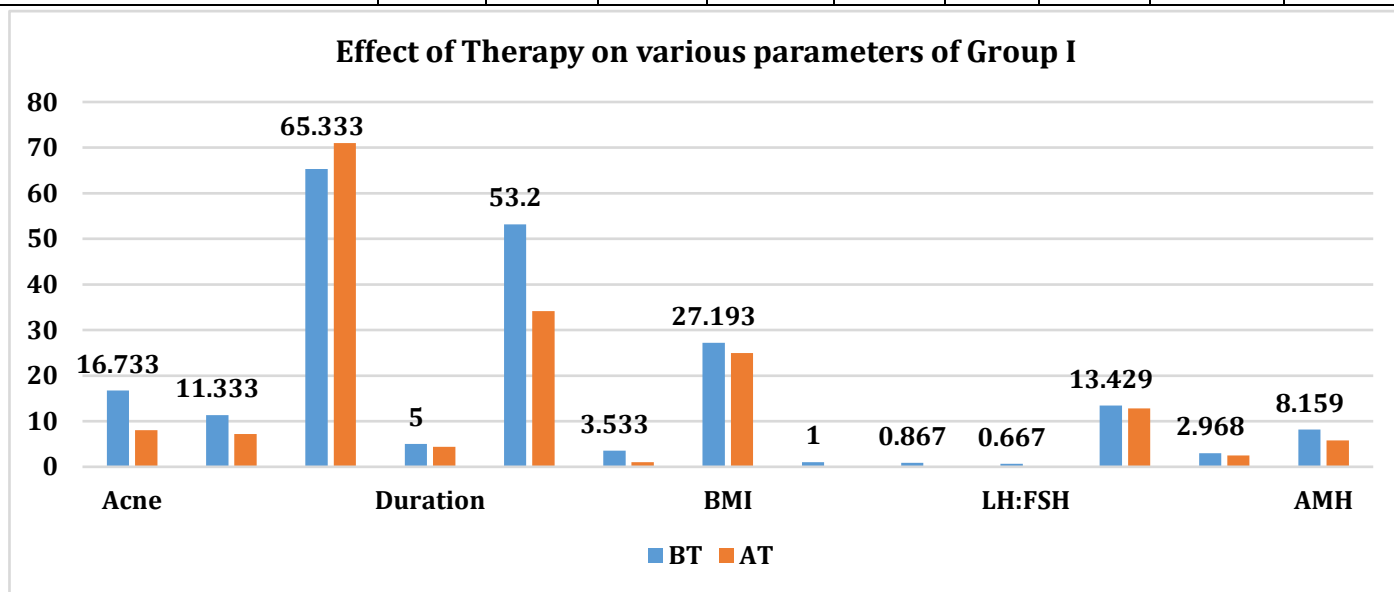
<b>Do's (Pathya - Recommended Practices)</b>	<b>Don'ts (Apathya - To Be Avoided)</b>
1. Include <b>high-fiber foods</b> in the daily diet	1. Avoid <b>fried and bakery items</b> , and <b>carbonated cold drinks</b>
2. Consume a <b>well-balanced diet</b> with regular intake of <b>salads</b>	2. Refrain from <b>refined carbohydrates</b> such as maida-based foods
3. Eat more <b>green leafy vegetables</b> and <b>seasonal fruits</b>	3. Avoid <b>junk foods</b> like pizza, burgers, and other <b>packed or processed items</b>
4. Practice <b>Yoga and Pranayama</b> daily for stress reduction and hormonal balance	4. Avoid <b>mental stress, anger, and excessive sorrow</b> , which aggravate hormonal imbalance

### Observation & results

#### Statistical analysis on effect of therapy on Various Parameters of PCOS in Group I:

Criteria	Mean score		Mean diff.	% age	S.D	S.E	't'	P	Results
	B.T	A.T							
<b>Acne</b>	16.733	8.067	8.667	51.79%	6.831	1.764	4.914	<0.001	HS
<b>Hirsutism</b>	11.333	7.200	4.133	36.46%	2.200	0.568	7.278	<0.001	HS
<b>Amount of menstrual blood</b>	65.333	71.00	-5.667	8.67%	27.894	7.202	-0.787	>0.05	NS
<b>Duration</b>	5.000	4.400	0.600	12%	1.920	0.496	1.210	>0.05	NS
<b>Inter menstrual interval</b>	53.200	34.133	19.067	35.84%	19.252	4.971	3.836	<0.05	S

<b>Dysmenorrhoea</b>	3.533	1.000	2.533	71.69%	1.506	0.389	6.517	<0.001	HS
<b>BMI</b>	27.193	24.927	2.267	8.33%	1.830	0.472	4.798	<0.001	HS
<b>No. of follicles</b>	1.000	0.200	0.800	80%	0.414	0.107	7.483	<0.001	HS
<b>Ovarian Volume</b>	0.867	0.133	0.733	84.54%	0.458	0.118	6.205	<0.001	HS
<b>LH: FSH</b>	0.667	0.133	0.533	79.91%	0.516	0.133	4.000	<0.05	S
<b>Fasting Glucose: Insulin</b>	13.429	12.796	0.633	4.71%	3.483	0.899	0.704	>0.05	NS
<b>S.Testosterone (Free)</b>	2.968	2.487	0.481	16.2%	0.573	0.148	3.256	<0.05	S
<b>AMH</b>	8.159	5.805	2.355	28.86%	1.771	0.457	5.150	<0.001	HS



**Effect of Therapy on Various Parameters in Group I**

(15 patients treated with *Lekhana Aasthapan Basti* and *Lahshun Taila Anuvasana Basti*)

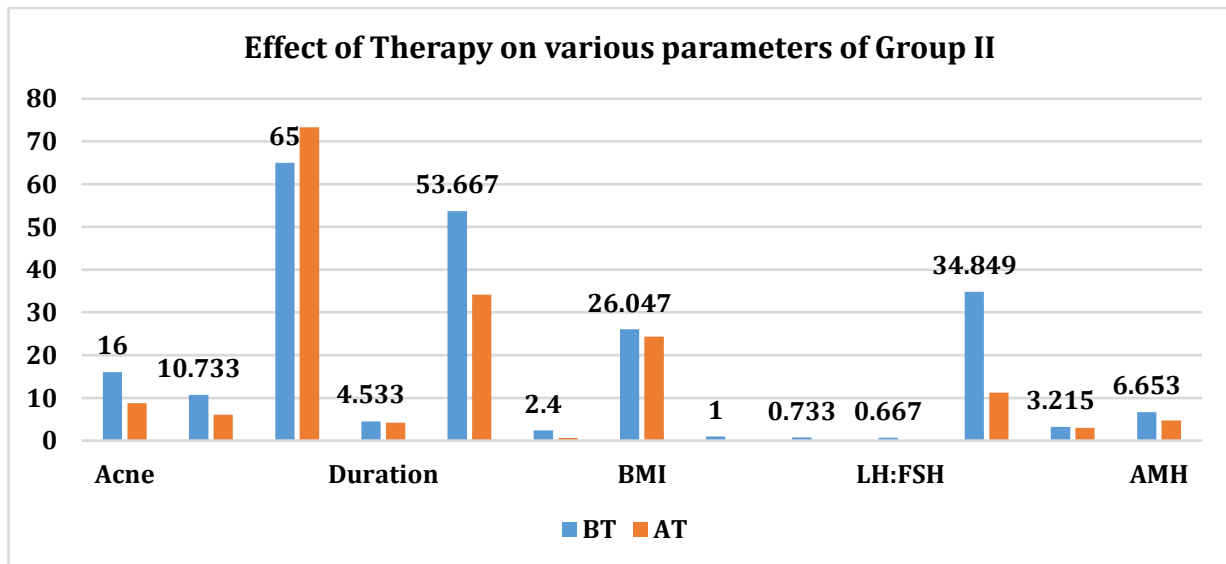
Parameter	% Relief	Significance	p-value
Acne	51.79%	Highly significant	<0.001
Hirsutism	36.46%	Highly significant	<0.001
Menstrual Blood Amount	8.67% ↑	Non-significant	>0.05
Duration of Menstruation	12% ↓	Non-significant	>0.05
Menstrual Interval	35.84% ↓	Significant	<0.05
Pain during Menstruation	71.69% ↓	Highly significant	<0.001
BMI	8.33% ↓	Highly significant	<0.001
No. of Follicles	80% ↓	Highly significant	<0.001
Ovarian Volume	84.54% ↓	Highly significant	<0.001
LH:FSH Ratio	79.91% ↓	Significant	<0.05
Fasting Glucose:Insulin	4.71% ↓	Non-significant	>0.05
Serum Testosterone (Free)	16.2% ↓	Significant	<0.05
AMH	28.86% ↓	Highly significant	<0.001

**Summary**

Therapy showed marked improvement in acne, hirsutism, menstrual pain, BMI, ovarian morphology, LH:FSH ratio, testosterone, and AMH-indicating significant correction in hormonal and metabolic imbalance. Changes in menstrual flow and glucose-insulin ratio were statistically non-significant.

