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PREVALENCE OF PCOD/PCOS AND ROLE OF HOMOEOPATHY

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ABSTRACT

PCOD/PCOS is a polygenic, multifactorial, polygenetic condition existing mainly due to lifestyle disorder. It is one of the cause of primary infertility in women of reproductive age group. Being a chronic disease it has both biological and psychological effect. Homoeopathy has a permanent cure to such chronic illness and is much safer than traditional therapies. Some the homoeopathic medicines with their indications with respect to side of ovary has been mentioned.

KEYWORDS: PCOD, PCOS, Absent menses, homoeopathy.

INTRODUCTION

Female body is largely governed with narrow range of various hormones, once the levels are disturbed, they develop an array of signs and symptoms. Disrupted hormone levels have a multidimensional effect including biological and psychological aspects of the patient.[1] Hormonal disruptions like LH, FSH, Androgens and insulin resistance are becoming more common due to the increase in chemical invasion and exposure, which are largely endocrine disruptors, resulting in cysts in ovarian antral follicles.[2]

Epidemiology

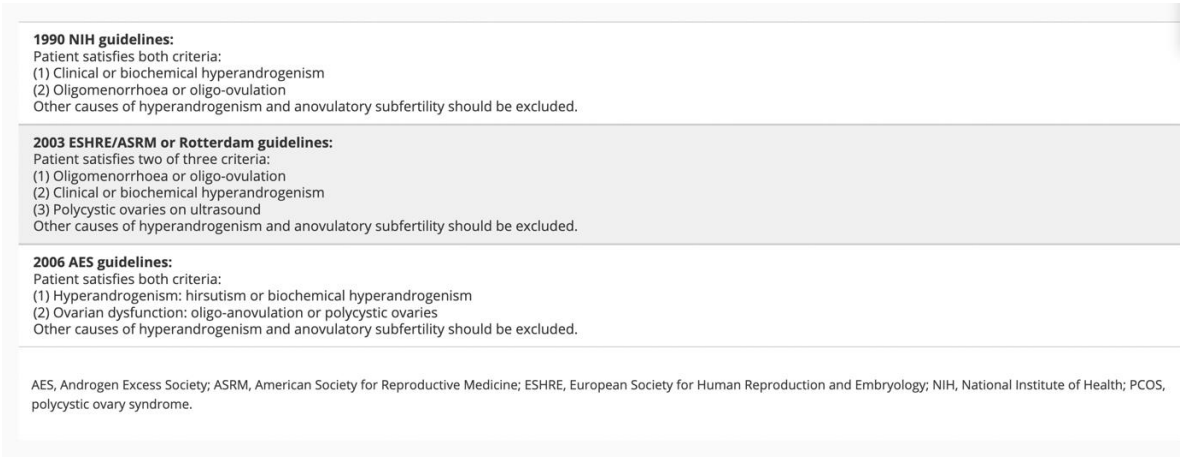
Number of PCOD/PCOS cases have assumed epidemic figures owing to high prevalence.[2] PCOD is observed in women of child bearing age across all cultures.[3] The global prevalence of PCOD is 21.27%. The prevalence of PCOD in India ranges from 3.7 to 22.5 per cent.[4] In

another study conducted across several continents by Ding T, Hardiman PJ, Peterson I, Wang FF, Qu F, Baio G in 2017, prevalence in Chinese women(2003 Rotterdam criterion: 5.6% 95% interval: 4.4–7.3%), for Caucasians (1990 NIH criterion: 5.5% 95% interval: 4.8–6.3%), in Middle Eastern (1990 NIH 6.1% 95% interval: 5.3–7.1%; 2003 Rotterdam 16.0% 95% interval: 13.8–18.6%; 2006 AES 12.6% 95% interval: 11.3–14.2%), and in Black women (1990 NIH: 6.1% 95% interval: 5.3–7.1%) was noted.[5]

Investigation

USG abdomen is the most common investigation used along with hormonal assay of FSH, LH, Prolactin, Thyroid function test.

The following criteria can be used to diagnose PCOD/PCOS. Prevalence can vary according to the criteria used.[4]



1990 NIH guidelines:
Patient satisfies both criteria:
(1) Clinical or biochemical hyperandrogenism
(2) Oligomenorrhoea or oligo-ovulation
Other causes of hyperandrogenism and anovulatory subfertility should be excluded.

2003 ESHRE/ASRM or Rotterdam guidelines:
Patient satisfies two of three criteria:
(1) Oligomenorrhoea or oligo-ovulation
(2) Clinical or biochemical hyperandrogenism
(3) Polycystic ovaries on ultrasound
Other causes of hyperandrogenism and anovulatory subfertility should be excluded.

2006 AES guidelines:
Patient satisfies both criteria:
(1) Hyperandrogenism: hirsutism or biochemical hyperandrogenism
(2) Ovarian dysfunction: oligo-anovulation or polycystic ovaries
Other causes of hyperandrogenism and anovulatory subfertility should be excluded.

