



## "UTILITY OF SYNTHESIS REPERTORY IN THE TREATMENT OF POLYCYSTIC OVARIAN DISEASE"

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### ABSTRACT

**Background** –The polycystic ovarian disease (PCOD) is a hyper androgenic disorder associated with the chronic oligoanovulation and polycystic ovarian. It is often associated with psychological impairment, including depression and other mood swing disorder. It involves irregular menses, acne, discoloration on nape of neck, unwanted hair growth on face, chest. Due to prolonged PCOD may cause the infertility and unable to conceive a child.

Analyzed the symptom of PCOD with synthesis repertory and the totality of symptoms to select the similimum. With the help of synthesis repertory which is repeatedly updated repertory which is based on the Kentian philosophy. All the general and particular symptoms are stated in this repertory.

**Materials And Methods** – 30 patients were selected in this study, who diagnosed with polycystic ovarian disease, age group of 14 to 35 years. The changes were evaluated before and after treatment. Response of the treatment was determined by the USG reports which were done before and after the treatment. After the careful study and Repertorization with the synthesis repertory, the marked similimum was prescribed to the patient.

**Result** –In this study 30 patients were selected in this study, who were diagnosed with the Polycystic ovarian disease with the age group of 14-35 yrs. Homeopathic medicine were prescribed on the basis of the symptom totality. The treatment response was calculated by USG report before and after the treatment. From which 70 % patients showed marked improvement and 30% patients showed less improvement 10 % patients showed no improvement. Statistically significant improvement seen in pre-treatment and post-treatment in PCOD score at  $p < 0.0001$ .

The Homoeopathic medicine such as sulphur, lycopodium, and sepia were used repeatedly in maximum cases and showed marked improvement.

**Conclusion** – The highest marked medicines which were selected after the Repertorization from synthesis repertory showed significant result in the treatment of polycystic ovarian disease. Homeopathic medicines are effective in the PCOD related conditions. The results are supportive to open new paths for future studies on PCOD and homeopathic treatment.

**KEYWORDS** : Polycystic ovarian disease, PCOD, Homeopathy, USG.

### INTRODUCTION

The Polycystic ovarian Disease (PCOD) is a hyper androgenic disorder associated with chronic oligo An ovulation and polycystic ovarian disease. It is often associated with psychological impairment including depression and other mood disorder and metabolic derangements chiefly insulin resistance and compensatory hyperinsulinemia, which is recognized as a major factor responsible for altered androgen production and metabolism. Most women with PCOD are also overweight or obese further enhancing androgen secretion while impairing metabolism and reproductive function and possibly favoring the development of the PCOD phenotype. In the past hormone problems usually affect older women in forties or fifties.

Today more teenage girls are involved intolerance in PCOD. The insulin resistance in at least 50% of PCOD women appears to be related to excessive serine phosphorylation of the insulin receptor. A factor extrinsic to the insulin receptor, presumably a serine / threonine kinase, causes this abnormality and is an example of an important new mechanism for human insulin resistance, to factors controlling insulin receptor signaling serine phosphorylation. PCOD describes a constellation of clinical and biochemical features, for which etiology remains poorly understood. It is probably the common endpoint of a heterogeneous group of pathologies, characterized by the loss of coordinate control of the menstrual cycle. PCOD often

affects several family members and is aggravated by the obesity. Patient vary in the field of severity of the symptoms. The management of the PCOD depends on the clinical problem. The severity of the symptoms mainly the secondary amenorrhea which further leads to the infertility, it gets very hard for the patient to conceive. Hirsutism where there is excessive growth of the thick terminal hair is an androgen dependent distribution in women (upper lip, chin, chest, back, lower abdomen, thighs, forearm) and is one of the most common presentation after irregularity in menses. The high levels of estrogen concentration can cause endometrial hyperplasia. In this all the symptom are collected after the careful observation and case taking followed by the totality of the symptom. These symptoms are repertorized with the help of the synthesis repertory in RADAR. The main purpose of the study was the growing prevalence of the disease among the females which was highly responsible for the infertility in female.

