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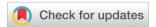
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Review Article

# Management of Amenorrhoea (*Ihtibas-al-Tamth*) in Unani System of Medicine: A Review

Ayesha Raza 1, Farheen Zehra 2, Mohd Nayab 3\* D

- <sup>1</sup> Head, Department of AmrazeNiswan, A&U Tibbia College and Hospital Karol Bagh, New Delhi, India
- <sup>2</sup> PG Scholar, Dept of MahiyatulAmraz, NIUM, Bengaluru, India
- <sup>3</sup> Associate Professor, Dept. of Ilaj bit Tadbeer, NIUM, Bengaluru, India

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# \*Address for Correspondence:

Dr. Mohd Nayab, Department of Ilaj bit Tadbeer, NIUM, Bengaluru, KA, 560091, India

# Abstract

Menstrual patterns can be an indicator of overall health and self-perception of well-being. Amenorrhoea is the absence of menses in women of reproductive agewhich may be primary or secondary. Primary amenorrhoea refers to the absence of menarche at the age of 16 and secondary amenorrhoea is the cessation of menses for at least 6 months in already cycling women. Secondary amenorrhoea is more common than primary amenorrhea. Ihtibas al-Tamth (amenorrhoea) is defined in the Unani system of medicine as the absence of monthly bleeding for more than 2 months or a decrease in the quantity of menstrual blood. The etiologies of amenorrhoea may be considered categorically as outflow tract abnormalities, primary ovarian insufficiency, hypothalamic or pituitary disorders, other endocrine gland disorders, sequelae of chronic disease, physiologic, or induced. The causes of Ihtibas al-Tamth are related to Quwwat Dafia al-Badan, Madda and Johar Khun-i-Hayd, or Ala Makhraj -i-Hayd. Su'-i-Mizaj Barid, Yabis, Harr or Harr wa Yabis, Su'-i-Mizaj Maddi or Sada can lead to Du'f al-Quwwat-i-Dafia. Abnormality in quality and quantity of Madda in Su'-i-Mizaj Maddi can also lead to ihtibas al-tamth. Amenorrhoea is not a diagnosis but a symptom indicating anatomical, genetic and neuroendocrine abnormalities. It can be determined by two different groups of causes: (a) anatomical defects of the genital organs; (b) endocrine dysfunctions. Both congenital and acquired anomalies in the structure of the uterus and vagina could produce amenorrhoea; nevertheless, in most patients, amenorrhoea is related to an ovarian malfunction. Symptoms usually associated with amenorrhoea are headache, nausea, back ache and lower abdominal pain, tiredness, and some respiratory problems. Main principle of treatment includes Tawleed-i-Dam, Tanqiya-i-Akhlat Ghaleeza, Talteef-i-Khilt, Tafteeh-i-Uruq Raham and Tahzeel if obesity is the cause. Surgical intervention if hymen is imperforated. Some regimenal therapies are also beneficial in amenorrhoea, such as Fasd-i-Safin, Hammam-i-Murattib and Hijama-i-Nariya on calf area. Some Unani drugs, which are beneficial in amenorrhoea, are Habb-i-Mudir, Safoof-i-Baboona, Kushta Faulad, and Safoof Muhazzil. In the present scenario, it is utmost important to educate the patients to live a healthy and hygienic life and to avoid those factors which cause amenorrhoea.

Keywords: Mudir-i-Hayd, Ehtibas al Tamth, Amenorrhoea, Unani Medicine

# Introduction

Menstruation is an important aspect of being female. It is also one of the biological differences between the sexes to which different cultures have given different meaning. Menstrual bleeding cessation is one of the most frequent gynecologic disorders among women in reproductive age<sup>1</sup>.

# **Historical Background**

Menstruum was the earliest word used for menstruation derived from the latin word menstruus meaning month. The cyclic occurrence of menstruation was noted from earliest times and primitive people understood that it occurred at intervals which approximated the lunar months. The word menstruation was introduced by the ancient Greek, who assumed that menstruation was a cleaning process and the Bible refers to the woman as being unclean at that time. The menstrual cycle was studied by the ancient Greeks who aware of cycle length and the number of days of menstrual loss.

