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AYURVEDIC MANAGEMENT OF POLYCYSTIC OVARIAN DISEASE: A REVIEW

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ABSTRACT:

Due to changes in life style, food habits, work load etc. in present scenario, women face a lot of stress and strain. Owing to complicated structure of the female body, women are subjected to a large number of complaints connected with reproductive system. Woman's health is a point of concern for her family, society and culture because any physical or mental disturbance can disturb her normal menstrual physiology. Polycystic Ovarian Disease is now-a-days a commonly rising concern for gynaecologists. Its increasing occurrence and problems related to difficulties in its treatment make it necessary to find newer and more positive ways to cope up with this issue. Polycystic ovarian disease (PCOD) is a condition that has cysts on the ovaries that prevent the ovaries from performing normally. Symptoms of PCOD include amenorrhoea or infrequent menstruation, irregular bleeding, infrequent or no ovulation, multiple immature follicles, increased levels of hormones, male pattern baldness or thinning of hair, excess facial and body hair growth, acne, oily skin or dandruff, dark coloured patches of skin specially on neck, groin, underarms, chronic pelvic pain, increased weight or obesity, lipid abnormalities and high blood pressure. Fertility problems experienced by women with PCOD may be related to the elevated male hormone, insulin or glucose levels, all of which can interfere with implantation as well as development of embryo. Increased luteinising hormone reduces the chances of conception and increases miscarriage. Additionally, abnormal insulin levels may also contribute to poor egg quality, making conception more difficult. The objective of this article is to provide better alternatives to modern therapy of PCOD. PCOD can be compared with Vataja Granthi and obesity together. Ayurveda has a holistic way of management. This includes a complete regimen of dietary and lifestyle management considering Vata Prakopa and Medovriddhi. Sukumara Ghrita described by Vagbhata is useful in management of PCOD.

KEY WORDS: Ayurveda, infertility, obesity, PCOD.

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INTRODUCTION

Polycystic ovarian disease (PCOD) is a common disorder of women with a prevalence of 9.13% in Indian population[1]. It is characterized by hyperandrogenism and chronic anovulation[2,3]. As PCOD is associated with hyperinsulinemia, it has major metabolic as well as reproductive morbidities[4]. Promisingly, lifestyle intervention comprising dietary, exercise and behavioural therapy improve fertility and reduce costs per birth significantly[5].

As per *Ayurveda*, the syndrome involves *Vata Dosha* causing *Dushti* of *Artava* and *Medodhatu*. As *Ayurveda* stresses more upon curing the disease from roots and *Apunarbhava Chikitsa*, through its holistic approach, PCOD can be managed with lifestyle changes, dietary management along with medications.

Treatment of PCOD in modern science stresses more upon the management of obesity. The medicinal therapy involves hormonal treatment which has various side effects of its own. Thus *Ayurvedic* management can provide a safer substitute in PCOD.

ETIOLOGICAL FACTORS

The exact pathophysiology of PCOD is complex and remains largely unclear. Genetic and environmental contributors to hormonal disturbances combine with other factors, including obesity, ovarian dysfunction and hypothalamic pituitary abnormalities to contribute to the aetiology of PCOD[6,7]. Obesity increases hyperandrogenism, hirsutism, infertility and pregnancy complications both independently and by exacerbating PCOD[8, 9].

As per *Ayurveda*, *Ahara* and *Vihara* causing *Vata Kapha Dushti*[10], *Meda Dushti*[11] will be the key factors causing the expression of the syndrome.

Clinical features

Women with PCOD may therefore present with a variety of serious clinical sequalae and the spectrum of clinical features, presentation can vary across the life cycle. PCOD is a chronic condition with psychological and reproductive manifestations usually beginning in adolescence then transitioning to include infertility and increasing metabolic complications over time. The clinical features can be categorised as[12, 13].

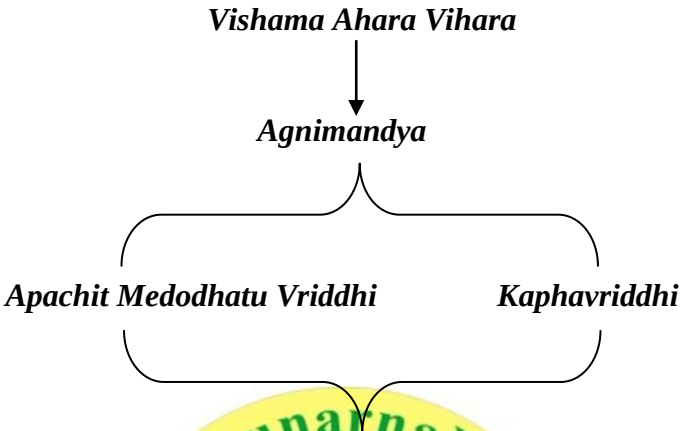
1) Ovulatory and Menstrual Dysfunction: Anovulation, oligomenorrhoea or irregular vaginal bleeding

2) Hyperandrogenemia: Raised circulating androgen levels

3) Clinical Features of Hyperandrogenism: Hirsutism, acne, androgenic alopecia.

4) Polycystic Ovaries: as evidenced by radiological findings.

Possible *Samprapti* according to *Ayurveda*



- The vitiated *Vata Dosha* is responsible for the *Vishesh Samprapti* of the disease.
- As we all know, *Vata Dosha* is regulating system of the body, all the *Sharirik* and *Manasika Bhavas* being controlled by it[14]. Thus vitiated *Vatadosha* can be held responsible for the hormonal disbalance occuring in patients.
- The oligomenorrhoea or amenorrhoea seen in relation with the syndrome can be compared with *Doshavaranajanit Arthavanasha*[15].
- Moreover, the psychological symptoms developed in the syndrome can be related to the close relation between *Vayu* and *Manas*, *Vayu* being "....*Niyanta Praneta Cha Manasah*..."[14].
- The multiple cysts seen in ovaries, though at ancient times invisible, as we now know are similar to *Vataj Ghranthi* as described by *Acharya Sushruta*.. "..*Bastivat*..", i.e. filled with fluid[16].