Diet plays an important role in improving the PCOD. There are various micronutrients which are useful for improving PCOD. All cases of PCOD were given the remedy on the basis of the totality of the symptoms with the help of the synthesis repertory.

### MATERIALS AND METHODS

#### Theoretical Study -

Theoretical study of this topic was done from various preview

Homeopathic journals authentic internet search through the website and Homeopathic part was studied from various Homeopathic repertory, Google scholar, Pub MED, electronic handouts, paperback edition was selected to PCOD.

### Clinical study -

The study was carried out in detail case study and follow up in Bharati Vidyapeeth Medical Foundation Homeopathic Hospital, OPD, IPD, and peripheral OPD. 33 subjects were enrolled for the study from which three were drop out. The study was carried out on 30 patients with age group 14 years to 35 years, who had complaints of polycystic ovarian disease and fulfilled the criteria of inclusion and exclusion and after the voluntary consent were enrolled in the study. Subjects were selected by randomization, Prospective single arm simple randomization clinical trial.

### Case Definition-

Cases of age group of 14 – 35 years, had irregular menses, acne, hair fall, hair growth on unusual parts, mood swings, infertility.

### Study Design

Single, blind, prospective, single armed, non- randomized study was administered in Bharati Vidyapeeth Homeopathic Hospital, Pune. A sum of 30 individual of each cases of female group within the age group of 14-35 yrs. The patient was enrolled with the consent form was done and all 30 cases with 5 follow up where be in respective OPD of BVDUHCM and Peripheral OPD as well.

### Sampling Procedure

The total of 30 patients of 14-35 yrs. age group was having complaints of PCOD and fulfilled the inclusion and exclusion criteria were enrolled in the study from the general OPD & Peripheral OPD OF Bharati Vidyapeeth Homeopathic Hospital Pune out of all 30 patients with 5 follow of each.

**Type of study-** prospective single arm simple randomization clinical trial

**Allocation-** randomized

**End point classification-** effectiveness

**Mode of intervention-** oral route

**Type of research-** prospective

**Type of study-** clinical

### E. Inclusion and Exclusion Criteria:

#### Inclusion Criteria:

- Patients who are diagnosed with PCOD
- Rubric correlation of synthesis repertory with PCOD
- Patients who are willing to take the treatment
- Patient coming with signs and symptoms of PCOD
- Patient of age group of 14-35 yrs

#### Exclusion Criteria:-

- PCOD patient with complication of excessive bleeding, pregnant women.
- Patient suffering from the cardiovascular disease.
- Metabolic syndromes (generally having high blood pressure, high cholesterol).
- Patients suffering from endometrial cancer.
- Adrenal hyperplasia or virilising tumors
- Patients having insulin resistance

### Selection Of Remedy -

The remedy was being selected after case taking on the basis of the Performa made Rubrics were selected from the synthesis

repertory & selection of the remedy was done on the basis of the symptom totality from the synthesis repertory based on Homeopathic principle.

### Selection of Potency and Repetition of Doses:

The remedy was administered in various potencies like 30c, 200c, 1M, as per the instruction given by Dr. Samuel Hahnemann in his Organon of Medicine, and according to the need of patients' requirement.

### Drug Administration:

This was done through oral route only.

### Drug Dispensing:

Drug was dispensed in globule (Sac. Lac, powder form and given by oral route.

### Storage:

Drug was acquired from standard pharmacy and was stored as per rules of Homoeopathic Pharmacopoeia. Medicines were stored in Bharati Vidyapeeth Homoeopathic Pharmacy, Katraj, and Pune – 411043. Liquid was stored in amber color glass bottle kept in dark place, away from sunlight, Log no. and Batch no. maintained.