AES, Androgen Excess Society; ASRM, American Society for Reproductive Medicine; ESHRE, European Society for Human Reproduction and Embryology; NIH, National Institute of Health; PCOS, polycystic ovary syndrome.

Image 1: Various diagnostic criteria used for diagnosis of PCOD/PCOS.[6]

The International Evidence-Based Guideline for the Assessment and Management of Polycystic Ovary Syndrome recommendations were published concurrently in Fertility and Sterility, Human Reproduction, and Clinical Endocrinology in 2018 and redefined the minimum antral follicle count. They concluded that utilising transvaginal ultrasonography, a cut off of 20 antral follicles in a single ovary was a more acceptable definition of polycystic ovaries.[7]

Pathogensis

1.) Gonadotropins

Anovulation in Polycystic Ovaries is caused by inappropriate gonadotropin release. Altered pulsatile release of Gonadotropin-releasing hormone (GnRH) leads to preferential production

of luteinizing hormone (LH) as compared to follicle-stimulating hormone (FSH). LH:FSH ratio is increased in approximately 60% female patients of PCOD.

2.) Insulin Resistance

Women with Polycystic Ovaries have higher insulin resistance and increased compensatory insulin levels than nonaffected counterpart. Both lean and obese females suffering from Polycystic ovaries suffer from insulin resistance.

3.) Androgens

Both insulin and LH hormone stimulate androgen production from ovarian theca cells, which lead to increased levels of testosterone and androstenodione. Elevated androstenodione lead to increase in levels of estrone via peripheral conversion of androgens to estrogen.

4.) Sex Hormone-binding Globulin

Sex hormone-binding globulin normally binds to most of the sex steroids, leaving only about 1% of free sex hormone in circulating blood. Sex hormone-binding globulin synthesis is suppressed by insulin, androgens, corticosteroids, progestins and growth hormone.

5.) Anovulattion

Exact mechanism not known, however, altered GnRH pulsatile release and inappropriate gonadotropins secretion has been implicated in menstrual irregularity.[8]

Risk factors

- Family history of PCOD
- Family history of Diabetes Mellitus
- Family history of Obesity
- Family history of infertility
- Sedentary lifestyle and diet
- Stress[9]

Signs & symptoms

1. Menstrual dysfunction
2. Hyperandrogensim (hirsutism, acne, alopecia)
3. Insulin resistance (Acanthosis nigricans)
4. Dyslipidemia
5. Obesity

6. Obstructive Sleep Apnea (OSA)
7. Cardiovascular disease (Hypertension, Left ventricular diastolic dysfunction, external carotid artery stiffness, endothelial dysfunction, atherosclerosis)
8. Infertility
9. Pregnancy loss
10. Psychological health (Negative body image, depression, anxiety, reduced quality of life)
11. Endometrial hyperplasia[8]

MIASMATIC BACKGROUND

According to master Hahnemann all chronic disease have a miasmatic background. Cysts are basically sycotic in nature as sycotic patient assimilates.[10]

MANAGEMENT

Lifestyle changes like weight loss, avoid smoking along with Homoeopathy offers gentle and permanent cure for a chronic illness like PCOD/ PCOS.

Traditional management includes Hormonal therapy and metformin for insulin resistance accompanied by long term side effects.[11]

Some of the most common indicated medicines for PCOD/PCOS are Natrium muriaticum, Pulsatilla nigricans, Calcarea carbonicum, Sepia, Ignatia amara, Kali carbonicum, however in this article medicines for PCOD/PCOS according to the side of ovary involved, namely right and left are discussed.

RIGHT

Palladium

Ovarian remedy, symptom of chronic oophoritis. Subacute pelvic peritonitis with right sided pain and with backache. Menorrhagia. Pain and swelling in region of right ovaries. Shooting and burning pain in pelvis and bearing down > rubbing. Indicated in gynaecological condition where the disease had its inception in right ovary, uterine prolapse and retroversion, the subacute pelvic peritonitis and concomitant symptoms being secondary.[12]

Apis mellifica

Amenorrhea, menorrhagia. inflammation, induration, swelling and dropsy of the ovaries (right). Weight and pain either ovarian region predominantly right side. Ovaries > lying right

side. Enlargement of right ovary with pain in left pectoral region and cough. Sharp stinging pain in swollen right ovary, menses during.

Bearing down sensation < before menses. Dropsy of ovary (right); dropsy of uterus. Strained pain in left ovary. Menses suppressed or decrease with headache.[13]

Belladonna

Delayed menses. Menses – copious or early or too decreased. During menses- sweat on chest. Metrorrhagia. Parts sensitive. Uterus and ovaries congested, sore to touch. Sensitive to jar.[14]

Lycopodium clavatum

Menses suppressed readily and for a long time. By fright. Menses- too late, last too long, sometimes, suppression of menses, profuse, protracted. May find female at change of life with one side of the body greatly hypertrophied.[15]

Conium maculatum

Catamenia- premature and too weak. Suppression of catamenia.