**Statistical analysis of effect of therapy on Various Parameters of PCOS in Group II**

Criteria	Mean Score		Mean diff.	%age	S.D	S.E	't'	P	Result
	B.T	A.T							
Acne	16.000	8.800	7.200	45%	5.074	1.310	5.496	<0.001	HS
Hirsutism	10.733	6.067	4.667	43.48%	2.350	0.607	7.690	<0.001	HS
Amount of menstrual blood	65.000	73.333	-8.333	12.82%	24.029	6.204	-1.343	>0.05	NS
Duration	4.533	4.200	0.333	7.34%	2.410	0.622	0.536	>0.05	NS
Inter menstrual interval	53.667	34.133	19.533	36.39%	15.711	4.057	4.815	<0.001	HS
Dysmenorrhoea	2.400	0.600	1.800	75%	1.781	0.460	3.915	<0.05	S
BMI	26.047	24.360	1.687	6.47%	1.182	0.305	5.527	<0.001	HS
No. of follicles	1.000	0.133	0.867	86.7%	0.352	0.090	9.539	<0.001	HS
Ovarian Volume	0.733	0.133	0.600	81.85%	0.507	0.131	4.583	<0.001	HS
LH:FSH	0.667	0.0667	0.600	89.95%	0.507	0.131	4.583	<0.001	HS
Fasting Glucose: Insulin	34.849	11.252	23.597	67.71%	94.679	24.446	0.965	>0.05	NS
S.Testosterone (Free)	3.215	3.020	0.195	6.0%	1.367	0.353	0.553	>0.05	NS
AMH	6.653	4.747	1.905	28.63%	1.960	0.506	3.766	<0.05	S



**Summary of Therapeutic Effect in Group II (Vishwadi Guggulu & Aartava Pravartaka Yoga)**

In Group II, consisting of 15 patients treated with *Vishwadi Guggulu* and *Aartava Pravartaka Yoga*, significant improvements were observed across multiple clinical and biochemical parameters.

Highly significant improvement ( $P < 0.001$ ) was noted in acne (45%), hirsutism (43.48%), menstrual interval (36.39%), BMI (6.47%), no. of follicles (86.7%), ovarian volume (81.85%), and LH:FSH ratio (89.95%).

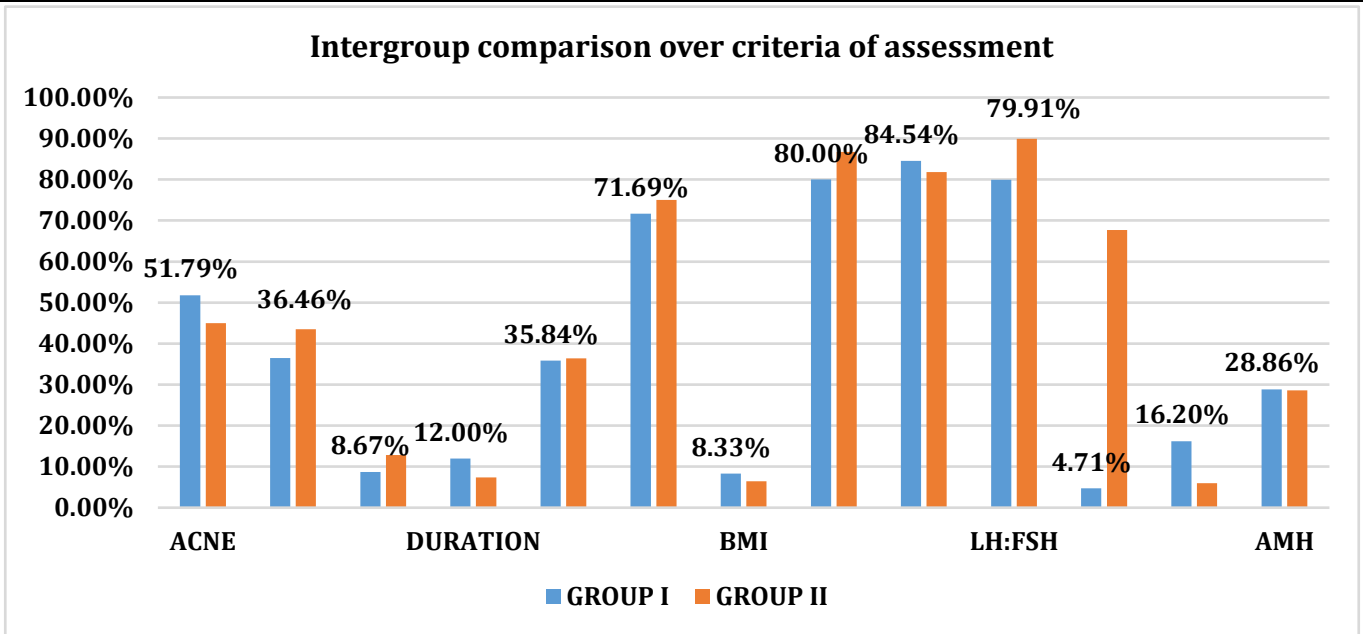
Significant improvement ( $P < 0.05$ ) was observed in pain during menstruation (75%) and AMH (28.63%).

Non-significant changes ( $P > 0.05$ ) were seen in amount (12.82%) and duration (7.34%) of menstrual bleeding, fasting glucose-insulin ratio (67.71%), and serum testosterone (6%).

Overall, the therapy demonstrated a remarkable regulatory effect on hormonal balance, follicular maturation, and menstrual regularity, along with visible clinical improvement in acne and hirsutism, indicating its efficacy in managing PCOS and related reproductive dysfunctions.

**Intergroup Comparison over Criteria of Assessment**

Criteria	Percentage relief		Diff. in Relief %	S.D.	S.E.	't'	p	Results
	Grp. I	Grp. II						
Acne	51.79%	45%	6.79%	6.157	2.753	0.326	>0.05	NS
Hirsutism	36.46%	43.48%	7.02%	2.432	1.087	-1.011	>0.05	NS
Amount of menstrual blood	8.67%	12.82%	4.15%	27.711	12.392	-0.443	>0.05	NS
Duration	12%	7.34%	4.66%	2.140	0.957	0.313	>0.05	NS
Inter menstrual interval	35.84%	36.39%	0.55%	18.671	8.350	-0.191	>0.05	NS
Dysmenorrhoea	71.69%	75%	3.31%	1.641	0.734	0.681	>0.05	NS
BMI	8.33%	6.47%	1.86%	1.761	0.787	0.952	>0.05	NS
No. of follicles	80%	86.7%	6.7%	0.372	0.166	-0.6	>0.05	NS
Ovarian Volume	84.54%	81.85%	2.69%	0.5	0.223	0.447	>0.05	NS
LH:FSH	79.91%	89.95%	10.04%	0.516	0.230	0.000	>0.05	NS
Fasting Glucose: Insulin	4.71%	67.71%	63%	81.987	36.666	-0.950	>0.05	NS
S.Testosterone (Free)	16.2%	6.0%	10.2%	1.252	0.560	0.341	>0.05	NS
AMH	28.86%	28.63%	0.23%	1.801	0.805	-0.689	>0.05	NS



**Summary of Intergroup Comparison (Group I vs Group II)**

The comparative analysis between Group I (*Yog Basti: Lekhana Aasthapana & Lahshun Taila Anuvasana Basti*) and Group II (*Vishwadi Guggulu & Aartava Pravartaka Yoga*) revealed that both therapies produced comparable therapeutic benefits across all clinical and biochemical parameters.

Group I showed slightly better relief in acne (6.79%), duration of menses (4.66%), BMI (1.86%), ovarian volume (2.69%), serum testosterone (10.2%), and AMH (0.23%).

