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Effectiveness of Homoeopathic Medicines in the Treatment of Polycystic Ovarian Disease - A Retrospective Case Series

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Abstract:

Polycystic ovarian disease (PCOD), is an ill-defined heterogeneous condition with a complex pathophysiology. It is one of the common endocrine metabolic disorders affecting 6-10% of women of reproductive age. The objective of this study was to evaluate the outcome of homoeopathic treatment in terms of symptomatic relief and find out a group of homoeopathic remedies that are frequently prescribed in the treatment of polycystic ovarian disease. This retrospective study was conducted at the OPD unit of the NHRIMH, Kottayam, Kerala, India. A total of 174 case sheets were screened. Among them, 35 ultrasonographically-diagnosed cases of PCOD, with at least 6 months follow-up were analyzed. The changes in the severity of secondary amenorrhoea, oligomenorrhea, and dysmenorrhoea were assessed clinically. Out of the 35 patients, six had regular menses, and 15 started getting regular menses after treatment. In 12 patients, there was a clinically meaningful improvement for the menstrual irregularity, and two cases had no improvement. All 18 patients with dysmenorrhea reported no pain after the treatment. The frequently indicated medicines were *Pulsatilla nigricans [Puls-n]* and *Calcarea Carbonicum [Calc-c]*. The study indicates the possible effectiveness of homoeopathic medicines *Puls-n* and *Calc-c* for PCOD.

Keywords: Dysmenorrhoea, Homoeopathy, Oligomenorrhoea, Polycystic ovarian disease, Secondary amenorrhoea.

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Introduction:

Polycystic ovarian disease (PCOD) is an ill-defined heterogeneous condition with a complex pathophysiology. It is one of the common endocrine metabolic disorders affecting 6-10% of women of reproductive age.[1] The Rotterdam criteria define the syndrome of PCOD as the presence of any two of the following three

criteria: ultrasound appearance of polycystic ovaries, menstrual disturbances, evidence of hyperandrogenism, acne, hirsutism,etc.[2] Features of PCOD may manifest at any age ranging from childhood (premature puberty), teenage years (hirsutism, menstrual abnormalities), early adulthood, and middle life (infertility, glucose intolerance) to later life (diabetes mellitus and cardiovascular disease).[3]

The global prevalence of PCOD is 21.27%..[4] The prevalence of PCOD in India ranges from 3.7 to 22.5 per cent.[5] The prevalence of PCOD is as high as 20% in women presenting with infertility.[6] No single etiologic factor fully accounts for the spectrum of abnormalities in PCOD.[7]Familial aggregation of PCOD among mothers and siblings has suggested evidence of autosomal transmission.[8]Obesity is present in at least 30% of cases of PCOD. Ghrelin is a gastric peptide, which is an appetite stimulant and has adipogenic properties. Nutritional status influences circulatory ghrelin concentrations. Ghrelin may regulate the secretory pattern of pituitary hormones, and it may impose direct effects on peripheral organs such as gonads and the pancreas. Diet and composition of the diet itself are unlikely to be an etiological factor of PCOD. High-calorie diet intake resulting in obesity may modify the clinical manifestation of PCOD.[3]

The exact pathophysiology of PCOD is not known. The manifestations of biochemical abnormalities include - high Luteinizing hormone (LH), high LH/FSH (Follicle-stimulating hormone) ratio, increased androgen production, and high estrogen levels from the peripheral conversion of androgen in adipose tissue.[3] Two important hypotheses have been inferred. Firstly, the basic defect in PCOD is androgen excess from the theca cells of the ovary. Biochemical and molecular phenotyping of PCOD cells invitro by Nelson VL, Legro RS, Strauss JF 3rd and McAllister JMstrongly suggest this hypothesis.[9] Secondly, insulin resistance leading to hyperinsulinemia contributes to overall androgen production leading to hirsutism, menstrual problems, and anovulation.[10]

The increased ovarian androgen production begins with disordered activities of the enzyme cytochrome 450 C 17α that catalyzes 17 hydroxylase and 17/20 lyase activities, the rate-limiting step in androgen biosynthesis.[11] The disordered activities of the enzyme cytochrome 450 C 17α are due to persistently high levels of LH or hyperinsulinemia as a consequence of insulin resistance.[3].

