NATIONAL JOURNAL OF RESEARCH IN AYURVED SCIENCE

ISSN: 2320-7329

http://www.ayurlog.com Oct-Dec : 2023 | Volume: 11th | Issue: 5th

Efficacy of *Panchakarma* in polycystic ovaries

Salim M. Mulla*[1] , Sujata Jagtap[2]

1. M.S. (Ayu. streeroga Prasutitantra) PhD (Sch., Professor Loknete Rajarambapu Patil Ayurvedic Medical College, Islampur, Sangli , Maharashtra, India

2. Asso. Prof. AVP Mandal's Ayurved Mahaidyalaya Sion, Mumbai¸ Maharashtra, India

***Corresponding Author:** Email : drsmmulla@hotmail.com

ABSTRACT:

Polycystic ovaries & Anovulation are the leading causes for infertility in the society. Ayurvedic panchakarma treatment offers safe, genuine, effective, fast treatment option for the diseased. This is a single blind randomized clinical study on female patients suffering with endocrine disturbances like polycystic ovaries., Anovulation – oligovulation etc. The study was carried out on thirty patients taking regular ayurvedic medicinal treatment for the ovulation problems. Patients from age group 10 to 50 years of age were studied. Patients were treated with ayurvedic bodypurification treatment i.e. Panchakarma. First purification treatment for kaphadosha e.g.vaman done, followed by bastikarma for vata balance after one month. Patients were followed with monthly followup for 3 months. The response to treatment was observed in terms of improved maturation of ovarian follicle with establishment of regularity of menstrual cycle.*The results of internal medications were aggrevated with vaman & basti treatment. So panchakarma procedures vaman & bastikarma are effective in endocrinal pathologies like polycystic ovaries, anovulation – oligovulation. Faster results seen might be due to influence on hormonal levels.*

KEYWARDS :

Ayurvedic panchakarma, vamana, bastikarma, significantly effective, Polycystic ovaries , oligo-ovulation, hormonal homeostasis.

INTRODUCTION:

Endocrine disturbances are important underlying causes for the many dynamic health problems. Hormones are key substances for most of the bodily vital functions. Hormones are responsible for the stability, co-ordination & delivering target tissue function & there by maintaining homeostasis of the body functions. Endocrines glands work by principle of positive or negative feedback signal mechanisms.

In Ayurveda there is no special description available as hormonal systems.

But diseases caused by hormonal upsets are described at many instances.

Hormonal alterations may be physiological / pathological. Pubertal menstrual irregularities are physiological whereas anovulation due to disturbed levels of thyroid, pituitary or ovarian hormones is pathological.

In case of Polycystic Ovaries the pathology is limited to reproductive system whereas in polycystic ovarian syndrome (PCOS) the pathology is multisystem & more complex. So polycystic ovaries can be treated effectively whereas due to multiple systems involvement PCOS / PCOD is *kashtasadhya* (difficult for cure).

AIMS AND OBJECTIVES :

A) To study the 'Efficacy of *Panchakarma* procedures *vamana* and *bastikarma* in Polycystic Ovaries'.

B) To note side effects of the treatment if any.

STUDY DESIGN:

Randomised single blind comparative clinical trial in patients suffering from Polycystic Ovaries.Total 60 Outdoor patients in two groups of 30 patients were studied.

First group (A): patients were treated with *vamana* , followed by *sansarjanakrama* for 7 days . Then after one month *Bastikarma* was done on same patients with follow up of sansarjanakrama. Second Group (B) was given the same regular ayurvedic medicinal treatment without *panchakarma.*

INCLUSION CRITERIA :

1. Patients suffering from Polycystic Ovaries.

2. Patients from age 18 to 50 years of age. (Menarche to Menopause)

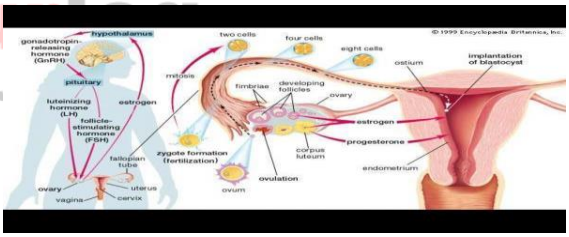
3. Selection was irrespective of constitution (*prakruti*), sex, duration of the disease.