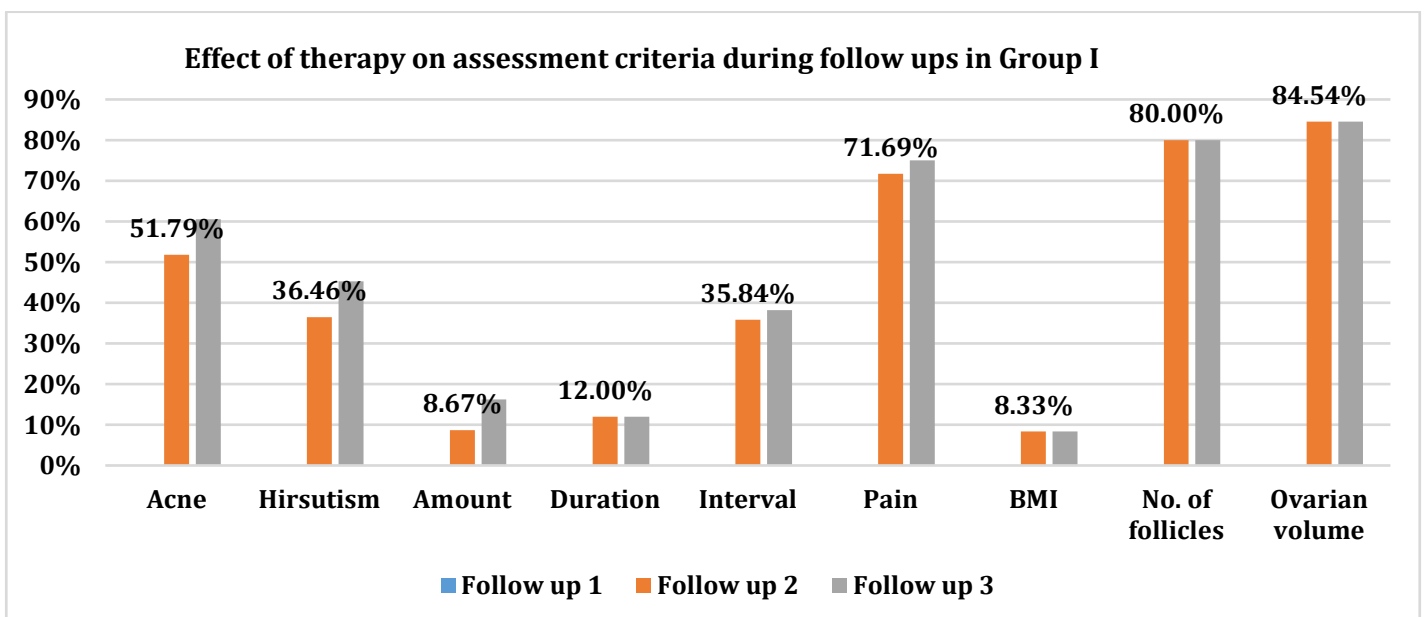
Group II demonstrated marginally higher relief in hirsutism (7.02%), menstrual blood amount (4.15%), menstrual interval (0.55%), pain during menstruation (3.31%), no. of follicles (6.7%), LH:FSH ratio (10.04%), and fasting glucose-insulin ratio (63%).

However, none of the intergroup differences were statistically significant ( $P > 0.05$ ) across all parameters.

Both *Yog Basti* (Group I) and *Vishwadi Guggulu with Aartava Pravartaka Yoga* (Group II) were found to be effective and comparable in improving the clinical manifestations and hormonal parameters of PCOS, suggesting that both therapeutic modalities hold similar efficacy in overall management of the disorder.

**Effect of therapy on assessment criteria during follow ups in Group -I**

Criteria	BT Mean score	F1 (1 <sup>st</sup> month) Mean score	% age relief after F1	F2 (3 <sup>rd</sup> month) Mean score	% age relief after F2	F3 (4 <sup>th</sup> month) Mean score	% age relief after F3
Acne	16.733	16.733	0%	8.067	51.79%	6.600	60.55%
Hirsutism	11.333	11.333	0%	7.200	36.46%	6.200	45.29%
Amount of menstrual blood	65.333	65.333	0%	71.00	8.67%	54.700	16.27%
Duration	5.000	5.000	0%	4.400	12%	4.400	12%
Inter menstrual interval	53.200	53.200	0%	34.133	35.84%	32.867	38.21%
Dysmenorrhoea	3.533	3.533	0%	1.000	71.69%	0.883	75%
BMI	27.193	27.193	0%	24.927	8.33%	24.927	8.33%
No. of follicles	1.000	1.000	0%	0.200	80%	0.200	80%
Ovarian Volume	0.867	0.867	0%	0.133	84.54%	0.133	84.54%



**Summary of Therapeutic Effect during Follow-ups in Group I (Yog Basti: Lekhana Aasthapana & Lahshun Taila Anuvasana Basti)**

Progressive improvement was observed in all clinical and hormonal parameters across the three follow-ups in Group I.

No improvement was recorded after the first follow-up, indicating that therapeutic effects began manifesting after continued treatment.

By the second follow-up, substantial relief was observed in several key parameters — acne (51.79%), hirsutism (36.46%), pain during menstruation (71.69%), intermenstrual interval (35.84%), and significant reductions in number of follicles (80%) and ovarian volume (84.54%).

By the third follow-up, the relief further improved in acne (60.55%), hirsutism (45.29%), amount of menstrual flow (16.27%), pain during menstruation (75%), and intermenstrual interval (38.21%), indicating sustained and stable therapeutic response.

BMI and menstrual duration showed mild improvement (8.33% and 12% respectively) by the second follow-up, which remained stable thereafter.

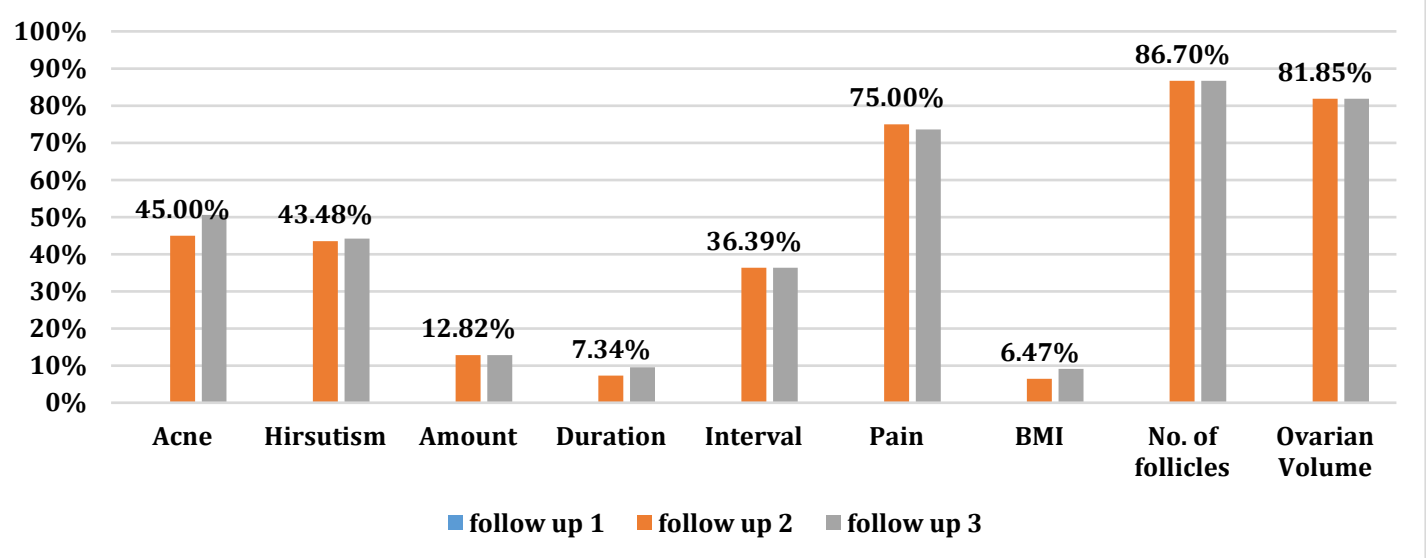
**Overall Summary**

Therapeutic progression in Group I showed gradual and consistent improvement from the second follow-up onward, with marked relief in acne, hirsutism, menstrual pain, follicular number, and ovarian volume, demonstrating the progressive and cumulative efficacy of Yog Basti therapy in managing PCOS symptoms over time.