Seventy percent of affected women are suffering from associated menstrual dysfunction. Amenorrhoea may be primary (10%) or secondary.[1] Ninety percent of women with oligomenorrhea will have PCOD on ultrasound.[8] The reproductive outcome in PCOD women is poor due to associated ovulatory defects.[3] Signs of androgen excess are manifested as hirsutism, acne, virilization, and male pattern balding.[1] Ninety-two percent of women with hirsutism will have PCOD on ultrasound.[12] Women with PCOD have an 11-fold increase in the prevalence of metabolic syndrome compared with age-matched controls. The long-term health hazards of PCOD include type II diabetes mellitus, dyslipidemia, cardiovascular disease, and endometrial cancer.[3]

The diagnosis of PCOD is made by ultrasound. However, evidence of clinical manifestations and associated altered biochemical profiles also suggests the presence of PCOD. In the clinical history and physical examination, the points to be taken into consideration are - family history of menstrual disturbances, menstrual history, history of weight gain, BMI, the clinical suggestion of androgen excess, and acanthosis nigricans suggesting insulin resistance. Biochemical profile manifests hypersecretion of

insulin, hypersecretion of LH, high LH: FSH ratio, high levels of free testosterone and DHEA-S (Dehydroepiandrosterone sulfate), low SHBG (Sex hormone-binding globulin), and elevated prolactin.[3,13] In USG (ultrasonogram) , ovaries are described as polycystic if there are ten or more 2-8mm cysts aggregated around a dense stroma or scattered throughout an increased stroma.[3]

A pilot study by Lamba CD and a clinical trial by Malvekar PA show a positive response of Homoeopathy in the treatment of PCOD and in establishing the menstrual regularity and improvement in quality of life.[14,15]

The current study aimed to collect some systematic retrospective data of diagnosed cases of PCOD presented to Out Patient Department (OPD)of NHRIMH, Kottayam. The objective of this study was a retrospective analysis of available sociodemographic and health-associated information of the diagnosed patients, and to evaluate the outcome of homoeopathic treatment in terms of symptomatic relief, and to find out the homoeopathic remedies which are frequently prescribed for the polycystic ovarian disease.

Materials and methods

The study population was selected retrospectively from the patient records in the computer data of the institute. From the data, cases that were entered as polycystic ovarian disease between January 2016 and August 2018 were selected as samples. All the patients who were confirmed to have PCOD on ultrasonogram and taken homoeopathic treatment for PCOD for at least six months were considered for the study. Inclusion criteria was cases which are diagnosed ultrasonographically. Exclusion criteria was cases with less than 6 month follow up. Thus 35 cases out of 174 cases, met the above criteria and were included in the study. Remaining 139 cases were excluded because of less than 6 month follow up and improper diagnosis.

Available demographic and treatment-related data as noted in the case record format were collected. Patient-related data such as age, religion, marital status, and menstrual history were collected from the available records. Treatment related data like medicines prescribed and symptomatic relief were analyzed. The changes in the severity of the variables menstrual irregularity and dysmenorrhoea were retrospectively analyzed.

All the patients presented with either oligomenorrhea or secondary amenorrhea. Six patients had regular menses. The cases were classified as per the nature of menstrual irregularity into oligomenorrhea and secondary amenorrhea. Menstrual bleeding occurring more than 35 days apart is termed as oligomenorrhoea and absence of menstruation for 6 months or more in a woman in whom menstruation had been established is termed as seconadary amenorrhoea. Thus, there were 27 patients with oligomenorrhea and two patients with secondary amenorrhea. In oligomenorrhea, the menses will be at an interval of greater than 35 days but less than six months. But when delayed more than six months, it is known as secondary amenorrhea. Out of the 35 cases, 18 cases had dysmenorrhea.

Results:

35 ultrasonographically diagnosed cases of PCOD between 15 and 36 years of age were considered for analysis. Demographic data of patiennt were given in [Table 1]. Out of the 35 cases, six patients had regular menses, and 15 patients started getting regular menses after treatment. In 12 patients, there was a clinically meaningful improvement for the menstrual irregularity, and two cases reported no change. All 18 patients with dysmenorrhea reported no pain after the treatment. [Table 2] *Puls-n* and

Calc-c were given in seven patients each, *Natrum muriaticum*in five patients, *Sulphur* in four patients, *Apis mellifica* in three patients and *Lachesis* in two patients. *Belladonna, Cinchona officianalis, Natrum Phosphoricum, Pituitarinum, Silicea terra, Thuja occidentalis*, and *Thyroidinum* were prescribed in single cases. Potencies ranging from 6c to 200c were prescribed [Table 3].