Amenorrhoea is the absence of menses in women of reproductive age. Primary amenorrhea is defined either as absence of menarche by 14 years of age in the absence of secondary sexual characteristics or absence of menses by 16 years in the presence of normal growth and secondary sexual characteristics<sup>2,3</sup>.

Secondary amenorrhea is characterized as the cessation of previously regular menses for three months or previously irregular menses for six months<sup>2,4,5</sup>.Amenorrhea is not a diagnosis but rather a most common clinical sign of reproductive dysfunction<sup>6</sup>.

According to WHO estimates, amenorrhea stands at sixth largest major cause of female infertility and affects 1.5-3% of all women in the childbearing  $age^7$ . Whereas primary amenorrhea is quiet rare, secondary amenorrhea is not infrequent in women of reproductive age. The incidence is increasing because of increased reporting, better utilization of

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healthcare, declining trend in the child marriage and increased awareness due to social media<sup>8</sup>.

Nowadays there has been an increasing trend in usage of complementary and alternative medicine<sup>9</sup>.Unani System of Medicine (USM), as a holistic system of medicine and based on temperament, is one of the wealthiest branches of the CAM and was used thousands of years ago.Temperament is made of the action and reaction of four pivotal elements (fire, air, water, and soil) and creates different characteristics in living things<sup>10</sup>. In USM, temperament has been classified in different types:  $H\bar{a}r$  (hot),  $B\bar{a}rid$  (cold), Raţab (wet), and  $Y\bar{a}bis$  (dry)<sup>11</sup>. Any disturbances in normal temperament of organs can cause diseases. Treatment is based on modifying the temperament<sup>12</sup>.

In classical Unani literature, *Ihtibās al-Tamth* is defined as cessation of menstruation, either it varies from scanty flow to complete cessation, or it occurs at interval of more than or equal to 2 months<sup>13</sup>.

According to *Ali Ibne Abbas Majusi*, Menstrual discharge and its cessation should occur by the innate power (*tabiyat*) of the body. Women start menstruating at the age of 8-14 years and cessation occurs upto60 years of age. The duration of the menstrual blood should not be less than 2 days and more than 7 days and if it extends more than this will be considered as abnormal. A woman's body becomes heavy when the days are nearer to the menstruation and the woman in whom menstruation comes with longer period of time has experienced severe pain because the blood comes out of her body at once. The period of being free from the menstruation i.e *zamanatahar* and the minimum period of menstrual cycle is atleast 20 days and maximum is not more than 2 months and the menstruation that comes after 2 months is termed as amenorrhea<sup>13</sup>.

But the women who menstruate long before the age of 14 years are always thin and weak and their age is not so long because their temperament is very hot and due to hot abnormal temperament, the vessels of the menstruation get dilated that leads to early discharge of menstrual blood and the woman who starts menstruating much later than the age of 14 years is always dull and restless because her temperament is very cold and dry and the vessels are very narrow and thin and the blood of menstruation is thickened that cannot come out from those vessels that deviate from the menstrual flow and spread out in the body<sup>14</sup>.

Menstruation begins after the age of 14 years because before this age the blood is not perfect and mature enough and spent in the growth and development of the body and no waste remains that can be eliminated as menstruation<sup>14</sup>.

Menstruation stops after the age of 40 years, because after this age the temperament of a woman changes to coldness and the liver produces less blood and that is produced also tends towards coldness<sup>14</sup>.

# Types according to Unani System of Medicine:

In Unani classical literature it can be divided into 15

- 1. Primary Amenorrhea
- 2. Secondary/Pathological Amenorrhea
- 3. Physiological Amenorrhea

# Primary Amenorrhea-

The first case is that the flow of blood towards the internal organs of a woman is not that much that the wastes/fuzlat tamthiya (menstrual waste) can be separated from the blood and eliminated in the menstruation. As in a woman whose uterus or ovaries or both the organs are much smaller than

their normal size at birth as compared to the rest of the body because *quwwate namiya* could not increase these organs to their normal size. So that they could not achieve their physical perfection (*tabayi kamal*) even in youth, that we could termed it as primary amenorrhea<sup>15</sup>.

Sometimes those organs are completely absent since birth, such women never menstruate from the beginning to the end of her life and the body wastes of such woman that cannot be eliminated through menstruation are naturally discharged or dissolved in some other ways.

