

Effectiveness of Homoeopathy Responding to Polycystic Ovarian Syndrome - An Evidence-based Case Study

"Mind communicates, the body responds."

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Abstracts

Background

Polycystic Ovarian Syndrome (PCOS) is a hormonal disorder affecting 6% to 26% of women, characterized by irregular menstruation, anovulation, obesity, and excessive hair growth. Treatment options include lifestyle changes, hormone therapy, and medications like clomiphene and metformin. Oral contraceptives can be effective but may cause side effects. Homeopathy may also help without adverse effects. A 22-year-old woman diagnosed with polycystic ovary disease (PCOD) was treated with Ammonium Carbonicum 200, leading to normal results.

Objectives:

Study the effectiveness of homeopathy in managing polycystic ovary disease (PCOD) and its role in treating hormonal disorders.

Methods:

This is a case study that uses the PubMed and Google Scholar databases to investigate the potential of homeopathic treatment for hormonal disorders, such as PCOD. After the abstracts were evaluated, the full texts of the publications that made the shortlist were reviewed for study design.

Result: A 22-year-old female with polycystic ovary disease (PCOD) reported irregular menstrual cycles for one year. Previously healthy, she experienced periods for three months, six months, three months without, and three months without. Recently, she resumed menstruation, but it's now scanty and ongoing for ten days. Ammonium Carbonicum 200 was prescribed, resulting in normal parameters.

Conclusion:

Polycystic ovary syndrome (PCOS) is a hormonal disorder affecting 6-13% of women worldwide, leading to infertility and long-term health complications. Common treatments include oral contraceptives, estrogens, and other medications, each with its side effects. Homeopathy offers a holistic approach, focusing on physical and emotional symptoms, and addressing both physical and emotional well-being. This approach offers a more comprehensive remedy, nurturing both body and mind for better health.

Keywords: -Homoeopathy, PCOS, Adverse effects

Key Messages Case Report on the Role of Homeopathy in Addressing Hormonal Disorders in PCOS.

I. INTRODUCTION

Polycystic ovary syndrome (PCOS) is a disease affecting young women, causing oligomenorrhoea, non-ovulation, obesity, and hirsutism. It is caused by insulin resistance and is linked to hyperinsulinemia and obesity. Treatment involves ultrasound, hormone therapy, and surgery if necessary. The condition can be improved with weight loss and lifestyle changes. Clomiphene is the first line of treatment for infertility, while resistant cases may require laparoscopic surgery or gonadotropins and metformin. ^[1]

II. THE PREVALENCE of Stein-Leventhal syndrome (PCOS) in Indian women, a common endocrine and metabolic disorder. The etiology of PCOS is unknown, and the study found a high prevalence rate of 11.33. The prevalence rate was close to 10% using Rotterdam's and AES criteria, while 5.8% using NIH criteria. The study highlights the need for more uniform diagnostic criteria for screening PCOS and suggests policymakers should prioritize PCOS in their efforts to control non-communicable diseases. ^[2] (PCOS) is a hormonal condition affecting 6-13% of reproductive-aged women worldwide, with up to 70% of cases remaining undiagnosed. It is the leading cause of infertility and is associated with long-term health problems affecting physical and emotional well-being. The condition typically begins during adolescence and can cause hormonal imbalances, irregular periods, excess androgen levels, and cysts in the ovaries. Although it is a chronic condition, some symptoms can be improved through lifestyle changes, medications, and fertility treatments. Women with a family history of type 2 diabetes are at higher risk. PCOS is a significant public health problem, with higher prevalence among certain ethnicities and more metabolic complications. The biological and psychological effects of PCOS, including obesity, body image, and infertility, can lead to mental health challenges and social stigma. ^[3]

III. CONVENTIONAL TREATMENT

Oral combined pills (OC) Monophasic ovulation treatment is the most effective method, containing estrogen and progestin in fixed doses. Second-generation pills can be reduced without compromising efficacy, while third-generation pills contain newer progestins like desogestrel. Triphasic regimens mimic the normal hormonal pattern in menstrual cycles, recommended for women over 35. Minipills are low-dose progestin-only pills for women with estrogen restrictions. Emergency contraception, such as Levonorgestrel or SPRM ulipristal, is used when a woman is unprotected and risks unwanted pregnancy.