Before catamenia, pain in the breast; anxious dreams, dry heat, pain as from fatigue in the limbs. Lachrymose humour, in quietude and hepatic pains.

During catamenia there is sensation of bearing down and dragging in the thigh or painful cramps in abdomen. Suppressed menses with barrenness.[16]

Ferrum iodatum

Amenorrhœa.

Itching and soreness of vulva and vagina; parts much swollen.

Leucorrhœa like boiled starch; when the bowels move the discharge is stringy.

Severe hysterical attacks, with frequent spasms and syncope ; great debility, cachectic appearance, leucorrhea, anorexia ; finally hydrops of right ovary set in ; enormous swelling under border of right ribs ; menses scanty, preceded by painful swelling of right breast, and followed by an aggravation of the constant and profuse leucorrhœa ; three weeks after beginning of treatment there occurred sudden loss of consciousness and discharge of about two quarts of yellowish fluid from vagina, after which swelling subsided and health was entirely restored.[17]

Platina

Metrorrhagia. Menses too early, too profuse, dark, coagulated, tar like, exhaustive, spasm and scream at every periods.

Before menses- cutting pain in hypogastrium like labour, cramps, painful sensitives to mons veneris and genital organs with internal chill and external coldness except face. Severe pain in RIGHT ovary region.

During menses- general bearing down sensation towards genitals which are sensitive.[20]

LEFT SIDE

Lachesis mutus

Pain from ovaries to uterus with discharge of pus while at stool. Catamenia feeble tardy and of too short duration.

Catamenia accompanied by hemorrhoids. Menses too scanty, blood black. Abdomen pain during menses.

Before menses- head pain, vertigo, epistaxis, pain abdomen, cutting pain, in hypogastrium flow of mucus in urethra and cramps in chest. Diarrhoea, violent colic beginning in left ovary. Swelling, induration, pain and other anomalies of left ovary. On appearance of menses- sacral pain with pain in fracture in hip, chest.

During menses- pain, in loins as in labour.[18]

Phosphorus

Intermittent menses. Menses too early and scanty, not profuse, last too long. Weeps before menses. Too early, too profuse, protracted. Too early scanty, too serious.

Menses protracted with toothache and colic, frequent and profuse, metrorrhagia. Menses too short, continuous, retarded. Sterility on account of excess voluptuousness or if menses come too late. On appearance of menses incisive gripping pain in back and vomiting.

Before menses- abundant bleeding of ulcers, leucorrhoea, want to urinate, weeping.

After menses- weakness, blue circle around eyes, anxiety.

During menses- headache shooting. Fermentation in abdomen. Expectoration of blood pain in (small of) back. Soreness of limbs. Palpitation of heart. Shivering. Swelling of gums and cheeks and many other sufferings.[19]

Thuja

Affections of ovaries. Left ovary inflamed < at every menses, distressing pain, burning pain < riding, walking pain extends from left iliac to groins to left leg. Pain in ovaries/ ducts with over physiological action.

Before menses- tired, palpitation. Spasmodic weakness. Restlessness in legs. Retching in stomach. Distension. Pain in abdomen and back. Bearing down of genitals. Sensitiveness and swelling of breast. General coldness.

After menses- tired with rush of blood upwards, toothache. Sleeplessness. Nightmare.[21]

Colocynth

Ovarian cysts, with pain in abdomen upon straightening up ; walks bent, with hands pressed to painful side.

Metrorrhagia, with cramplike pain in abdomen ; > by pressure and hot drinks.

Drawing, gnawing pain in left ovary, extending towards stomach, before appearance of menses, which are profuse and too early.

Several days before each menses, sharp, darting paroxysmal pains in stomach, making her bend forward and press on painful part to get relief, with extreme nausea and vomiting ; these all ceased on appearance of menses ; on last day of menses pains returned, lasting to within about thirty minutes of end of menses, when an erythematous eruption appeared over seat of pain, itched intensely for thirty minutes and then suddenly disappeared ; no return of symptoms till next pre-menstrual time.

Dysmenorrhœa; cramping pains, must bend double, sometimes < after eating or drinking.

Catamenia by one or two days too soon, dark colored, offensive, accompanied by almost constant sharp, cutting pains

Menses regular, last two weeks, scanty and bright red, with cramplike pain.

Menses increased, with pain in left foot ; < before menstruation.

Menses increased and too frequent.

Difficulty of breathing during menses. Ovarian tumor.

Suppression of menses, caused by chagrin; colicky pains, with great anguish and restlessness.

Menses absent.[22]

Discussion & Conclusion

Illness especially when related to hormones are chronic in nature and at times stubborn to treat where traditional system offers temporary results, Homoeopathy on the other hand extends permanent mode of treatment. There are various criteria used for the diagnosis of PCOD/PCOS but Rotterdam criteria is most often used. More research is needed to establish superiority of Homoeopathic mode of treatment.

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Conflict of interest

None

Abbreviations

PCOD- Polycystic ovarian disease

PCOS- Polycystic ovarian syndrome

NIH- National Institute of Health

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