EXCLUSION CRITERIA :

i. Pregnant & lactating womens.
ii. Patients having any benign or malignant new growth anywhere inside body.
iii. Patients with major systemic illness like diabetes, hypertension, bronchial, asthama, blood disorders etc.
iv. Patients unfit for treatment.

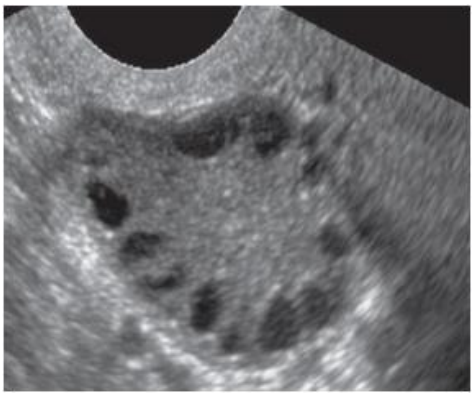
Place of work: Working institute Hospital & Research centre

HPO Axis – Ovulation / Female Reproductive System



Understanding PCOS [4, 5, 6, 7]

Polycystic ovary syndrome (PCOS) - affects several functions like reproductive, metabolic, and hormonal functions in the body. Infrequent or prolonged menstrual periods, Infertility, excessive hair growth known as hirsutism, acne, and obesity are some of the features of PCOS.PCOS Impact on reproductive, metabolic and psychological health. Women with PCOS have enlarged ovaries with multiple follicles, seen as string of pearls along the ovary during an ultrasound exam (Fig.1)



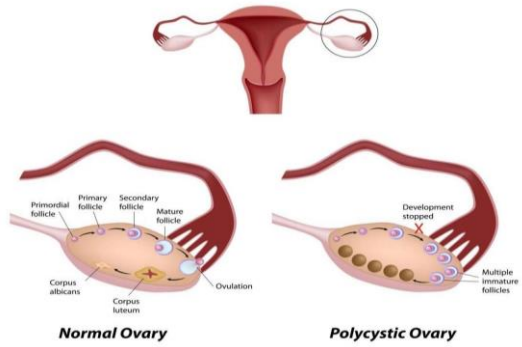


Fig. 1

EPIDEMIOLOGY : PCOS worldwide affects 4–18% of reproductive age women, based on the diagnostic criteria employed. Polycystic Ovaries affects 1-IN-10 WOMEN. 10%women of child-bearing age estimated to have PCOS, 50% women with PCOS go undiagnosed. 4.3 billion estimated annual cost to the American healthcare system to diagnose and treat women with PCOS. 3X The increased risk of women with PCOS developing endometrial cancer. 50% Women with PCOS who will develop T2DM or prediabetes before age 40.

Resistance to insulin : Insulin resistance interferes with the development of the follicles and prevents normal ovulation. Insulin resistance can also lead to weight gain, which can make PCOS symptoms worse, because having excess fat causes the body to produce even more insulin.

Hormone imbalance: There are raised levels of testosterone, luteinizing hormone, Low levels of sex hormone-binding globulin. (SHBG), raised levels of prolactin.

INVESTIGATIONS FOR PCOS :

Histopathological Investigations: Beta-human chorionic gonadotropin (b-HCG)/Urine pregnancy test, Serum prolactin, Thyroid-stimulating hormone (TSH), Follicle-stimulating hormone (FSH), Fasting blood glucose, Lipid profile, etc.

For women with hirsutism, add to the above list the following:

• Testosterone • Dehydroepiandrosterone-sulpate (DHEA-S)

PCOS complications : Menstrual problems and fertility, Pregnancy complications, Weight gain and obesity, Hair growth and acne, Insulin abnormalities, Cardiovascular diseases , Endometrial cancer , Sleep apnoea, Psychological – mood changes , depression , anxiety etc.are some important complications associated with PCOS.