MANAGEMENT

As the name suggests, *Ayurveda* is the science of life. Thus it stresses more upon a holistic aproach towards complete cure of every disease. The *Ayurvedic* management thus includes pacification of vitiated *Doshas* along with purification of *Dushta Dhatus*. The treatment in *Ayurveda* is tailored as per the condition of the patient and the disease.

1. The first step towards treatments is *Nidanaparivarjana* [17], i. e. avoiding the causes which are at the root of the disease. As *Vata Dosha* and *Dushta Medas* are key elements involved, *Ahara* and *Vihara* causing *Vata Prakopa* and *Medo Vriddhi* should be avoided.
2. *Dinacharya* of the patient should be adjusted according to that described in *Ayureveda* [18], as far as possible.
3. *Vasti Chikitsa* has been called the half of the therapy, or *Ardhachikitsa* by *Acharya Charaka* [19], so *Aasthapana* or *Anuvasana Vasti* or both, should be scheduled, according to the stage of the disease, *Prakriti* of both the patient and the disease. *Pathathi Kwatha* described by *Sushruta* in *Vatakafaja Aarthavadushti* when given orally alongwith *Shatapushpa Tail Matra Basti* for seven days after caessation of menstruation is found to be effective[20].
4. Use of various *Lekhana Dravyas* like *Takra, Vyoshadya Sattu*, as described by *Acharya Charaka* along with lifestyle modification including regular exercise is useful in management of *Medovriddhi*[21]. Dietary modifications are also useful.
5. In a case study including two cases done in *Prasutitantra* OPD of Sir Sundarlal Hospital, IMS, BHU, Varanasi, it is seen that Sukumara ghrita described by *Acharya Vagbhata*[22] used 3gm BD for 1 month significantly reduces the size of ovarian cyst as seen on radiological findings.

TREATMENT OF OBESITY

Treatment of obesity through lifestyle intervention is a key treatment strategy in PCOD and improves insulin resistance, reproductive and metabolic features[23]. Treatment options need to be tailored to the clinical presentation. Education on short-term and long-term squeal of PCOD from a reliable independent source is important in allaying anxiety and minimising the impact of illness in chronic disease. As a prelude to treatment psychological features need to be acknowledged, discussed and counselling considered, enabling lifestyle change which is unlikely to be successful without first addressing education and psychosocial issues[13]. Regular exercise in order to reduce the excess weight gained. Prevention of excess weight gain should

be emphasised in all women with PCOD of either normal or increased body weight. As little as 5% to 10% weight loss has significant clinical benefits improving psychological outcomes, reproductive features (menstrual cyclicity, ovulation and fertility) and metabolic features (insulin resistance and risk factors for CVD and DM2). Evidence shows that lifestyle change with small achievable goals results in clinical benefits even when women remain in the overweight or obese range[13].

Summary of treatment options according to modern science in polycystic ovarian disease (PCOD) [13]

1. Oligomenorrhoea/amenorrhoea
    - Lifestyle change (5% to 10% weight loss and structured exercise).
    - Oral contraceptive pill (OCP; low oestrogen doses, for example 20 µg may be preferable).
    - Cyclic progestins (for example, 10 mg medroxyprogesterone acetate for 14 days every 2 to 3 months).
    - Metformin (improves ovulation and menstrual cyclicity).

2. Hirsutism treatment recommendations
    - Cosmetic therapy.
    - Laser treatment.
    - Eflornithine cream can be added and may induce a more rapid response.

Pharmacological therapy

- Medical therapy if patient concerned about hirsutism and cosmetic therapy ineffective, inaccessible or unaffordable.
- Primary therapy is the OCP (monitor glucose tolerance in those at risk of diabetes).
- Antiandrogen monotherapy should not be used without adequate contraception.
- Trial therapies for ≥ 6 months before changing dose or medication.
- Combination therapy: if ≥ 6 months of OCP is ineffective, add antiandrogen to OCP (daily spironolactone 50 mg twice a day or cyproterone acetate 25 mg/day for days 1 to 10 of the active OCP tablets). 3. Infertility

- Obesity independently exacerbates infertility and reduces effectiveness of interventions. Maternal and foetal pregnancy risks are greater and long-term metabolic outcomes in the child are related to maternal weight at conception. Consistent with international guidelines, women who are overweight prior to conception should be advised on folate, smoking cessation, weight loss and optimal exercise, prior to additional interventions.
- Given age-related infertility, advice women to optimise family planning.
- Infertility therapies may include clomiphene, gonadotrophins and in vitro fertilisation.
- Metabolic syndrome, pre-diabetes, diabetes and cardiovascular disease risk
- Lifestyle change with a 5% weight loss reduces diabetes risk by approximately 50% to 60% in high-risk groups. Metformin reduces the risk of diabetes by approximately 50% in high-risk groups.
- Metformin and the OCP are not currently approved for use to manage PCOD by many regulatory bodies. The OCP is primarily indicated for contraception and metformin for diabetes. However, their use is recommended by international and national specialist societies and is evidence based.

CONCLUSION

In this era of modernization, lifestyle disorders are emerging as a headache to the healthcare systems. People are looking at Ayurveda with a hope that it can give a better alternative to hormonal therapy. Ayurveda can provide better ways to manage PCOD effectively with minimal or no side effects.

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