Table 1: Baseline Characteristics

Variable	Mean ±SD*and n(%)#
Age	23.06±5.18*
Religion	
Christian	9(25.7) #
Hindu	24(68.6) #
Muslim	2(5.7) #
Marital Status	
Married	10(28.6) #
Unmarried	25(71.4) #
Menstrual cycle	
Regular	5(14.3) #
Irregular	30(85.7) #
Dysmenorrhoea	
Yes	18(51.4) #
No	17(48.6) #
Infertility	
Yes	6(17.1) #
No	29(82.9) #

Table.2:Evaluation of homoeopathic treatment outcome after 6 months

Variables	**Improved (No.of patients)**	**Not improved (No.of patients)**	**Total (No.of patients)**
Secondary amenorrhoea	2	0	2
Oligomenorrhoea alone	12	2	14
Dysmenorrhoea alone	5	0	5
Oligomenorrhoea +Dysmenorrhoea	12	Dysmenorrhoea improved and oligomenorrhoea not improved in - 1 case	13
Asymptomatic – diagnosed incidentally on USG			1

Table-3: Presenting symptoms with medicine prescribed in each case

Sl.No	Menstrual irregularity	Dysmenorrhoea	Medicine	Remarks
1	Oligomenorrhoea	Absent	Apismellifica 30C	Oligomenorrhoea improved
2	Oligomenorrhoea	Absent	Pulsatilla 200C	Oligomenorrhoea improved
3	Oligomenorrhoea	Present	Natrum phosphoricum 30C	Oligomenorrhoea improved &dysmenorrhoeaimproved
4	Oligomenorrhoea	Absent	Apismellifica 30C	Oligomenorrhoea improved
5	Oligomenorrhoea	Present	Natrum muriaticum 200C	Oligomenorrhoea improved &dysmenorrhoeaimproved
6	Oligomenorrhoea	Present	Thujaoccidentalis 1M	Oligomenorrhoea improved &dysmenorrhoea improved
7	Oligomenorrhoea	Present	Pulsatilla 30C	Dysmenorrhoea improved
8	Oligomenorrhoea	Present	Pulsatilla 200C	Oligomenorrhoea improved &dysmenorrhoea improved
9	Oligomenorrhoea	Absent	Calcareacarbonica 200C	Oligomenorrhoea improved
10	Oligomenorrhoea	Absent	Silicea 200C	Oligomenorrhoeaimproved
11	Oligomenorrhoea	Present	Pulsatilla 200C	Oligomenorrhoea improved &dysmenorrhoea improved
12	Oligomenorrhoea	Present	Apismellifica 30C	Dysmenorrhoea improved
13	Oligomenorrhoea	Present	Sulphur 200C	Dysmenorrhoea improved
14	Oligomenorrhoea	Absent	Lachesis 30C	Asymptomatic
15	Oligomenorrhoea	Present	Calcareacarbonica200C	Oligomenorrhoea improved &dysmenorrhoea improved
16	Oligomenorrhoea	Present	Pulsatilla 200C	Oligomenorrhoea improved &dysmenorrhoea improved

17	Oligomenorrhoea	Absent	Sulphur 1M	Oligomenorrhoea improved
18	Oligomenorrhoea	Absent	Sulphur 1M	Oligomenorrhoea improved
19	Oligomenorrhoea	Present	Pituitarinum 200C	Oligomenorrhoea not improved &dysmenorrhoea improved
20	Oligomenorrhoea	Absent	Natrum muriaticum 6C	Oligomenorrhoea improved
21	Oligomenorrhoea	Present	Belladonna 200C	Oligomenorrhoea improved &dysmenorrhoea improved
22	Oligomenorrhoea	Present	Cinchona officinalis 200C	Oligomenorrhoea improved &dysmenorrhoea improved
23	Oligomenorrhoea	Present	Sulphur 1M	Oligomenorrhoea improved &dysmenorrhoea improved
24	Oligomenorrhoea	Present	Natrum muriaticum 200C	Dysmenorrhoea improved
25	Oligomenorrhoea	Absent	Calcareacarbonica 30C	Oligomenorrhoea improved
26	Oligomenorrhoea	Present	Pulsatilla 200C	Oligomenorrhoea improved &dysmenorrhoeaimproved
27	Oligomenorrhoea	Absent	Pulsatilla 200C	Oligomenorrhoea improved
28	Oligomenorrhoea	Absent	Calcareacarbonica 200C	Oligomenorrhoea not improved
29	Secondary amenorrhoea	Absent	Thyroidinum 200C	Oligomenorrhoea improved
30	Oligomenorrhoea	Absent	Calcareacarbonica 200C	Oligomenorrhoea improved
31	Oligomenorrhoea	Absent	Natrum muriaticum 200C	Oligomenorrhoea not improved
32	Oligomenorrhoea	Absent	Calcareacarbonica 200C	Oligomenorrhoea improved
33	Oligomenorrhoea	Present	Lachesis 200C	Oligomenorrhoea