PCOS &Pregnancy: Patients with PCOS have difficulty in conceiving and sustaining pregnancy. These women have higher incidence of early pregnancy loss, recurrent pregnancy loss, gestational diabetes, preterm delivery pregnancy-induced hypertension and pre-eclampsia.

Allopathic Treatment View : Hormonal therapy (HRT) - is the mainline treatment

For PCOS - limitations to success because of involvement of multiple systems. Treatment strategy is changing many times. With

ovulation induction quantity of growing follicles can be increased but what about the quality of forcefully enlarged eggs? How to overcome genetical or DNA derrangements ? So chances of abortion & malformations & pregnancy complications are increased with forcefully enlarged eggs.

AYURVEDIC VIEW : Ayurveda *panchakarma* i.e. bodypurification treatment is the first-line treatment in majority of diseases. Earliest *Shodhana* (Removing vitiated doshas) brings the body equilibrium and increased response to other treatment and also important in relapse prevention. So it is superior treatment to other treatment modalities.[1, 2]

दोषाःकदाचित्कुप्यन्तिजितालंघनपाचनैः।जिताःसंशोधनैर्येतुनतेषां पुनरुभ्दवः।।

च.सू.16/20, अ.ह्र.सू.4/27[1.3]

Vamana & Basti - showed significant results in regularizing irregular menses , infrequent ovulation, Amenorrhoea . So Study of two procedures i.e. *Vamana* (Therapeutic Emesis - Purificatory procedure for *kaphadoha)* & *Basti* (Purificatory procedure for *Vaatadosha*) out of five *panchakarma* procedures has been conducted. The diseases selected for study Polycystic Ovaries, PCOS, Anovultion or oligo- ovulation . According to Ayurveda unless & until Sperms & Ovum (*Beej*) are pure (*Shuddha*) fruitful conceptus will not be there.

एवंयोनिषुशुध्दासुगर्भंविन्दन्तियोषितः।।च. चि. 30/1

अदुष्टेप्राकृतेबीजेजीवोपक्रमणेसति।
पञ्चकर्मविशुध्दस्यपुरुषस्यापिचेन्द्रियम्।।च. चि. 30/126

परीक्ष्यवर्णैर्दोषाणांदुष्टंतद्ध्नैरुपाचरेत्। [1]

Purity is undiseased physiological state of zygotes - there should not be any alterations in physiology, genetic mutations , defects in the fertilising zygotes. There should be perfect , natural , long lasting union " *Supraja*" (Superior Progeny). *Panchakarma* at the start of medicinal treatment - aims at achieving the pure , natural , undiseased state of sperms & ovum. Now-a-days age of marriage & conception are prolonged for individuals - increased environmental & health effects on the sperms & ovums inside the human - reducing fertility index. In Ayurvedic gynaecology , specially for diseases related to ovulation disturbances again *Sanshodhan* – purification treatment is the first line treatment.

तत्रसंशोधनमाग्नेयानांद्रव्याणांविधिवदुपयोगः।

सु. सू. 15 – 16[3]

PROBABLE MODE OF ACTION : Purification of cellular wastes creates better environment more effective cellular functions/ metabolism. Panchakarma treatment decrease in resistance for hormone functions at the cellular level with better function of hormone receptors at target tissues.There may be Increased secretion of releasing hormones from hypothalamus due to better regulation of feedback mechanisms. Panchakarma brings individual cell purification i.e. clearance of waste of cellular metabolism & improved supply of essential nutrients (rasa) through improved digestion & circulation . Overall system performance & output is improved. So the results are quick & long standing. Ayurvedic Panchakarma boosts body immunue system , enhancing function of host defence mechanism & thereby creating positive changes in the body homeostasis & regularising the disturbed hormonal levels. Concept of mode of action of basti on enteric nervous system (ENS) is to be considerd here. Direct effect of vamankarma on CNS & cranial nerves specially vagus nerve may be matter of separate study. Ayurvedic panchakarma treatments brings about purification at micro - cellular level,

improve nerve conduction & neurotransmitters function enhancing better balance between body signalling & feedback systems.