**Effect of therapy on assessment criteria during follow ups in Group II**

Criteria	BT Mean score	F <sub>1</sub> (1st month) Mean score	% age relief after F <sub>1</sub>	F <sub>2</sub> (3rd month) Mean score	% age relief after F <sub>2</sub>	F <sub>3</sub> (4 <sup>th</sup> month) Mean score	% age relief after F <sub>3</sub>
Acne	16.000	16.000	0%	8.800	45%	7.900	50.62%
Hirsutism	10.733	10.733	0%	6.067	43.48%	5.986	44.22%
Amount of menstrual blood	65.000	65.000	0%	73.333	12.82%	73.333	12.82%
Duration	4.533	4.533	0%	4.200	7.34%	4.100	9.55%
Inter menstrual interval	53.667	53.667	0%	34.133	36.39%	34.133	36.39%
Dysmenorrhoea	2.400	2.400	0%	0.600	75%	0.633	73.62%
BMI	26.047	26.047	0%	24.360	6.47%	23.674	9.11%
No. of follicles	1.000	1.000	0%	0.133	86.7%	0.133	86.7%
Ovarian Volume	0.733	0.733	0%	0.133	81.85%	0.133	81.85%

**Effect of therapy on assessment criteria during follow ups in Group II**



**Summary of Therapeutic Effect during Follow-ups in Group II (Vishwadi Guggulu & Aartava Pravartaka Yoga)**

In Group II, a gradual and steady improvement was observed across all clinical and hormonal assessment criteria over the course of follow-ups.

No change was seen after the first follow-up, indicating that therapeutic action began after continued administration.

By the second follow-up, marked improvement was noted in acne (45%), hirsutism (43.48%), pain during menstruation (75%), intermenstrual interval (36.39%), no. of follicles (86.7%), and ovarian volume (81.85%), showing strong mid-course therapeutic response.

By the third follow-up, further mild improvement was observed in acne (50.62%), hirsutism (44.22%), duration of menses (9.55%), and BMI (9.11%), with most parameters maintaining stable relief levels achieved during the second follow-up.

**Overall Summary**

Therapeutic response in Group II exhibited progressive and sustained improvement, particularly in acne, hirsutism, menstrual pain, follicular count, and ovarian volume, with stabilization of effects by the third follow-up. This indicates that Vishwadi Guggulu and Aartava Pravartaka Yoga act gradually but effectively in correcting hormonal and menstrual irregularities associated with PCOS.

**Changes observed in Lab. Investigations in Group I**

Investigations	Mean score		Mean diff.	%age	S.D±	S.E	't'	P	Result
	B.T	A.T							
Hb <sub>gm</sub> %	11.740	11.720	0.020	0.1%	0.524	0.135	0.148	>0.05	NS
TLC	7627	7480	147	1.9%	0.441	0.114	1.289	>0.05	NS
ESR	16.333	10.000	6.333	38.77%	5.765	1.489	4.255	<0.05	S
T.Cholesterol	154.200	135.667	18.533	12%	29.520	7.622	2.432	<0.05	S
HDL	42.133	46.933	-4.800	11.39%	7.053	1.821	-2.636	<0.05	S
LDL	98.800	79.133	19.667	19.9%	17.779	4.591	4.284	<0.001	HS
S.Insulin (Fasting)	8.612	7.291	1.321	15.33%	2.123	0.548	2.410	<0.05	S

**Summary of Changes in Laboratory Investigations - Group I (Yog Basti: Lekhana Aasthapana & Lahshun Taila Anuvasana Basti)**

In Group I, analysis of hematological and biochemical parameters revealed notable improvements in metabolic and inflammatory markers following therapy.

Non-significant changes (P>0.05) were observed in Hb% (0.1%) and TLC (1.9%), indicating that the therapy did not adversely affect general hematological status.

Significant reduction in ESR (38.77%, P<0.05) suggested a marked anti-inflammatory effect of the treatment.

Lipid profile showed favorable modulation — total cholesterol decreased by 12% (P<0.05), LDL reduced by 19.9% (P<0.001), and HDL increased by 11.39% (P<0.05), reflecting improved lipid metabolism.

Fasting serum insulin decreased by 15.33% (P<0.05), indicating a positive impact on insulin sensitivity and metabolic balance.

**Overall Summary**

Therapy with *Yog Basti (Lekhana Aasthapana and Lahshun Taila Anuvasana Basti)* demonstrated beneficial biochemical modulation, particularly in reducing inflammation, improving lipid metabolism, and enhancing insulin regulation, thereby supporting its systemic detoxifying and metabolic balancing role in PCOS management.

**Changes observed in Lab. Investigations in Group II**

Investigations	Mean Score		Mean diff.	%age	S.D.	S.E.	't'	P	Result
	BT	AT							
Hb <sub>gm</sub> %	11.433	11.493	-0.060	0.5%	0.745	0.192	-0.312	>0.05	NS
TLC	8020	7700	320	3.9%	0.598	0.154	2.073	>0.05	NS
ESR	28.467	8.733	19.733	69.31%	21.222	5.479	3.601	<0.001	HS
T. Cholesterol	170.933	155.333	15.600	9.1%	21.500	5.551	2.810	<0.05	S
HDL	44.667	51.000	-6.333	14.1%	4.639	1.198	-5.287	<0.001	HS
LDL	103.533	84.733	18.800	18.1%	13.056	3.371	5.577	<0.001	HS
S.Insulin (Fasting)	17.415	9.927	7.487	42.9%	18.291	4.723	1.585	>0.05	NS

**Summary of Changes in Laboratory Investigations - Group II (Vishwadi Guggulu & Aartava Pravartaka Yoga)**

In Group II, treatment with *Vishwadi Guggulu* and *Aartava Pravartaka Yoga* produced significant biochemical improvements, reflecting enhanced metabolic and anti-inflammatory effects.

Non-significant changes (P>0.05) were noted in Hb% (↑0.5%), TLC (↓3.9%), and fasting serum insulin (↓42.9%), indicating no adverse effect on hematological stability and a trend toward better insulin sensitivity.

Highly significant reduction in ESR (↓69.31%, P<0.001) demonstrated a strong anti-inflammatory response, showing the therapy's potential to reduce systemic inflammation.

Lipid profile improved remarkably - total cholesterol decreased by 9.1% (P<0.05), LDL reduced by 18.1% (P<0.001), and HDL increased by 14.1% (P<0.001), signifying effective lipid regulation and cardiovascular protection.

**Overall Summary**

Therapy with *Vishwadi Guggulu* and *Aartava Pravartaka Yoga* significantly improved lipid and inflammatory parameters, reflecting enhanced metabolic correction and systemic detoxification. Although the changes in insulin were not statistically significant, the overall trend suggests an improvement in metabolic and endocrine homeostasis relevant to PCOS management.

**Inter-Group Comparison over Lab Investigations**

Investigations	% age Change		Diff. in Relief %	S.D.	S.E.	't'	p	Results
	Grp I	Grp II						
Hb gm %	0.1%	0.5%	0.4%	0.788	0.352	0.368	>0.05	NS
TLC	1.9%	3.9%	2%	0.398	0.178	-0.729	>0.05	NS
ESR	38.77%	69.31%	30.54%	9.881	4.419	-0.950	<0.05	S
T. Cholesterol	12%	9.1%	2.9%	10.979	4.910	1.588	>0.05	NS
HDL	11.39%	14.1%	2.71%	6.556	2.932	0.272	>0.05	NS
LDL	19.9%	18.1%	1.8%	16.750	7.491	1.001	>0.05	NS
S.Insulin (Fasting)	15.33%	42.9%	27.57%	15.669	7.007	-1.412	>0.05	NS

**Summary of Intergroup Comparison in Laboratory Investigations (Group I vs Group II)**

The comparative evaluation of laboratory parameters between Group I (Yog Basti) and Group II (*Vishwadi Guggulu & Aartava Pravartaka Yoga*) showed that both therapies produced beneficial biochemical effects, with only minor variations between them.

Group II exhibited slightly greater improvements in Hb% (0.4%), TLC (2%), ESR (30.54%), HDL (2.71%), and fasting serum insulin (27.57%).

Group I showed marginally higher reductions in total cholesterol (2.9%) and LDL (1.8%) levels.

A statistically significant difference (P<0.05) was found only in ESR, where Group II demonstrated notably greater anti-inflammatory response than Group I.

For all other parameters, no statistically significant intergroup differences (P>0.05) were observed, suggesting both therapies exerted comparable effects on metabolic and hematological parameters.