				improved &dysmenorrhoea improved
34	Oligomenorrhoea	Present	Natrum muriaticum 200C	Dysmenorrhoea improved
35	Secondary amenorrhoea	Absent	Calcareacarbonica 200C	Oligomenorrhoea improved

Discussion:

This retrospective study was undertaken because of the large number of PCOD cases attending in the OPD unit of NHRIMH. From the data regarding sociodemographic factors, it was observed that the majority of PCOD patients were in the age group between 18 to 28 years. Most women find out they have PCOD in their 20s and 30s. But PCOD can occur at any age after puberty.[16]

A pilot study by Lamba CD and a clinical trial by Malvekar PA showed a positive response of Homoeopathy in the treatment of PCOD and in establishing the menstrual regularity and improvement in quality of life.[14,15] A case series by Suraia Parveen showed the role of individualized homoeopathic medicines in PCOD by regularizing the menstrual cycle with the resolution of cysts and associated symptoms.[17]

Out of these 35 cases, 9 were Christian, 24 were Hindus, and 2 were Muslims and 10 were married. Six patients had regular menstrual cycles, while the remaining 30 cases had irregular cycles. Dysmenorrhoea was present in 18 cases. Out of married patients, six were infertile.

Out of 35 patients, only six had regular menses before treatment. But after six months of homoeopathic treatment, 15 patients established menstrual regularity. Dysmenorrhoea also improved confirmed the findings in previous studies.

A prospective interventional study by Girish G noticed a reduction in the number of cysts on USG and improvement in PCODQ (Polycystic ovarian syndrome questionnaire). The most prescribed medicines in the study were *Calc-c* and *Lycopodium* (26.47%).[18] Another study by Das D on the effectiveness of *Calcarea carbonica* and *Lycopodium* for treating PCOD patients showed resolution of cysts in about 21 cases out of 40.[19] In the pilot study conducted by Lamba CD *Puls-n* was the most frequently indicated medicine (n=12, 40%).[14] Conventional treatment in PCOD includes clomiphene citrate for ovulation induction. If there is a poor response, gonadotropins are the next drug of choice.[20] Since gonadotropins are expensive and cause hyperstimulation their use needs judicious monitoring.[3] If the above attempts fail, laparoscopic ovarian drilling is the next line of treatment, but the risk of adhesions and the possibility of ovarian failure remains.[13]

In this retrospective study, *Pulsatilla* and *Calcarea carbonica* were the most frequently used medicines as in previous studies. This study upholds the effectiveness of homoeopathic medicines in the management of PCOD.

Conclusion:

The study indicates the possible effectiveness of homoeopathic medicines especially *Pulsatilla* and *Calc-c* in the treatment of PCOD, which is reflected as improvement in menstrual regularity and a significant reduction in dysmenorrhoea. Further prospective studies with biochemical profiles like fasting insulin, LH, LH: FSH ratio, testosterone, DHEAS, SHBG, prolactin levels, and USG findings are required to study the

possible action of Homoeopathic medicines on the pathophysiology aspect of PCOD.

Limitations of the study:

As it was a retrospective study, there was no available data regarding BMI, hirsutism, acne, and LH/FSH ratio that are important assessment parameters in PCOD.

Patients consent:

Informed consent was obtained from the patients for the publication of their treatment results.