Cyproterone acetate Cyproterone acetate is a weak AR antagonist related to progesterone that inhibits LH release through progestational activity. It prevents pubertal changes in boys and suppresses libido and androgenic anabolism in adult men. Clinical indications include precocious puberty, inappropriate sexual behavior, acne

Spirolactone Spirolactone is a steroid that inhibits aldosterone-induced proteins, promotes Na⁺ reabsorption and K⁺ secretion, and acts as a competitive antagonist. It is a mild saluretic and antagonizes K⁺ loss in diuretics. It is often used with thiazide diuretics.

Ketoconazole 200 mg daily reduces testosterone secretion

Oestrogen: suppresses androgens and adrenal hormones, reducing free testosterone and LH. It's best used in low-dose combined pills for PCOS, reducing acne, hirsutism

Progestogen may be used to induce menstruation in amenorrhoeic women before hormonal therapy, OC with cyproterone for hirsutism, and epi-ornithine HCl for hair growth prevention.

Anti-androgens Superactive GnRH agonists inhibit gonadal function, causing loss of androgen secretion. Ketoconazole interferes with testosterone and adrenal steroid production, but toxicity prevents its use. Cimetidine, spironolactone, and progesterone have weak antiandrogenic effects, causing side effects.

Clindamycin Clindamycin is a chlorinated lincosamide antibiotic similar to erythromycin but exhibits partial cross-resistance due to ribosomal binding site modification. It inhibits most gram-positive cocci, *C. diphtheriae*, *Nocardia*, *Actinomyces*, and *Toxoplasma* but has high activity against various anaerobes, particularly *Bact. fragilis*. Oral absorption is good, but not in the brain and CSF. Clindamycin is largely metabolized and excreted in urine and bile.

Erythromycin gel at 2%, if pustules develop, can be used to treat acne.

Isotretinoin is used to treat severe acne, but it is teratogenic and can cause pregnancy problems.

Dexamethasone (0.5 mg) at bedtime reduces androgen production and is used in infertile women with clomiphene if DHEA-S is elevated above 5 ng/m.

Clomiphene is the primary treatment for infertility in PCOS women, promoting ovulation and conceiving rates. It can improve fertility rates when combined with dexamethasone. If resistant, tamoxifen or letrozole may be used. Failure requires FSH, LH, or GnRH analogs.

Metformin is a medication used to treat PCOS, improve fertility, and rectify endocrine and metabolic functions. It reduces insulin levels, delays glucose absorption, and improves peripheral glucose utilization. It also reduces testosterone levels and increases sex hormone-binding globulin. Metformin is contraindicated in hepatic and renal disease and can cause gastrointestinal disturbances and lactic acidosis. It is taken three times a day and should not be administered for more than six months. Shaw's textbook of gynaecology. [4]

IV. ADVERSE EFFECTS

Oral contraceptives' side effects appear later Older 19-nortestosterone progestins may cause weight gain, acne, and increased body hair due to androgenic action. Newer ones like desogestrel are less affected. Chloasma may occur, and pruritus vulvae is rare. Carbohydrate intolerance and diabetes precipitation are unlikely with current pills. Mood swings and mental depression may occur.

Serious complications Oral contraceptives (OCs) can cause serious complications like leg vein thrombosis, coronary and cerebral thrombosis, and blood pressure rise. The estrogen component is responsible for venous thromboembolism, while both estrogen and progestin cause arterial phenomena. Newer low-dose pills may cause a rise in blood pressure, possibly due to increased angiotensinogen levels and renin activity. Contraceptives do not increase the occurrence of general genital carcinoma but may increase risk in predisposed individuals.

Ketoconazole has more side effects than itraconazole or fluconazole, including nausea, vomiting, appetite loss, headache, paresthesia, rashes, and hair loss. Its major drawback is its hormonal effects, which decrease androgen production, displace testosterone and cause gynecomastia, hair loss, and menstrual irregularities.