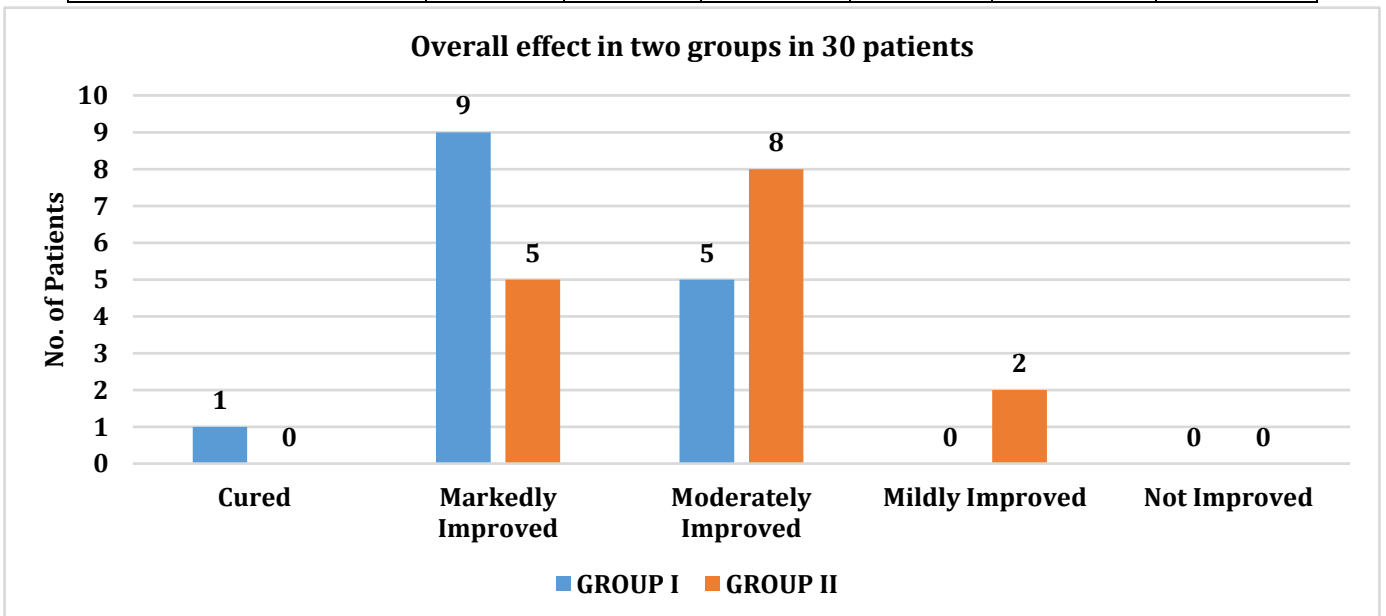
**Overall Summary**

Both *Yog Basti* and *Vishwadi Guggulu* with *Aartava Pravartaka Yoga* significantly improved inflammatory and lipid parameters, with Group II showing slightly superior anti-inflammatory action, while Group I showed marginally better lipid-lowering potential. Overall, both interventions were equally effective in restoring metabolic balance and systemic health in PCOS patients.

**Overall effect in two Groups in 30 Patients**

Assessment	Grp I Patients	Grp I % age	Grp II Patients	Grp II % age	Total Patients	Total % age
Cured	1	6.6%	0	0%	1	3.33%
Markedly improved	9	60%	5	33.33%	14	46.67%
Moderately improved	5	33.33%	8	53.33%	13	43.33%
Mildly improved	0	0%	2	13.33%	2	6.67%
Not improved	0	0%	0	0%	0	0%

**Overall effect in two groups in 30 patients**



### Summary of Overall Results and Interpretation

The overall therapeutic outcome of both treatment groups demonstrated significant clinical improvement in the majority of patients.

#### Overall Analysis (All Patients, n=30):

- 46.67% of patients showed marked improvement
- 43.33% showed moderate improvement
- 6.67% showed mild improvement
- 3.33% patients were completely cured

#### Group-wise Results

Group I (Yog Basti): Out of 15 patients, 1 (6.67%) was cured, 9 (60%) markedly improved, and 5 (33.33%) moderately improved - indicating a higher degree of marked improvement and cure rate.

#### Drug Review

Group II (Vishwadi Guggulu & Aartava Pravartaka Yoga): Out of 15 patients, 5 (33.33%) were markedly improved, 8 (53.33%) moderately improved, and 2 (13.33%) mildly improved - reflecting steady and moderate improvement in most cases.

#### Overall Interpretation

Both therapeutic regimens were effective in managing PCOS, but Group I (Yog Basti) demonstrated a more pronounced and deeper therapeutic response, with higher rates of marked improvement and complete cure, while Group II showed consistent moderate improvements, highlighting the complementary potential of both approaches in holistic management of the disorder.

**Table 1: Lekhana Aasthapana Basti (Sushruta Samhita, Chikitsa Stana 38/82)**

No.	Drug Name	Latin Name	Family	Part used	Karma	Rogaghanta
1.	Triphala	<i>Embelica officinalis</i> Gaertn. <i>Terminalia bellirica</i> Roxb. <i>Terminalia chebula</i> Retz.	Euphorbiaceae Combretaceae Combretaceae	Pericarp of fruit	<i>Garbhashthapaka, Anulomana, Rasayana, Lekhana, Deepana, Rechana</i>	<i>Paittikavikara, Daha, Netraroga, Khalitya, Palitya, Aruchi, Agnimandhya, Vatavyadhi, Trishna, Udavarta, etc.</i>
2.	Gomutra	Cow's urine	-	-	<i>Kriminuta, Kushtanuta, Vishaghna, Lekhana</i>	<i>Shoola, Gulma, Udararoga, Kushtha, Sthaulya</i>
3.	Yavakshar	Mixture of Pottasium Salts	-	<i>Kshar</i>	<i>Deepana, Pachana, Shodhana, Ropana, Soshana, Iekhana, Darana</i>	<i>Ashmari, Mutrakrucchra, Udarashula, Gulma, Arsha, Pandu</i>
4.	Shudh Shilajeet	Asphaltum	-	-	<i>Rasayana, Vrishya, Vajikarana, Yogavahi, Dehadadyakar</i>	<i>Prameha, Pandu, Mandagni, Shoola, Medoroga, Gulma, Udarroga</i>
5.	Shudh Kasisa	Green Vitriol	FeSo <sub>4</sub>	-	<i>Vishghna, Netrya, Balya, Rajah pravarataka</i>	<i>Kshaya, Pandu, Alpa-aartava, Gudabhransha</i>
6.	Shudh Hingu	<i>Ferula narthex</i> Boiss.	Umbelliferae	<i>Niryaas</i>	<i>Anulomana, Krimighna, Chedana, Vajikarana, Aartavajanana</i>	<i>Aadhmana, Vatavikara, Swaasa roga, Kashta aartava, Klebya</i>
7.	Tutha	Copper Sulphate	CuSo <sub>4</sub>	-	<i>Lekhana, Krimighna, Vishghna, Balya, Rasayana</i>	<i>Prameha, Medohara, Shoola, Amlapitta, Arshnashaka</i>
8.	Katu Taila	-	-	-	<i>Krimighna, Kandu-kushta nashaka, Lekhana, Agnideepana.</i>	<i>Kustha, Vrana shodhana, Dantapooya, Rajorodha</i>