### H. General Management:

Treatment was done as follow- Proper diet and regimen

- Balance your dietary intake of carbohydrates and proteins
- Eat more greens
- Drink enough water
- Avoid caffeine and carbohydrate drinks
- Move your body with proper exercise to maintain weight
- Stress management

### RESULTS

In this trial 33 patients were registered within the study 3 participants were ruled out as per inadequate follow-ups and they were excluded from the study. Total 30 patients were registered in the trial within the age group of 14-35 yrs of female group. The history taking and examination of each case was done according to standardized format designed for my dissertation. The selection of case was based on inclusion and exclusion criteria. The diagnosis was done on the basis of the USG reports. Selection of the remedy was done on the basis of the totality of symptoms with the help of the synthesis repertory. Potency was given according to the severity of the symptom of the patient mostly 200 dose. The subsequent diagram display the observation and outcome of the research look at.

**Table No. 1: Distribution Of Patients According To Reduction In Left And Right Ovary Volume After Treatment**

Post treatment outcome	Range of Reduction in volume	Improvement in the Volume of the right Ovary		Improvement in the Volume of the left Ovary	
		F	%	F	%
Improvement	>0	21	70.00%	21	70.00%
No Improvement	=0	5	16.67%	7	23.33%
Deterioration	< 0	4	13.33%	2	6.67%
Mean ± SD		0.2733 ± 0.4763		0.327 ± 0.582	

Above table and graph shows improvement in the Volume of the right and left Ovary after treatment. After treatment improvement is seen in 70% of the patients that is, Volume of the left and right ovaries of 70% of the patients increased after treatment. After treatment, 'no improvement' or 'increased' in the sizes of ovaries seen in remaining 30% of the patients.

**Demographic Data****Table. No.2: Distribution Of Patients According To Age**

Age	f	%
Below 20 years	1	3.33%
20 - 24years	4	13.33%
24 -28 years	18	60.00%
28 years and above	7	23.33%

f:Frequency

Above table and graph shows that 3.33% of the patients belongs to age class below 20yrs, 13.33% belongs to age class 20-24yrs, 60% belongs to age class 24-28yrs and 23.33% belongs to age class 28yr and above in this study.

**Table. No. 3: Distribution Of Patients According To Occupation**

Occupation	f	%
HOUSEWIFE	3	10.00%
BLOGGER	1	3.33%
BUISNESS	1	3.33%
JOB	6	20.00%
STUDENT	18	60.00%
TEACHER	1	3.33%

Distribution of patients according to occupation shows that in this study 3.33% were businessman, 20% doing jobs, 60% were students, 3.33% were bloggers and 3.33% were teacher.

**Table. No.4: Distribution Of Patients According To Medicine Prescribed**

MEDICINE	f	%
ARSCENIC ALB-200	1	3.45%
BELL-200	1	3.45%
BRYONIA-200	1	3.45%
CALC CARB-200	3	10.34%
CAUSTICUM-200	1	3.45%
LYCO-200	8	27.59%
NAT-MUR-200	1	3.45%
PHOS-200	2	6.90%
PULS-200	2	6.90%
SEPIA-200	4	13.79%
SULPHUR-200	5	17.24%

**Table. No.5: Descriptive Statistics Of The Volume Of The Right And Left Ovary Before Treatment**

Before Treatment	Mean $\pm$ SD	Minimum Size	Maximum Size
Volume of the Right Ovary	9.567 $\pm$ 2.79	4.1	14.5
Volume of the Left Ovary	9.153 $\pm$ 2.894	3.5	13.6

Table of descriptive statistics of the volume of the right and left Ovary shows that before treatment average volume of the right ovary was 9.567  $\pm$  2.79cm and average volume of the left ovary was 9.153  $\pm$  2.894cm.

Before treatment minimum volume of the right ovary was 4.1mm and maximum volume observed was 14.5mm.

Before treatment minimum volume of the left ovary was 3.5mm and maximum volume observed was 13.6mm.

**Hypothesis-**

H<sub>0</sub>: Synthesis repertory is not useful / effective in treating the PCOD

Vs

H<sub>1</sub>: Synthesis repertory is useful / effective in treating the PCOD.