Oestrogen Oestrogen can have dose-dependent adverse effects, including suppression of libido, gynecomastia, and feminization in males, fusion of epiphyses in children, increased risk of irregular bleeding and endometrial carcinoma in postmenopausal women, acceleration of breast cancer growth, doubled incidence of gallstones, benign hepatomas, migraine, epilepsy, and endometriosis. Estrogens are contraindicated during pregnancy.

Progestogen Progestins can cause adverse effects like breast engorgement, headache, and mood swings. Continuous use can lead to irregular bleeding or amenorrhoea. Long-term use may increase breast cancer risk, and long-term use may cause diabetes. Intramuscular injections can be painful. Progestins can cause masculinization in early pregnancy.

Clindamycin is a first-line drug for anaerobic and mixed infections, particularly those involving *Bact. Fragilis*, causes abdominal, pelvic, and lung abscesses, septic abortion, and penetrating injuries. It is often combined with an aminoglycoside or cephalosporin. Alternatives include metronidazole and chloramphenicol. Clindamycin is used for skin and soft tissue infections, streptococcal and *Cl. perfringens* infections, endocarditis prophylaxis, and AIDS patients. It is also used for multidrug-resistant falciparum malaria and acne vulgaris.

Erythromycin Erythromycin base is a safe drug with side effects including mild-to-severe epigastric pain, nausea, and anorexia, especially in children. It stimulates motilin receptors in the gastrointestinal tract, causing gastric contractions and hastening emptying. High doses can cause reversible hearing impairment. Hypersensitivity to the estolate ester can cause hepatitis with cholestatic jaundice, which clears after discontinuation. Estolate is acid-stable, tasteless, and better absorbed, but has been banned in some countries.

Isotretinoin Isotretinoin is a highly teratogenic medication with frequent side effects like cheilitis, dryness, and musculoskeletal symptoms. It is reserved for severe acne cases and contraindicated for pregnant women. Its half-life is approximately 18 hours.

Dexamethasone Dexamethasone is a potent, selective glucocorticoid used for inflammatory and allergic conditions. It causes pituitary-adrenal suppression.

Clomiphene may cause polycystic ovaries, multiple pregnancies, hot flashes, gastric upset, vertigo, allergic dermatitis, and increased ovarian tumor risk. Cautious use with lower doses is advised for enlarged ovaries.

Metformin Metformin has frequent side effects like abdominal pain, anorexia, bloating, nausea, and metallic taste. It doesn't cause hypoglycemia except in overdose. It can cause lactic acidosis, a small increase in blood lactate, and can cause Vit B12 deficiency. It's not recommended for renal insufficiency, hypotensive states, heart failure, severe respiratory/hepatic disease, or alcoholics. Drugs like cimetidine and furosemide may compete with metformin excretion. ^[4]

V. HOMOEOPATHY MANAGEMENT

Homeopathy, which focuses on individualized treatment, can be beneficial for long-term management of health issues. A study on Polycystic Ovary Syndrome (PCOS) in India found that personalized homeopathic remedies improved intermenstrual duration and body mass index (BMI) scores. Additionally, these treatments addressed hormonal imbalances that affect fertility rates, leading to complete resolution in some patients. The rising

incidence of PCOS, attributed to modern lifestyles, highlights the need for further research into effective therapeutic interventions.

In today's fast-paced world, many women use beauty products to enhance their appearance or protect their skin from radiation. However, they often overlook potential side effects and fail to recognize the serious health risks associated with these products.

The systemic absorption of pharmaceutical agents is influenced by the lipid solubility of the drugs, with only a few being effective for skin penetration. Some examples of transdermal medications include hyoscine, fentanyl, glyceryl trinitrate (GTN), nicotine, testosterone, and estradiol. It is important to note that corticosteroids when applied over large areas of skin, can lead to adverse effects. Highly lipid-soluble drugs can be applied to the skin for prolonged absorption, bypassing the liver.