**Table 2: Lahshun Taila Anuvasana Basti (Kashyapa Kalpa Sthana, Lahshun Kalpa Adhyaya 93-95)**

No.	Drug Name	Latin Name	Family	Part used	Karma	Rogaghanta
1.	Lahshun	<i>Allium sativum</i> Linn	Liliaceae	Bulb	Vedanasthapaka, Deepana, Pachana, Anulomana, Aartavajanana	Aartavajanana, Sandhivata, Ardita, Agnimandya, Aruchi, Shoola.
2.	Murchit Til Taila	<i>Sesamum indicum</i>	Pedaliaceae	Oil	Snehana, Vedanasthapana, Vajikarana, Artavajanana, Rasayana	Vatashoola, Agnimandhya, Rajaorodha, Kashtartava
3.	Godugdha	Cow`s milk	-	-	Rasayana, Jeevaniya, Brimhana, Vajikarana, Vayasthapana	Daha, Trishna, Udavarta, Gulma, Atisara, Shrama, Klama, Lactogogue
4.	Trikatu	<i>Piper longum</i> Linn., <i>Zingiber officinale</i> Rosc., <i>Piper nigrum</i> Linn.	Piperaceae, Zingiberaceae, Piperaceae	Fruit, Rhizome, Fruit	Anulomana, Deepana, Pachana, Kaphavatahara, Garbhashaya sankochaka, Aam doshahara, rajorodha.	Kasa, Shwasa, Hikka, Aruchi, Agnimandya, Ajirna, Vibandha, Gulma, Udara vikara, Arsha, Yakridavikara.
5.	Pippalimoola	<i>Piper longum</i> Linn.	Piperaceae	Root	Anulomana, Deepana, Hridya, Pachana, Vrishya, Garbhashaya sankochaka, Aam doshahara, Rajorodha	Udara vikara, Aruchi, Agnimandya, Ajirna, Vibandha, Gulma, Krimiroga, Pandu, Raktavikara, Aamvata, Vatarakta
6.	Chavya	<i>Piper retrofractum</i> Vahl.	Piperaceae	Root	Deepana, Pachana, Vata anulomana, Krimighna, Shoola prashamana	Aruchi, Agnimandya, Ajeerna, Udararoga, Anaha
7.	Chitraka	<i>Plumbago zeylanica</i> Linn.	Plumbaginaceae	Root	Lekhana, Garbhashaya sankochaka, Vajikarana, Deepana, Pachana, Rajorodha	Shotha, Nadi daurbalya, Vatavyadhi, Rajorodha, Prasuti vikara, Makkala shoola
8.	Ajmoda	<i>Carum Roxburghianum</i> (DC) Craib.	Umbelliferae	Fruit	Shoola prashamana, Krimighna, Vata anulomana, Deepana, Garbhashaya uttejaka, Vajikarana	Agnimandya, Aadhmana, Udara roga, Krimi, Mutraghata, Kashta aartava, Klebya
9.	Hingu	<i>Ferula narthex</i> Boiss.	Umbelliferae	Niryaas	Anulomana, Chedana, Vajikaran, Aartavajanana	Aadhmana, Vatavikara, Kashta aartava, Klebya, Jwara
10	Vidarikanda	<i>Pueraria tuberosa</i> DC.	Fabaceae	Kanda	Shonitasthapana, Vrishya, Stanyajanana,	Yakrita-pleeha vridhi, Vibandha, Raktavikara
11.	Shatavari	<i>Asparagus racemosus</i> Willd.	Liliaceae	Root	Garbhaposhaka, Stanyajanana, Shukrala, Rasayana, Vedanasthapana	Vatavyadhi, Amlapitta, Shoola, Garbha srava, Raktapradara

12.	<i>Ashwagandha</i>	<i>Withania somnifera</i> Linn.	Solanaceae	Root	Shothahara, Vedanasthapana, Vajikarana, Yonishoolahara, Anulomana,	Vatavyadhi, Yonishoola, Pradara, Shotha
13.	<i>Mudagparni</i>	<i>Phaseolus trilobus</i> Ait.	Fabaceae	Panchang	Garbhasthapana, Shukrala, Rasayana, Deepana, Sukradoshahara, Vrishya, Kaphahara, Anulomana, Jeevaniya	Raktapradara, Raktavikara, Kshaya, Shotha, Jwara, Vatarakta
14.	<i>Mashaparni</i>	<i>Teramnus labialis</i> Spreng.	Fabaceae	Panchang	Vrishya, Balya, Jeevaniya, Deepana	Jwara, Krimi, Raktapitta, Ardita, Udararoga, Shotha
15.	<i>Jivanti (Swarnajivanti)</i>	<i>Leptadenia reticulata</i> W.&A.	Asclepiadaceae	Leaves	Anulomana, Vrishya, Rasayana, Stanyajanana	Grahni, Raktapitta, Kasa, Mutrakricha, Mutradaha, Shosha
16.	<i>Madhuka</i>	<i>Glycyrrhiza glabra</i> Linn.	Fabaceae	Root	Vedanasthapana, Shothahara, Vata anulomana, Mridurechana, Vrishya	Vranashotha, Aamvata, Shiroroga, Trishna, Vibandha, Rakta alpita
17.	<i>Dashmoola</i>	Roots of 10 herbs (Brihat & Laghu Panchamoola)	-	Root bark	Vata-Kaphahara, Shothahara, Srotoshodhaka	Garbhashaya shothahara, Agnimandhya, Kaphavatajavikara

**Table 3: Shamana Aushadha**

No.	Drug Name	Latin Name	Family	Part used	Karma	Rogaghanta
1.	<i>Ativisha</i>	<i>Aconitum heterophyllum</i> Wall.	Ranunculaceae	Root (Rhizome)	Deepana, Pachana, Stanya shodhana, Vajikarana, Lekhana, Vishaghna	Agnimandya, Ajeerna, Aamdosha, Shotha, Medoroga
2.	<i>Eranda</i>	<i>Ricinus communis</i> Linn.	Euphorbiaceae	Root	Balya, Vedanasthapana, Bhedana, Vrishya, Garbhashyashodhana	Shotha, Vatavyadhi, Yonivyapada, Mutrakriccha, Shoola
3.	<i>Shunthi</i>	<i>Zingiber officinale</i> Rosc.	Zingiberaceae	Rhizome	Deepana, Pachana, Vataanulomana, Vrishya, Aam pachana	Aamvata, Sandhisotha, Vatavyadhi, Aruchi, Ajeerna
4.	<i>Devdaru</i>	<i>Cedrus deodara</i> (Roxb.) Loud.	Pinaceae	Heartwood	Vedanasthapana, Garbhashyasodhana, Stanyashodhana, Lekhana, Anulomana	Shotha, Vatavikara, Medoroga, Sandhivata
5.	<i>Kushtha</i>	<i>Saussurea lappa</i> C.B.Clarke	Asteraceae	Root	Anulomana, Shoolaprashamana, Vrishya, Garbhashya uttejaka, Aartavajanana, Rasayana	Vatavyadhi, Shotha, Agnimandya, Rajorodha, Kashtartava, Stanyavikara
6.	<i>Rasna</i>	<i>Pluchea lanceolata</i>	Asteraceae	Leaves	Vedanasthapana, Aam Pachana, Rechana,	Shotha, Vatavyadhi, Aamdosha,

		C.B.Clarke			Vrishya, Rasayana -	Udarashoola, Vibandha
7.	Guduchi	<i>Tinospora cordifolia</i> Willd.	Menispermaceae	Stem	Anulomana, Pittasaraka, Vedanasthapana, Vrishya, Rasayana	Vatarakta, Amlapitta, Pravahika, Pandu, Madhumeha
8.	Saindhava	Rock Salt	-	-	Agni deepaka, Pathya, Vrishya, Ruchikaraka, Snigdha, Doshaghnam Uttamam	Aruchi, Udarashoola, Vibandha
9.	Shudh Guggulu	<i>Commiphora mukul</i> (Hook ex Stocks) Engl.	Burseraceae	Oleogum resin	Shothahara, Medohara, Vedanasthapana, Anulomana, Pittasaraka, Aartavajanana, Lekhana, Klebya, Yonivyapada	Sandhivata, Aamvata, Apchi, Vatavyadhi, Granthi, Gandamala, Klebya, Kashta aartava, Yonivyapada
10.	Goghrita	Cow's Ghee	-	-	Dhi, Smriti, Medha Vardhaka, Agni, Bala, Shukra Vardhaka, Snehanam Uttamam, Vayasthapana	Kshata ksheena, Shosha, Vishanashaka, and Yoniroga.

### Method of Preparation

All the drugs of group I and group II were prepared in Charak Pharmacy Ayurvedic College, Paprola. The *Shilajeet*, *Kasisa* and *Hingu* were used after their *Shodhana*.

### Place of Preparation of Drug

The drugs were identified under the supervision of Dravya Guna department. The drug were prepared in the college in the college pharmacy under the supervision of department of Rasa Shastra and Bhaishajya Kalpana.

### Discussion

Polycystic Ovarian Syndrome (PCOS) is a multifactorial and heterogeneous endocrine disorder involving *Artava-vaha-srotodushti* and *Meda-dhatu-vridhhi*, which result in hormonal imbalance, anovulation, and metabolic dysfunction. The present study was undertaken to evaluate and compare the effect of *Yog Basti* (*Lekhana Asthapana Basti* & *Lahshun Taila Anuvasana Basti*) and *Shamana Aushadha* (*Vishwadi Guggulu* & *Artava Pravartaka Yoga*) in the management of PCOS from Ayurvedic and modern perspectives. [19]

#### 1. Ayurvedic Pathophysiological Understanding

According to Charaka Samhita (Sutrasthana 28/9), disease manifests when the *Dosha* and *Dushya* interact within *Srotas* causing obstruction (*Srotorodha*), which is the key factor in *Artava-vaha-srotodushti* [20]. In PCOS, *Kapha* and *Meda* produce *Srotorodha* in the *Artavavaha srotas*, while *Vata*, being

obstructed, results in irregular ovulation and menstrual disturbances (*Avrta Vata*) [21].