**Table. No.7: Descriptive Statistics Of Right Ovary Volume Before And After Treatment**

Volume of the Right Ovary	Mean $\pm$ SD	T-value	p-value	Decision
Before treatment	9.567 $\pm$ 2.790	3.14	0.002**	Reject H <sub>0</sub>
After treatment	9.293 $\pm$ 2.814			
Difference (Before – After)	0.2733 $\pm$ 0.4763	Difference is Highly Significant		

Test used: Paired t-test, \*\*: Highly Significant Difference, T-value: Test Static value

Above table and graph shows that before treatment average volume of the right ovary was 9.567  $\pm$  2.790mm, 9.293  $\pm$  2.814mm. after treatment average volume of the right.

**Inference–**

study gives the result that there is significant decreased in the size of the cyst with the homeopathic medicine. As a result, synthesis repertory was found very useful in the treatment of the PCOD.

**CONCLUSION**

The highest marked medicines which were selected after the Repertorization from synthesis repertory showed significant result in the treatment of polycystic ovarian disease. Homeopathic medicines are effective in the PCOD related conditions. The results are supportive to open new paths for future studies on PCOD and homeopathic treatment. Statistical results showed significant difference at p = 0.0001..Homeopathic medicines help in improving the quality of life of patients. Many medicines are repeated in the maximum cases of PCOD by which these get the therapeutic value to the case. Statistical results showed significant difference at p < 0.0001.

**DISCUSSION**

This study was to explore the effectiveness of the homeopathic medicines which were selected with the synthesis repertory in the treatment of polycystic ovarian disease. The patient came with the symptoms of irregular menses, Hairfall, Acne hair growth on face chest, lower abdomen. After patient received the treatment there was marked improvement in the symptoms of the patients. A polycystic ovarian disease patient the first most common symptom comes is the irregularity of the menses, Acne, Hair growth. The prior goal of the treatment was to make the regularity of the menses with the help of the medicine; the patient was given only homeopathic medicine. The synthesis repertory was much helpful in treating the symptoms of the patient and the symptoms like irregular menses was found straight rubric in the synthesis repertory FEMALE – Menses – Irregular. Most of the symptom in the synthesis repertory were taken as it is .Standard doses of the medicine were given to the patient as well as the exact diet regime and the exercise routine, as these play very important role in the maintenance of the symptom in the PCOD. Homeopathic medicine helped the regularity in the menses and to control the symptoms. The treatment with the Homeopathic medicine showed good response and about 70% of the patient showed the positive results in which 30% patients showed the moderate improvement with the medicine.

Statistical data also the synthesis repertory is much effective in the treatment of the polycystic ovarian disease. As most of the symptom of the PCOD represent in the synthesis repertory in the raptorial language that is in the form of the rubric. Mental and physical particular symptom is analyzed by synthesis. The remedy which shows the higher marks for these symptoms showed the effective results in PCOD.

Most of the homeopathic medicine was polychrest remedy and sphere of action was on the female symptoms. The prescription was on the basis of the totality of presenting symptom were associated with the improvement in the patient. Also synthesis repertory has the maximum symptom related to the PCOD, so the repertorization gives group of similimum of the case.

picture totality of the patient. The Homeopathic medicine like sepia, sulphur, lycopodium, were repeatedly used in maximum cases and showed marked improvement.

The primary objective of the study was to see the utility of synthesis repertory in the treatment of the PCOD. The trial showed positive results and effective results of Homeopathy when prescribed on the basis of the totality of the symptoms with the help of synthesis repertory. Total 33 patients were screened and 30 were included with proper diagnosis. Dietary intervention was consulted as per the need of case. Remedies given showed the marked improvement which were prescribed on the basis of the totality of the symptoms with the synthesis repertory.

In this study, major intention was to understand the importance of synthesis repertory in the treatment of the PCOD. In these 30 cases the most of the indicated remedy was lycopodium, sulphur, sepia. Homeopathic treatment has proven the Significant impact to patient in prescribing similimum.

#### Limitation And Scope Of The Study -

Limitation of the study was small sample size, as it requires the study on larger sample size that should apply to more general population. Study was done on the age group of 14-35, other age group was not included in the study. All the other symptom associated were excluded in the study like insulin resistance. Control group was maintained, scope of the study is that control group can be added to evaluate the significance.

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