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References

1. Hart R, Hickey M, Franks S. Definitions, prevalence and symptoms of polycystic ovaries and polycystic ovary syndrome. Best Pract Res Clin ObstetGynaecol. 2004 Oct;18(5):671-83.
2. Rotterdam ESHRE/ASRM-Sponsored PCOS Consensus Workshop Group. Revised 2003 consensus on diagnostic criteria and long-term health risks related to polycystic ovary syndrome. FertilSteril. 2004 Jan;81(1):19-25.
3. Ganguly Mukherjee G and Chakravarty B. Polycystic ovary syndrome An update.Polycystic ovary syndromw –an introduction, Definitions and diagnosis of PCOS, Lifestyle changes as an etiology and management of PCOS, Long term health hazards in PCOS. Jaypee Bros. Medical Publishers, New Delhi.2007, pp-2,4,11,12,15,249,254.
4. Deswal R, Narwal V, Dang A, Pundir CS. The Prevalence of Polycystic Ovary Syndrome: A Brief Systematic Review. J Hum Reprod Sci. 2020 Oct-Dec;13(4):261-271.
5. Ganie MA, Vasudevan V, Wani IA, Baba MS, Arif T, Rashid A. Epidemiology, pathogenesis, genetics & management of polycystic ovary syndrome in India. Indian J Med Res. 2019 Oct;150(4):333-344.
6. Diamanti-Kandarakis E, Kouli C, Tsianateli T, Bergiele A. Therapeutic effects of metformin on insulin resistance and hyperandrogenism in polycystic ovary syndrome. Eur J Endocrinol. 1998 Mar;138(3):269-74.
7. Ehrmann DA. Polycystic ovary syndrome. N Engl J Med. 2005 Mar 24;352(12):1223-36.
8. Franks S. Polycystic ovary syndrome. N Engl J Med. 1995 Sep 28;333(13):853-61.
9. Nelson VL, Legro RS, Strauss JF 3rd, McAllister JM. Augmented androgen production is a stable steroidogenic phenotype of propagated theca cells from polycystic ovaries. Mol Endocrinol. 1999 Jun;13(6):946-57.
10. Convey GS, Clark PM, Wong D. Hyperinsilinaemia in the polycystic ovary syndrome confirmed with a specific immunoradiometric assay for insulin. Clinical endocrinology 1993;38:219-22.
11. Barnes RB, Rosenfield RL, Burstein S, Ehrmann DA. Pituitary-ovarian responses to nafarelin testing in the polycystic ovary syndrome. N Engl J Med. 1989 Mar 2;320(9):559-65.
12. Farquhar CM, Birdsall M, Manning P, Mitchell JM, France JT. The prevalence of polycystic ovaries on ultrasound scanning in a population of randomly selected women. Aust N Z J ObstetGynaecol. 1994 Feb;34(1):67-72.
13. Kumar P, Jeffcoate SN, Malhotra N. Jeffcoate's principles of gynaecology. Polycystic ovary syndrome. Jaypee Brothers

Medical Publishers, New Delhi. 6th edition 2008, pp386.
14. Lamba CD, Oberai P, Manchanda RK, Rath P, Bindu PH, Padmanabhan M. Evaluation of homoeopathic treatment in polycystic ovary syndrome: A single-blind, randomized, placebo-controlled pilot study. Indian J Res Homoeopathy 2018;12:35-45.
15. Malvekar PA, Nadgauda SS, Jadhav AB. A Clinical Study to See the Effect of Homoeopathic Medicines in Polycystic Ovarian Syndrome of Reproductive Age Group between 12-45 Years. Int J Health Sci Res. 2020; 10(3):43-47.
16. Bremer AA. Polycystic ovary syndrome in the pediatric population. Metab Syndr Relat Disord. 2010 Oct;8(5):375-94.
17. Parveen S, Das S. Homeopathic Treatment in Patients with Polycystic Ovarian Syndrome: A Case Series. Homeopathy. 2021 Aug;110(3):186-193.
18. Gupta G, Gupta N, Singh S, Roja V, Dewan D. Homoeopathic treatment of women with polycystic ovarian syndrome: A prospective observational study. Indian J Res Homoeopathy. 2021;15(1):12-23.
19. Das D, Das I, Das J, Kayal SK, Khuda-Bukhsh AR. Efficacy of two traditionally used potentized homoeopathic medicines, Calcareacarbonica and Lycopodium clavatum, used for treating PCOS patients: I. Effects on certain important external guiding symptoms. Cell Med. 2016;6(1):6-1.
20. Jayakrishnan K. Hyperinsulinaemia and insulin resistance in PCOD- syndrome X and its management. In Dasgupta S(Ed.): Recent advance in Obstetrics and Gynaecology. 2003; 157-65.

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