MATERIALS FOR *VAMANA* (Therapeutic emesis)

A. Emetic compound (*Vamakyoga)*:

मदनमधुकलम्बानिम्बबिम्बीविशालात्रपुसकुटजमूर्वादेवदालीकृमिघ्नम्।

विदुलदहनचित्राःकोशवत्यौकरञ्जःकणलवणचैलासर्षपाश्चर्दनानि ।।अ. ह्र. सू. 15/1[2]

i) *Madanphalapippali – Randia spinosa* powder - 2-3gms.

ii) *Pippali – Piper longum* powder – ½ gm

iii) *Yashtimadhu – Glycerrhiza glabra* powder - ½ gm

iv) *Vacha – Acorus calamus* – ½ gm

v) *Saindhav – Rock salt* - ½ gm

vi) *Tankanbhasma – Tankana boriox* – ¼ gm

vii) Honey 5 ml

B. Liquid for fulfillment of stomach (*Akanthapana*) : Milk

C. *Saindhav* – Rock Salt water (*lawanjala*)

Dose for *Vamana*: Textual dose of *vamakyoga* for *vamana* is full of onself's finch (*antarnakhamushthi*). (*madanaphalapippali*)

Practically used: adults- 3-5 gms of *vamakyoga .Akanthapana*: 1-4 lit. as required.

PROPER (*SAMYAGA*) *VAMANA* SIGNS: *Pittantak* (bile vomited at the end), 6-8 *vegas* (ejections), self-limiting *vegas*, feeling of *laghuta* (lightedness) in body, satisfied mind & indriyas (Sensory organs) and most important relief of symptoms.[1]

दौर्बल्यलाघवंग्लानिर्व्याधीनामणुतारूचिः।ह्रद्वर्णशुद्धिःक्षुत्तृष्णाकालेवेगप्रवर्तनम्।।

बुद्धीन्द्रियमनःशुद्धिर्मारूतस्यानुलोमता।सम्यग्विरिक्तलिङ्गानिकायाग्नेश्चनुवर्तनम्।। च.सू.16-6[1]

Eradicated dosha *pramana* – Quantity of *Doshas* vomited = vomitus-intake quantity

= approx 54 tolas or 500-550 ml.

DURATION OF TREATMENT FOR *VAMANA* : 7days & 7days of Sansarjanakrama

FOLLOW UP : weekly for one month

MATERIALS FOR *BASTI* :

मदनकुटजकुष्ठदेवदालीमधुकवचादशमूलदारूरास्नाःयवमिसिकृतवेधनं

कुलत्थोमधुलवणंत्रिवृतानिरूहणानि।।
अ. ह्र. सू. 15/3[2]

A. *Bastidravya* – For *Niruhabasti*

i. *Dashamoola + Erandamoola* (Decoction)
ii. *Kalka* (Paste) (*Madanphala + Vekhand + Kutaj + Yashtimadhu*) (1/8 of kwath)
iii. *Chandanbalalakshadi* oil - 50 ml
iv. *Saindhav* – Rock salt - about 10 gms
v. Honey 10 ml

B. *Anuvasan Basti* : with *Siddha* (Medicated) Til oil at prior evening of First Bastikarma

C. *Matrabasti* - Chandanbalalakshadi oil in evening after food.

DOSE OF *MATRABASTI* :

Prepared *Bastidravya* 700 to 960 ml as per *bala , prakriti & doshaprokopa* of the patient.