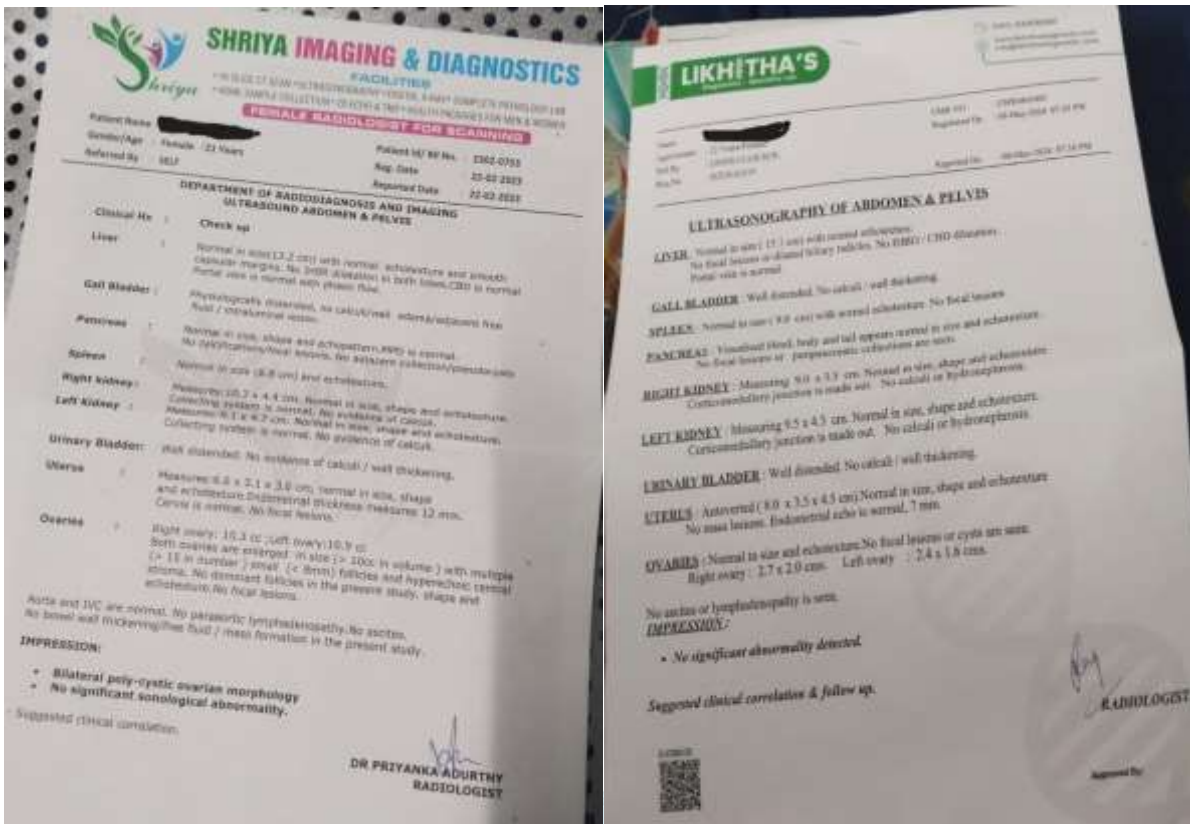
These medications can be mixed into ointments and applied to specific skin areas. Transdermal therapeutic systems (TTS) are adhesive patches that deliver drugs at a constant rate into the bloodstream via the stratum corneum. The drug is delivered at the skin's surface through diffusion for percutaneous absorption into circulation. TTS are available in India and other countries and are designed to last for one to three days. ^[4]

VI. METHODS

A case study was conducted to explore the potential of homeopathic treatments for hormonal disorders, including PCOD, by utilizing the PubMed and Google Scholar databases. The full texts of relevant publications, such as case reports, retrospective studies, prospective studies, literature reviews, systematic reviews, and bibliographies, were shortlisted and subsequently reviewed for their study design after evaluating the abstracts.

VII. RESULT

Summary of the case: A 22-year-old female presented with a diagnosis of polycystic ovary disease (PCOD) with the impression of bilateral polycystic ovarian morphology measuring right ovary: 10.3cc; left ovary 10.9cc before treatment and reported experiencing irregular menstrual cycles for one year. She noted that her menstrual flow has been scanty and continuous for the past ten days. The patient was healthy a year ago, but over time, she began to experience irregular menstrual cycles. Initially, she had no menstrual periods for three months. After this, she had regular menstruation for six months, followed by another three months without menstruating. Subsequently, she experienced an additional three months without any menstrual flow. Recently, she resumed menstruation; however, it is now scanty and has been ongoing for ten days. Ammonium Carbonicum 200 was prescribed, followed by SL, resulting in normal parameters. The diagnosis was made based on USG reports. The medicine was selected based on physician observation. Shown in before treatment “Fig no:1” After treatment “Fig no:2”.



