ORIGINAL RESEARCH PAPER

Unani

MANAGEMENT OF SECONDARY AMENORRHOEA DUE TO POLYCYSTIC OVARIAN SYNDROME THROUGH UNANI MEDICINE : A REVIEW PAPER

KEY WORDS: secondary amenorrhoea, polycystic ovarian syndrome, infertility, unani medicine.

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ABSTRACT

In certain cultures, menstruation is regarded as a sign of femininity, and lack of menses may cause emotional and social problems. Secondary amenorrhoea is a common distressing symptom caused by a multitude of pathological processes. The prevalence of secondary amenorrhea varies depending on the age group; 8.5% in women aged 13 to 18 years, 3% in women aged 25 to 34 years. The incidence of secondary amenorrhoea due to polycystic ovarian syndrome is 15 to 30%. According to World Health Organization (WHO), PCOS impacted 116 million women worldwide. Polycystic ovarian disease (PCOD) is the most common endocrine abnormality of women of reproductive age, and is the commonest cause of infertility due to anovulation. The purpose of this review is to summarize physiological characteristics of PCOS like menstrual abnormalities, obesity, hirsutism, infertility, acne etc. That are common among women diagnosed with secondary amenorrhoea due to polycystic ovary syndrome. This review also highlights a brief outline of signs and symptoms, pathophysiology, risk factors and treatment with drugs in unani medicine.

INTRODUCTION:

Amenorrhea is not a diagnosis in itself but rather a most common clinical sign of reproductive dysfunction [1,2]. Secondary amenorrhea, which is usually defined as no periods for three or four months [2] occurs in 10 20% of patients complaining of infertility and is one of the commonest reasons for referral to a gynecological endocrine clinic [3]. Women with amenorrhea are at increased risk of developing endometrial hyperplasia from chronic unopposed estrogen [4]. Besides pregnancy, other causes of secondary amenorrhea are PCOS, thyroid dysfunction, hyperprolactinemia, hypothalamic amenorrhea and ovarian failure [4,5]

Polycystic ovarian syndrome (PCOS) also known as Stein Leventhal Syndrome. is a heterogeneous disorder characterized by excessive androgen production by the ovaries mainly. PCOS is the most common endocrine disorder in women of reproductive age, occurring in 20-30%of all young women.[6] It has an autosomal dominant pattern, modified by environmental factors. PCOS is associated with hyperandrogenism, hyperinsulinemia, normal or elevated estrogen levels and raised LH secretion leading to increased LH: FSH ratio.[7] Hyperandrogenism manifest clinically as hirsuitism, acne, alopecia and virilisation. PCOD accounts for most cases of oligomenorrhoea and about a third of those of amenorrhoea.[8] They have an increased risk for prediabetes, type 2 diabetes mellitus (T2DM), metabolic syndrome, fatty liver disease, and obstructive sleep apnea.[9] The onset of this disease is peri–menarcheal, as during this stage major endocrinological and emotional change takes place and this probably could explain the reason behind its onset at this stage.[8]

Methods: Authentic ancient text of Unani medicine was searched to obtain the Unani concept of secondary amenorrhoea. PubMed/Google scholar was also searched with the keywords; Herbs for secondary amenorrhoea, PCOD, infertility etc.

Unani concept: According to unani system of medicine menstruation is a cleansing process and the occurrence of menstruation regularly preserve health and prevent from disease.[10] ehtebas tams (amenorrhoea) is defined as cessation of menstruation, either it varies from scanty flow to complete cessation or it occur at interval of ≥2 months.[11] Disorders of menstruation are attributed to sue mizaj barid sada(,(simple abnormal cold temperament) which increases the viscosity of khoon haiz and forms sudda, ultimately weakens the quwwate dafia'h so that the khoon haiz is unable to be expelled out of rehm.[12,13,14] The Unani term coined for PCOD is Marz Akyas Khusytur Rehm; is in fact an Arabic translation of PCOD. This disease has been described by Unani Physicians under the headings of amenorrhoea, obesity, phlegmatic disease and liver disorders. The Unani Physicians consider that the early twenty years of life are the period of childhood which is predominated by phlegm; hence the phlegmatic disorders are more likely to occur at this stage. This probably may explain the role of phlegm as a contributing factor for the onset of this disease during this age group [8].Women who have ehtebas tams are transformed towards the masculinity, and develop the features of virilisation like hirsutism, hoarseness and deepening of voice.[11,13,15,16] Any disturbance in menstrual regularity may lead to consequences like amenorrhoea, infertility, hysteria, leucorrhoea, obesity and inflammation of viscera's.[11,15]

DIAGNOSIS: In many women preliminary diagnosis can be made from clinical evaluation at the initial visit to the clinic and in almost all cases the diagnosis can be established as a result of simple endocrine test. Establishing an accurate diagnosis is essential for safe and effective management and to avoid potential complications.

Diagnostic Criteria for PCOS: [6,17]

Table No 1. Organization	Criteria for diagnosis
1. NIH	1. Excess androgen 2. Chronic anovulation (menstrual disturbance)
2. ESHRE /ASRM	1. Morphology of polycystic ovary on 2. ultrasound scan Characteristic of excess of androgen 3. Irregular menses

- NIH- National Institute of Health
- ESHRE – European society for Human reproduction and Embryology
- ASRM- American Society for Reproductive Medicines

Treatment: In conventional medicine, hormone supplements are advised not only for withdrawal bleeding but also to regularize the menstruation in patients with secondary amenorrhoea Which though effective have got their own consequences like weight gain, migraine, mood swings, abdominal distension etc moreover they are contraindicated in patients with thromboembolism, stroke, hypertension, myocardial infarction and liver disease.[18,19]

Treatment of PCOS:

Table no. 2: Therapeutic options for PCOS [17]

DRUGS	MECHANISM
Oral contraceptives	
(a)combine pills (containing both estrogen and progesterone)	-endometrial changes -decreases GnRh -decreases LH and FSH -increases SHBG -decreases androgen
Antiandrogen	
(a) Cyproteron acetate	- it inhibit the binding of testosterone and 5a-DHT to androgen receptor.
(b)Flutamide	- it act as competitive antagonist at androgen receptor.
Insulin sensitizer	
(a) Metformine	-increases SHBG and reduce free testosterone. It also increases insulin Sensitivity.
(b)Thiazolidinediones	-it blocks PPARy (peroxisome Proliferator activated receptor gamma) thereby decreases insulin resistance.
Ovulation inducing agent	
(a)Clomiphene citrate	-estrogen antagonist, interfere with negative feedback of estrogen signalling pathway.increase FSH.

In Unani system of medicine, treatment plan for secondary amenorrhoea in PCOD patients is based on the concept that, treat the cause of amenorrhoea i.e. PCOD with life style modification through tadbir (regimental therapy), ghiza (diet), dawa (medicines).[19] In Unani system of medicine several mudire tams drugs are available for the treatment of ehtebas tams; Mudire tams drugs are hot in temperament which dilate the blood vessels, liquefy the blood and remove sudda; ultimately clear the passage for the discharge of menstrual blood.[10,14]

Mudir haiz advia (emmenagogue drugs): mudire haiz drugs are used to induce the menstruation; these drugs are hot in temperament, which dilate the blood vessels, liquefy the blood by quwwate talteef aur taqtee and remove sudda;[10] ultimately clear the passage for menstrual blood and discharge the fuzlat in the form of menstruation. Such drugs act as musleh for rehm having aromatic property which carries the effect of the drug to the uterus.These drugs can be used either orally or locally in the form of dhooni, humool, abzan, zimad, takmeed, huqna etc[11].

Mudirat haiz drugs act in two ways:

1) Some drug induces menstruation by acting directly on uterus like heeng, tukhme karafs, habbul qurtum, mur.

2) Some drugs induces menstruation by acting indirectly on uterus like:

a) Drugs by improving the blood induces menstruation e.g. murakkabat foulad or khabsul hadeed.

b) Drugs by acting on the nervous system induces menstruation e.g. murakkabat kuchla.

c) Drugs by causing irritation of adjacent organs e.g. mushil sibr produces intestinal irritation and stimulates the uterus to induce menstruation.[10,11,13]

In Unani system of medicine, treatment is based on four categories:

(1) Ilaj bil tadbir:

- Advise regular exercise(riyazat qawwi) [13,15] to reduce body fat and weight.[11,16]
- Massage with roghan natroon aur zuft followed by hammam.[16
- To induce menstruation wet cupping is applied over the calf muscles (Hijamat saaq).[13] to divert the flow of blood towards the uterus.

(2) Ilaj bil ghiza:

- Advise to take light(lateef ghiza) like aab anar, mosambi, naranj, ma ush shaeer, shehad, sharab, moong ki daal ka pani.[10,20] Taqleel ghiza with the use of chapati, kharbuza, tarbooz [10,11,16] chane ka pani, asfedaaj etc.[21]

(3) Ilaj bil dawa:

- Use of advia harra like khaksi, tukhme gazar, shora qalmi, post and bekh kasni is recommended.[10] Qurse mur can be used as mudir haiz.[15] Use of mulattif advia like pudina, habbe ayarij are advised.[15]
- Use of advia mushil balgham like habbe ayarej to evacuate ghaleez akhlat and rutubat.[1315] Use of maul usool and mudir haar advia like joshanda poste khyarshamber, mushktaramashi, parsiyushah, qand siyah kohna etc.[15]
- Sharbat irsa.[20]
- Use of qurse mur for taskheen rehm.[15,22]
- Taqtee by use of sharbat irsa or sharbat shikanjabeen unsali. If the woman is young with moderate built, sharbat irsa is beneficial. If the woman is elderly with thin built, sharbat shikanjabeen is effective. In this sharbat add those drugs which are aromatic and carry the effect of drug to uterus like zafran, mushk, karafs, nanqhuwa, tukhme gazar dashti.[20] Post khyarshamber, post jouz each 3 tola, fuwah, rewandchini, banafsha, abhal, turmus, kharkhasq, tukhm qurtum, tukhm kharpaza, mushktaramashi, inaab salib, tukhm karafs each 7 masha boil with arq kharkhask, arq makoo paw ser; to be used with sharbat deenar.[15] Abzan with advia mulattif like shibbat, marzanjosh, pudina, sudab, baboon, akleelul mulk and satar.[15]

(4) Ilaj BilYad:

- Fasd rage safan (saphenous vein)[10,13,15,16] and rage zano mabaz (popliteal vein) [15] are beneficial to divert the flow of blood towards the uterus to induce menstruation.[17]

CONCLUSION:

Amenorrhea is a common complaint in women and presents with a variety of accompanied symptoms. Some causes of amenorrhea can pose significant risk for long-term metabolic, reproductive, and bone health problems. A careful history and appropriate diagnostic workup are important to determine etiology and an appropriate treatment plan for women with this complaint. Hence, it can be inferred that unani drugs may be an effective therapeutic option in patients with PCOD associated secondary amenorrhoea as it has significant effect in inducing withdrawal bleeding and menstrual cycle regulation which in turn improves PCOD. Hence, it can be used as an alternative in its management. Further research is needed to fully explore the potential of unani medicine in the management of PCOS.

Deterrence and Patient Education:

Patients diagnosed with amenorrhea need long term follow up because resumptions of menstrual cycles may take months or years.

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