Dose of *Anuvasan Basti* : 120 ml. Dose of *Matrabasti* - 60 ml

Proper (*Samyaga) Bastikarma* signs : *Mala, Pitta , kapha & vayu doshas* were serially evacuated, feeling of *laghuta* (lightedness) in body, *Agni* (Digestive power), taste increases , satisfied mind & *indriyas* (Sensory organs) and most important relief of symptoms.[1]

दौर्बल्यलाघवंग्लानिर्व्याधीनामणुतारूचिः।ह्रद्वर्णशुद्धिःक्षुत्तृष्णाकालेवेगप्रवर्तनम्।।

बुद्धीन्द्रियमनःशुद्धिर्मारूतस्यानुलोमता।सम्यग्विरिक्तलिङ्गानिकायाग्नेश्चनुवर्तनम्।।च.सू.16- 6[1]

DURATION OF TREATMENT: 7 settings (days) Followed by *Sansarjanakrama*

FOLLOW UP - Monthly for 3 months

OBSERVATIONS :

Changes in cyclicity of menses, duration & amount of menstrual bleeding were noted. Changes in classical signs & symptoms of hormonal derrangements in PCOS like obesity , hirsutism etc.& changes in follicle maturation & signs of ovulation were noted clinically & *sonographically* in patients of both groups. Augmentation in speed of follicle maturation was observed in patients treated with *vaman* followed by *bastikarma*. Establishment of normal menstrual cycle with regular menstrual discharge was observed significantly in Group A. Changes in endometrial thickness also were noted *sonographically*

RESULTS :

Observation	Result	Gr.A	Gr.A %	Gr. B	Gr. B %
Menstrual Regularity	Improvement	23	76.66	17	56.66
Ovulation	Corrected/ Improved	25	83.33	17	56.66
Follicle Growth	Improvement	30	100	22	73.33
Endometrial Thickness	Improvement	27	90	20	66.66
Menstrual Discharge	Improvement	25	83.33	20	66.66
Conception	Positive	10	33.33	7	23.33
Obesity(BMI)	Improvement	10	33.33	6	20
Hirsutism	progress arrested/ Im provement	2	6.66	1	3.33

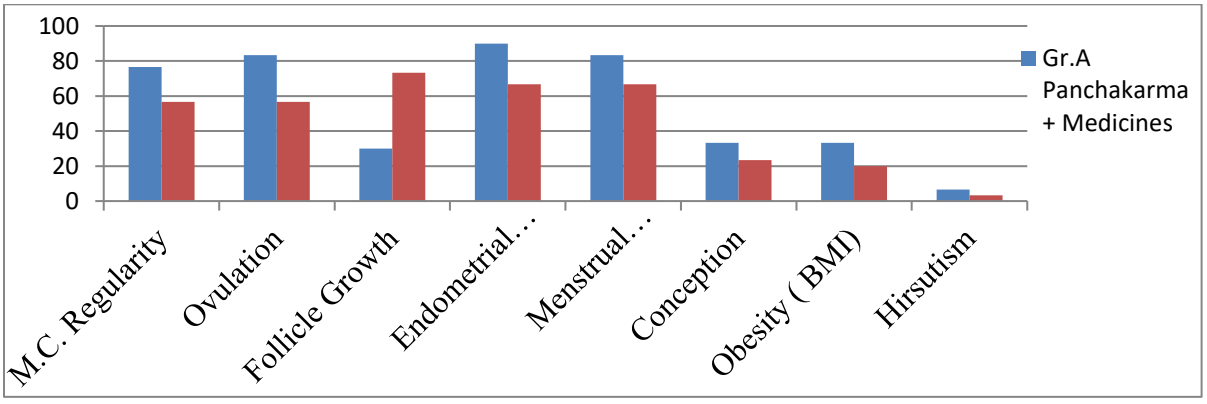


Fig. 3 Results of Polycystic ovaries signs & symptoms after Vaman & Bastikarma

CALCULATIONS & STATISTICS :

Chi square test (X^2) is applied to find out the efficacy of panchakarma treatment on study group A in comparison to efficacy of only medicinal treatment on Gr. B .