“Fig no: 1” Before Treatment 22-02-2023 “Fig no: 2” After treatment 09-05-2024

PAST HISTORY:

History of allergic rhinitis for 10 years, starting at age 12. History of chickenpox at age 14. Sprained left ankle joint at 20 years. It is not a known case of hypertension, diabetes, or thyroid illness.

MENSTRUAL HISTORY:

Duration of cycle -30 days

Duration of flow – 03 days

Quantity of flow- 03 pads/day

The character of flow- bright red, with no clots, no offensiveness

LMP- 13/12/24

Dysmenorrhea- present back region

MENTAL DISPOSITION:

Tormenting

Indecisive

Esteemed

Indifference

RUBRICS CHOSEN

[Complete] [Female Genitalia] Menses: Irregular: (145)

[Complete] [Female Genitalia] Enlarged: Ovaries: (29)

[Kent] [Genitalia female] Enlarged (see swollen): Ovaries: (17)

[Kent] [Genitalia female] MENSES: Protracted: (91)

[Kent] [Genitalia female] MENSES: Standing, increased, while: (1)

[Kent] [Mind]ANSWERS: Aversion to: (53)

[Complete] [Mind]Injustice, cannot support: (77)

[Kent] [Mind]IRRESOLUTION: (106)

[Kent] [Mind]LAUGHING: Trifles, at: (5)

CHOICE OF DOSE & POTENCY

Amm. Carb -200

Single dose

VIII. MANAGEMENT: Steer clear of unhealthy junk food, which often contains high levels of sugar, salt, and unhealthy fats, and instead opt for nutritious meals rich in fruits, vegetables, whole grains, and lean proteins. Incorporate a consistent exercise routine into your daily schedule, aiming for at least 150 minutes of moderate aerobic activity each week, such as brisk walking or cycling. Additionally, make time for relaxation and mental wellness by practicing meditation or yoga, which can help reduce stress, improve focus, and enhance overall well-being.

IX. DISCUSSION:

Homoeopathic studies related to PCOD

Gupta, Y. (2019) polycystic ovarian syndrome (PCOS) is a common issue affecting women, affecting the menstrual cycle, fertility, hormone levels, and appearance, and may lead to depression. The condition is a metabolic problem affecting multiple body systems. A 28-year-old woman with PCOS was successfully treated with homoeopathic medicine. Lifestyle modification and counseling are the first lines of treatment, considering constitutional and mental generals. Special diets, including less processed carbohydrates, whole grains, fruits, vegetables, and adequate protein, can help reduce insulin response and maintain weight. Homoeopathic treatment is effective in treating lifestyle disorders quickly, and detailed case-taking is necessary for remedy selection. ^[5]

Kant, V., et al., This study aimed to implement a comprehensive approach of homoeopathy for treating polycystic ovarian syndrome (PCOD) in a 23-year-old woman with irregular menstrual cycles. Nux Moschata,

a homeopathic remedy, was used for treatment, with customized dosing showing effectiveness in improving overall well-being and reducing the 3 months menstrual cycle delay. [6]

Sheeba, S., et al., Polycystic ovary syndrome (PCOS) is a prevalent endocrine disorder affecting women of reproductive age, causing 40% of female infertility. It affects 20-30% of women aged 12-40. PCOS is linked to hyperinsulinemia and insulin resistance, leading to irregularity, infertility, and hirsutism. Homoeopathy, a treatment method, can correct hormonal imbalances, regulate ovulation, and restore the menstrual cycle. Retrospective observational research evaluated the effectiveness of homoeopathy as a therapeutic option for postpartum depression, involving 20 female patients aged 18-45. [7]