*Kapha* predominance causes cystic changes and sluggish metabolism (*Agnimandya*), *Meda-vridhhi*, and hormonal imbalance, whereas *Vata* vitiation produces irregular follicular rupture and amenorrhea. The vitiation of *Apana Vata* specifically leads to *Anartava* (absence of menstruation), which correlates with anovulation in modern terms. *Pitta* involvement further disturbs *Rasa-Rakta-Artava* formation, aggravating the pathology [22].

#### 2. Action of Yog Basti

*Basti Chikitsa* is the prime therapy for *Vata-vyadhi* and reproductive disorders. Sushruta has mentioned that *Basti* acts on *Pakvasaya* (colon), the main site of *Vata*, and helps restore normal function of *Apana Vata* (Sushruta Samhita, Chikitsasthana 35/24)[23]. Ashtanga Hrdaya emphasizes that *Basti* is *Ardha Chikitsa*, i.e., half of all therapeutic measures, owing to its wide systemic actions (Ashtanga Hrdaya, Sutrasthana 19/1-3) [24].

In this study, *Lekhana Asthapana Basti* was chosen for its *Kapha-Meda-hara* and *Srotoshodhaka* actions, facilitating the breakdown of cystic and fatty deposits around ovaries and regulating metabolism. Charaka describes *Lekhana Basti* as effective in *Sthoulya* (obesity), *Meda-dhatu-vridhhi*, and disorders of *Avrta Vata* (Charaka Samhita, Siddhasthana 12/13-14) [25].

*Lahshun Taila Anuvasana Basti*, as per Kashyapa Samhita, Kalpa Sthana, Lahshun Kalpa Adhyaya 93-95, contains *Lahshuna* (*Allium sativum*), which is *Vata-Kapha-hara*, *Medohara*, *Lekhana*, and *Agnidipaka* [26]. The *Snigdha* property of *Taila* along with the *Lekhana* property of *Lahshuna* works in both directions - pacifying *Vata* and reducing *Kapha-Meda* simultaneously. The *Anuvasana Basti* lubricates the colon, corrects *Vata gati*, and enhances the hormonal secretory functions by stimulating the Hypothalamo-Pituitary-Ovarian axis through the Gut-Brain axis [27].

When *Lekhana Asthapana* and *Lahshun Taila Anuvasana* are administered in combination as *Yog Basti*, they provide dual benefits-elimination of vitiated *Doshas* (*Shodhana*) and nourishment of reproductive tissues (*Brimhana*). This *Yogic* combination improves follicular maturation, normalizes *Artava Pravrtti*, and reduces *Meda-vridhhi*. [28]

### 3. Role of Shamana Aushadha

The group of *Shamana Aushadha* used - *Vishwadi Guggulu* and *Artava Pravartaka Yoga* - target the root pathology of PCOS through *Dosha-prashamana* and *Srotoshodhana*.

*Vishwadi Guggulu* in *Vrihat Nighantu Ratnakar* (Bharat Bhaishajya Ratnakar) having all possessing *Kapha-Meda-hara*, *Agnidipaka*, and *Srotoshodhaka* actions [29] & has *Lekhana* and *Rasayana* properties, which help in reducing cystic growth and restoring hormonal balance.[30] *Artava Pravartaka Yoga*, described in *Ayurveda Saara Sangraha* all drugs (*Lauha Bhasma*, *Kasisa Bhasma*, *Shudha Tankan*, *Elua Churna* and *Purana Guda*) having *Artava-pravartaka* and *Deepana* herbs[31]. It stimulates uterine contractions and regularizes menstrual flow and acts as an estrogenic and ovulation-inducing agent [32]

### 4. Ayurvedic-Modern Correlation

The Ayurvedic concept of *Meda-dhatu dushti* and *Avrta Vata* closely parallels modern pathophysiology of insulin resistance, hyperandrogenism, and anovulation *Meda-dhatu vridhhi* (excess adiposity) is linked to obesity and insulin resistance, which triggers increased ovarian androgen production and follicular arrest. This matches the *Avrta Vata* state described by *Ashtanga Hrdaya* (*Nidanasthana 15/24*), where *Vata* becomes obstructed by *Kapha* and *Meda*, leading to cessation of menstruation [33].

Modern research supports that *Basti Chikitsa* influences the hypothalamic-pituitary-ovarian (HPO) axis, regulates autonomic nervous function, and reduces systemic inflammation, thereby normalizing hormonal patterns. [34]

### 5. Comparative Efficacy Discussion

The results of the present study indicate that *Yog Basti* group showed better improvement in clinical symptoms - such as menstrual regularity, reduction in cystic size, weight management, and ovulation - compared to the *Shamana Aushadha* group alone. This supports the classical principle that *Shodhana* therapy should precede *Shamana* in chronic metabolic disorders (*Charaka Samhita, Siddhithana 1/38*).[35]

The *Basti* group demonstrated significant correction in *Kapha-Meda-dushti* and normalization of *Apana Vata gati*, leading to restoration of menstrual cycle and ovulation. On the other hand, the *Shamana Aushadha* group provided gradual but sustained improvements in metabolic and hormonal parameters, indicating their role in maintenance and prevention of recurrence. [36]

Thus, the combined approach of *Yog Basti* followed by *Shamana Aushadha* is more effective as it addresses both the *Shodhana* (eliminative) and *Shamana* (pacifying) dimensions of PCOS management, aligning with the holistic Ayurvedic principle of *Dosha-shamana* and *Dhatu-prasadana*.

### Comparative Efficacy

Comparative evaluation revealed that *Yog Basti* showed quicker and more pronounced improvement in key parameters such as:

- Restoration of menstrual regularity (*Raja Pravrtti*)
- Reduction in ovarian volume and number of cysts
- Decrease in body weight and *Meda-dhatu-vridhhi*
- Improvement in ovulation rate and fertility markers
- Normalization of LH/FSH ratio and insulin resistance indicators

These findings confirm *Sushruta's* statement that *Basti* is the best treatment for disorders caused by *Vata* and its obstruction (*Sushruta Samhita, Chikitsasthana 35/24*). *Basti* being a *Mula Chikitsa* of *Vata* acts through the *Pakvashaya* (colon), the root site of *Vata*, thereby influencing systemic hormonal regulation through the gut-brain-ovary axis.

The *Shamana Aushadha* group also exhibited statistically significant improvement, demonstrating the role of *Rasayana*, *Agnidipana*, and *Artava-pravartaka* properties in maintaining long-term equilibrium. When both therapies are employed sequentially (*Shodhana* followed by *Shamana*), they provide a comprehensive correction at both physical and functional levels - as per *Charaka's* dictum: "*Suddha-sarirah santah doshah sukham prapnoti natra samśayaḥ*" (*Charaka Samhita, Siddhithana 1/38*).

**Probable Mode of Action**

Therapeutic Measure	Ayurvedic Action	Modern Correlation
<i>Lekhana Asthapana Basti</i>	<i>Kapha medahara, Srotoshodhaka, Avrta Vata-nashaka</i>	Detoxification, improved metabolism, insulin sensitivity
<i>Lahshun Taila Anuvasana Basti</i>	<i>Vata-shamaka, Medohara, Artava-pravartaka</i>	Enhances gut-brain axis, regulates HPO axis
<i>Vishwadi Guggulu</i>	<i>Agnidipaka, Srotoshodhaka, Medohara</i>	Improves lipid profile and hormonal balance
<i>Artava Pravartaka Yoga</i>	<i>Artava-pravartaka, Vatanulomaka</i>	Estrogenic and ovulation-stimulating effects

**CONCLUSION**

The present clinical study entitled “A Comparative Study to Evaluate the Effect of *Yog Basti* (*Lekhana Aasthapana Basti* & *Lahshun Taila Anuvasana Basti*) and *Shamana Aushadha* (*Vishwadi Guggulu* & *Aartava Pravartaka Yoga*) in the Management of Polycystic Ovarian Syndrome (PCOS)” revealed that both therapeutic modalities provided significant relief in the clinical and biochemical manifestations of PCOS. Both *Yog Basti* and *Shamana Aushadha* demonstrated remarkable improvement in menstrual regularity, reduction of acne and hirsutism, normalization of BMI, improvement in ovarian morphology, and regulation of hormonal parameters such as LH:FSH ratio and AMH levels. The therapies also showed positive influence on lipid profile and inflammatory markers, indicating systemic metabolic correction. While both groups showed statistically significant outcomes, *Yog Basti* (Group I) produced superior results in overall improvement, with higher rates of marked improvement and cure, suggesting that *Shodhana* therapy offers deeper detoxification and better hormonal regulation. *Shamana* therapy (Group II) also proved effective as a safe, supportive, and sustainable approach for long-term management. Thus, it can be concluded that Ayurvedic management through *Yog Basti* combined with appropriate lifestyle measures provides a comprehensive approach in addressing the root causes of PCOS by restoring dosha balance, enhancing metabolism, and improving reproductive health.