Group	Result	Result	
	Improved	Not improved	Total
With *pancha karma*	27 (a)	3 (b)	30 (a + b)
Without *pancha karma*	17 (c)	13 (d)	30 (c+ d)
Total	44 (a +c)	16 (b + d)	60 (a +b+c+d)

Calculated Chi Square value (χ^2) is 6.90. Table value (χ^2) at 1 % level of significance is 6.64. So the value obtained is higher than table value corresponding to probability p 0.01. So it is highly significant at 1 % level. So the treatment with *panchakarma* in PCOS patients under study is significantly efficacious.

SUMMARY: Significant improvement in regularity of menses , amount of discharge & development of follicles observed after panchakarma treatment. Ovulation was improved in khigher number of patients after Panchakarma. Positive changes in endometrial thickness noted sonographically in significant no. patients after *panchakarma*. Greater number of womens conceived after successful ovulation. Changes in weight & other signs & symptoms of patients affected with polycystic ovaries are favourable. In most of the patients signs of proper vaman & bastikarma noted. No major side effects of the treatment given observed. Minor side effects like epigastric discomfort , digestive discomfort, weakness etc. were observed in some patients. These were treated accordingly. The effects of the treatment in Group A were faster than Group B.

CONCLUSION:

1.Ayurvedic *Panchakarma* therapy *Vamana* and *Bastikarma* have stastistically significant results in ovulatory disorders like Polycystic Ovaries, PCOD , Oligo-ovulation, Anovulation.

2. Panchakarma with vamana and Bastikrma offers safe, effective and economical treatment modality in comparison to any invasive, chemical or hormonal treatments.

4. Results obtained by *panchakarma* procedures in properly selected patients are Safer, faster, stable & long lasting.

5.Further research with laboratory study of hormones like thyroid hormones, gonadotrophins , sex hormones, insulin & related hormones estimation in blood before & after the panchakarma procedures may be helpful.

References:

1. Agnivesh , Charak, "Charaksamhita*"* , 20th edition, , Varanasi, Chaukhambha, 1994, chikitsathana 30/125 - 126 Sutrasthana 16/20 , page no. 859, 321
2. Laghuvagbhata , Dr. G.V. Garde, "Sarth Vagbhata Marathi translation of Ashtangahrudaya"3rd edition 1999, Anmol Prakashana, Pune, 1982, sutrasthana 15/1 , 4/27 , page no.66, 16
3. Maharshi Sushruta, Dalhana, "Shushrutasamhita" Edition Reprint 2017, Varanasi Chaukhambha Sanskrit Sansthan, , Sutrasthana 15/16, Pg 77

4. Fauci, Braunwald, Isselbacher, Wilson, Martin, kasper, Hauser, Longo, "Harrison's Principles Of Internal medicine"14th edition, New York, , McGraw – Hill 1998 chapter 327 pg 1969-71
5. D.C. Dutta, "Textbook of Gynaecology", Fourth Edition New central Book Agency, Kolkatta , 2003, chapter 7 pg. 88, chapter 27 pg.412-434,
6. Norman Jeffcoate, V.R. Tindall , "Jeffcoate's Principles Of Gynaecology" *5th edition Oxford, London,* Butterworth Heinemann , publication 1987, Reprint 1998 Chapter 31 Pg. 495-511
7. Rashid Latif Khan, "Five teachers Gynaecology", 3rd edition , New delhi, CBS publishers & Distributors , 2000, Chapter 20 Pg. 242-252
8. B. K. Mahajan , "Methods in Biostatistics", 6th edition, New Delhi, Jaypee Brothers , 1997, pg.168-185
9. Dr. Ranade , Dr. Deshapande , Dr. Jawalagekar , "*Dravyagunavigyan"* 4th edition , 1Pune , Anmol Prakashan, 1996, Pg. 516 , 425, 541, 859, 638, 684.

Conflict of Interest: *Non* *Source of funding:* *Nil*

Cite this article:

Efficacy of Panchakarma in polycystic ovaries

Salim M. Mulla, Sujata Jagtap

Ayurlog: National Journal of Research in Ayurved Science- 2023; (11) (05): 01- 08