Gupta, G. (2017) The study examines 50 Polycystic Ovary Syndrome (PCOS) cases from the Gaurang Clinic and Centre for Homoeopathic Research. Pre- and post-treatment pelvic ultrasounds and hormone analysis were performed. Out of 50 patients treated with homoeopathic medicines, 22 (44.0%) achieved complete resolution, 12 (12.00%) showed significant improvement, 36 (36.0%) maintained the status quo, and 4 (8.00%) did not improve. Calcarea Carbonica was the medicine of choice for most patients, but Lycopodium was the most effective. The incidence of PCOS is increasing worldwide due to modern lifestyles, prompting researchers to conduct clinical studies on therapeutic interventions. [8]

Rath, P., et al., (2024) Polycystic ovary syndrome (PCOS) is a chronic ovarian disorder characterized by abnormal function and hyperandrogenism. It affects fertility and can be found in 5% to 18% of the global population. In India, it ranges from 3.7 to 22.5%. A case series of five patients with PCOS was assessed, and individualized homoeopathic medicines were prescribed. The patients showed significant improvement in intermenstrual duration and body mass index scores, along with hormonal derangement. The prevalence of PCOS in India varies from 3.7 to 22.5%. [9]

Gupta, G., et al., (2021) A study conducted at the Homoeopathic Research Foundation in Lucknow evaluated the effect of individualized homoeopathy on the clinical and hormonal profile of women with Polycystic Ovary Syndrome (PCOS). The study found significant improvement in overall PCOSQ, and reduced cysts in both ovaries, and the most prescribed medicines were Calcarea Carbonica and Lycopodium. The study suggests that individualized homoeopathy can be a promising treatment for PCOS, but further controlled trials are needed. [8]

Rath, P., et al., A literature review was conducted to evaluate the effectiveness of homeopathy in treating PCOS in women. A comprehensive search of electronic databases identified several studies, including randomized trials, controlled trials, and case reports. The results showed that homeopathic medicines, including Cal. carb and Lycopodium, were effective in improving and curing PCOS. Nine case reports also showed positive effects of homeopathy, with three cases showing positive outcomes in infertility with PCOS. Future research should focus on high-quality randomized controlled trials, comparative studies, and in-vitro and animal model studies to support the effectiveness of homeopathic therapeutics in PCOS management. [9]

Dewan, D., et al., (2021) polycystic ovarian syndrome (PCOS) is a hormonal and metabolic disorder with a global prevalence of 06%-26%. Homoeopathy, a holistic healing system, has been considered as an alternative treatment for PCOS. A systematic literature search was conducted in June 2021 to identify 28 articles related to

Homoeopathy on PCOS, including 22 randomized controlled trials (RCTs), observational studies, case series, and case reports. All studies were published in peer-reviewed journals. To establish the evidence-based efficacy of Homoeopathy in cases of RCT, more pragmatic studies need to be planned based on proper diagnostic criteria. [12]

CONCLUSION: Stein-Leventhal syndrome, more commonly known as polycystic ovary syndrome (PCOS), is a prevalent hormonal disorder that impacts 6-13% of women around the globe. This condition can cast a long shadow over women's lives, leading to challenges like infertility and a range of long-term health complications. One popular treatment avenue involves oral contraceptives, which can help alleviate various symptoms. However, these medications may come with unwelcome side effects such as weight gain and acne, which can further complicate a woman's self-esteem and quality of life. Estrogens, while sometimes beneficial, can dampen libido and potentially raise the risk of certain cancers, adding layers of concern to their use.

There is also an array of other medications, such as clindamycin, erythromycin, isotretinoin, dexamethasone, and clomiphene, each with its own set of possible side effects. These pharmaceuticals may not only increase the risk of developing polycystic ovaries but could also lead to complications during pregnancy.

In contrast to conventional treatments, homoeopathy presents a more holistic approach, employing natural remedies designed to fortify the immune system. This method emphasizes the importance of treating the person as a whole—addressing both the physical and emotional symptoms associated with this syndrome. By focusing on the underlying issues as well as emotional well-being, homeopathy seeks to provide a more comprehensive remedy, nurturing both body and mind in the journey toward better health.

X. CONFLICTS OF INTEREST: The author declares that have no conflicts of interest.

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