**REFERENCES**

- Rotterdam ESHRE/ASRM-Spon-sored PCOS consensus workshop group. Revised 2003 consensus on diagnostic criteria and long-term health risks related to polycystic ovary syndrome (PCOS). *Hum Reprod.* 2004;19(1):41-7.
- Teede HJ, Misso ML, Costello MF, Dokras A, Laven J, Moran L, et al. Recommendations from the International Evidence-based Guideline for the Assessment and Management of Polycystic Ovary Syndrome. *Fertil Steril.* 2018;110(3):364-379.
- Azziz R, Carmina E, Dewailly D, Diamanti-Kandarakis E, Escobar-Morreale HF, Futterweit W, et al. The Androgen Excess and PCOS Society criteria for the polycystic ovary syndrome: the complete task force report. *Fertil Steril.* 2009;91(2):456-88.
- Azziz R, Carmina E, Chen Z, Dunaif A, Laven J, Legro RS, et al. Polycystic ovary syndrome. *Nat Rev Dis Primers.* 2016;2:16057.
- Lujan ME, Chizen DR, Pierson RA. Diagnostic criteria for polycystic ovary syndrome: a reappraisal. *Fertil Steril.* 2008;90(5):1272-9.
- Diamanti-Kandarakis E, Dunaif A. Insulin resistance and the polycystic ovary syndrome revisited: an update on mechanisms and implications. *Endocr Rev.* 2012;33(6):981-1030.
- Dumont A, Laven J, Fauser BC. Role of anti-Müllerian hormone in pathophysiology, diagnosis and treatment of polycystic ovary syndrome: a review. *Reprod Biomed Online.* 2015;31(3):300-16.
- Rojas J, Chavez M, Olivar L, Monsalve D, Ospina P, Salazar A. Polycystic Ovary Syndrome, Insulin Resistance, and Obesity: Clinical and Molecular Aspects. *Arch Med Res.* 2014;45(7):570-9.
- Azziz R, Woods KS, Reyna R, Key T, Knochenhauer ES, Yildiz BO. The prevalence and features of the polycystic ovary syndrome in an unselected population. *J Clin Endocrinol Metab.* 2004;89(6):2745-9.
- Misso ML, Misso M, Wild RA, Norman RJ, Peet M, et al. The treatment of infertility, hyperandrogenism and metabolic complications in polycystic ovary syndrome: a position statement of the Androgen Excess and PCOS Society. *J Clin Endocrinol Metab.* 2010;95(4):1673-87.
- Moran L, Hutchison SK, Norman RJ, Teede H. Lifestyle changes in women with polycystic ovary syndrome. *Clin Endocrinol (Oxf).* 2011;74(2):191-8.
- Legro RS, Arslanian SA, Ehrmann DA, Hoeger KM, Murad MH, Pasquali R, Welt CK; Endocrine Society. Diagnosis and treatment of PCOS: an Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2013;98(12):4565-92.
- Legro RS. Metformin therapy in PCOS: review and meta-analysis. *Best Pract Res Clin Endocrinol Metab.* 2003;17(2):273-88.

14. Costello MF, Misso ML, Wong JL, Fassnacht M, Leijssen R, et al. Placements from the International evidence-based guideline for PCOS: evidence summaries and recommendations. *Hum Reprod Open*. 2019;2019(3):hoz021.
15. Qi X, Zhang Y, Zhang S, et al. The role of anti-Müllerian hormone in the pathogenesis of PCOS. *J Steroid Biochem Mol Biol*. 2016;162:1-6.
16. Moran LJ, Pasquali R, Teede HJ, Hoeger KM, Norman RJ. Treatment of obesity in polycystic ovary syndrome: a position statement of the Androgen Excess and PCOS Society. *Fertil Steril*. 2009;92(6):1966-82.
17. Teede HJ, Deeks AA, Moran LJ. Polycystic ovary syndrome: a complex condition with psychological, reproductive and metabolic manifestations that impacts on health across the lifespan. *BMC Med*. 2010;8:41.
18. Teede HJ, Misso ML, Costello MF, Dokras A, Laven J, Moran L, et al. International PCOS guideline: executive summary. *Hum Reprod*. 2018;33(9):1602-18.
19. Szapary PO, Wolfe ML, Bloedon LT, Cucchiara AJ, Dermarderosian A, et al. Guggulipid for the treatment of hypercholesterolemia: a randomized controlled trial. *JAMA*. 2003;290(6):765-72.
20. Sharma VB, et al. Efficacy of Vyoshadi Guggulu and Shadushana Churna in metabolic disorders: a clinical evaluation. *Ayu Int J Res*. 2022; (example Ayurvedic clinical trial; full text available on PMC).
21. Lalita, Tanwar S, Kumar Panda J, Rani T. Ayurvedic approach to manage Polycystic Ovarian Syndrome with Yoga Basti - A Case Study. *J Ayu Integr Med Sci*. 2024;9(1):298-303.
22. Pratima. A conceptual study on effect of Lekhana Basti on Polycystic Ovarian Syndrome. *Int Ayurvedic Med J*. 2016;4(9):407-11.
23. Keerti Yadav. An experimental evaluation of Artavajanaka Yoga on female reproductive system with respect to amenorrhoea. *Int J Adv Res*. 2019;7(5):863-8.
24. Misso ML, Wong JL, Teede HJ, Costello MF. Aromatase inhibitors, clomiphene citrate and gonadotropins in ovulation induction for PCOS: a systematic review. *Hum Reprod Update*. 2013;19(4): 323-33.
25. Azziz R, Carmina E, Chen Z, Dunaif A, Laven JS, Legro RS, et al. Polycystic ovary syndrome. *Nat Rev Dis Primers*. 2016;2:16057.
26. Rojas J, Chávez M, Olivar L, Monsalve D, Salazar A. Polycystic ovary syndrome, insulin resistance and obesity: pathophysiology and clinical aspects. *J Endocrinol Metab*. 2014.
27. Dokras A. Mood and anxiety disorders in women with PCOS. *Steroids*. 2013;78(8): 1-7.
28. Sirmans SM, Pate KA. Epidemiology, diagnosis, and management of polycystic ovary syndrome. *Clin Epidemiol*. 2013;6:1-13.
29. Teede HJ, Misso ML, Costello MF, Dokras A, Laven J, Moran LJ, et al. Recommendations from the international evidence-based guideline for PCOS: summary and implementation. *Med J Aust*. 2018;209(4): 164-5.
30. Moran LJ, Hutchison SK, Norman RJ, Teede H. Lifestyle and behavioral interventions for PCOS: systematic review. *Obes Rev*. 2011;12(6):410-23.
31. Legro RS, Barnhart HX, Schlaff WD, et al.; NICHD Reproductive Medicine Network. Clomiphene, metformin, or both for infertility in PCOS. *N Engl J Med*. 2007;356(6):551-66.
32. Conway G, Dewailly D, Diamanti-Kandarakis E, et al. The polycystic ovary: more than an ovarian anomaly. *Hum Reprod Update*. 2014;20(4): 391-409.
33. Pal L, Santoro N. Lipids and PCOS: role and management. *Endocrinol Metab Clin North Am*. 2015;44(4): 799-814.
34. Glueck CJ, Goldenberg N. Metabolic syndrome and PCOS: pathophysiology and management. *Endocrinol Metab Clin North Am*. 2016;45(1): 77-98.
35. Wild RA, Carmina E, Diamanti-Kandarakis E, et al. Assessment of cardiovascular risk and prevention of cardiovascular disease in women with PCOS: a consensus statement. *J Clin Endocrinol Metab*. 2010;95(5):2038-49.
36. Harborne JB. *Phytochemical methods: a guide to modern techniques of plant analysis-useful background for herbal components such as guggul*. 3rd ed. 1998. (book reference for herbal analysis)

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