#### Pathological Amenorrhea

According to different causes it, could be of 7 types: it may occur due to deficiency of blood, exercise, or excessive elimination of blood through epistaxis or by venesection, concentrated blood(*ghaliz*) or dominancy of any humor like *ghaliz sauda* or *ghaliz balgham* or may occur due to any obstruction(*sudda*) to the vessels or due to simple or complex abnormal temperament that results in amenorrhea<sup>15,16,17</sup>.

#### Physiological Amenorrhea

- a) In old age, blood storage and its production in the body decreases, besides the reproductive organs also die/wither like the rest of the body and remain nominal, so there is not enough blood flow to these genital organs to remove menstrual waste from it that we could termed as menopause/ sin yās in conventional medicine<sup>15</sup>.
- b) Cessation of menstruation in pregnancy is caused by the fact that the placenta is attached to the opening of the veins that open into the uterus and provides nutrition to the fetus hence menstruation stops<sup>18</sup>.
- c) In women, the menstrual blood is divided into three parts; the first type is the original and the most subtle one which provides nutrition to the fetus. The second type goes to the pistaan (mammary glands) which is connected to the raham (uterus) through vessels and converted into milk, thus cessation of menstruation occurs, and the third leftover part of blood is the waste and sediment (tilchat) that remains stagnant and expels out during childbirth and helps the fetus slide out19,20.

In Conventional Medicine the causes of Primary Amenorrhoea can be classified into the following groups<sup>21-25</sup>.

- a) Outflow tract abnormalities
- b) Ovarian causes
- c) Hypothalamic causes
- d) Pituitary causes
- e) Other causes

# $Outflow\ tract\ abnormality:$

Outflow tract abnormalities include an imperforate hymen, a transverse vaginal septum and Mayer–Rokitansky–Kuu¨ster–Hauser (MRKH) syndrome. The commonest cause is an imperforate hymen. In these cases, there is periodic shedding of the endometrium; however, the menstrual blood fails to come out due to blockage in the outflow tract. This can cause haematocolpos and may present as cyclical pain with primary amenorrhoea. A bulge at the vaginal introitus (bluish membrane) is commonly seen<sup>21</sup>.

# Ovarian causes (hyper-gonadotrophic hypogonadism)

Primary ovarian insufficiency (POI), previously known as premature menopause or premature ovarian failure is the cessation of ovarian function below 40 years of age. If it occurs before menarche, then it presents as primary amenorrhoea.

POI can occur due to chromosomal abnormalities such as Turner's syndrome [45XO] or gonadal agenesis. It can also arise iatrogenically, as a consequence of chemotherapy and radiotherapy used for childhood malignancy<sup>21,22</sup>.

Turner's syndrome [45X0] is characterized by typical phenotypic features such as short stature, shield chest, wide nipples, and a low hair line. Primary amenorrhoea in these girls is due to underdeveloped (streak) ovaries resulting in an impairment of the H–P–O axis. In those with Turner's syndrome with a mosaic karyotype, there is a higher likelihood of initiating puberty. However, most women fail to menstruate or have early secondary amenorrhoea<sup>21,22</sup>.

# Hypothalamic-pituitary causes (hypogonadotropic hypogonadism)

Suppression of the H-P-O axis can be triggered by energy depleting causes such as stress, anorexia, weight loss, excessive exercise, chronic illnesses or infections like tuberculosis. The levels of serum FSH, LH and estradiol levels are low in this group.

**Congenital Kallmann's syndrome** is a familial disorder that affects the hypothalamus. It is typified by a lack of GnRH production. This results in the absence of pubertal changes. It is also associated with anosmia or hyposmia<sup>21,22</sup>.

**Pituitary causes** of hypogonadotropic hypogonadism include hypopituitarism, hyper-prolactinaemia (due to either pituitary adenomas or being drug-induced) and empty sella syndrome. Empty sella syndrome causes hyper-prolactinaemia.

Constitutional delay of puberty is a diagnosis of exclusion. This occurs due to a temporary delay in the maturation of the H–P– 0 axis. There is usually a family history of late menarche. Bone age is delayed and eventually puberty is achieved spontaneously  $^{21,22}$ .

**Causes of Secondary Amenorrhoea:** Most of the causes of primary amenorrhoea attributable to hypo-gonadotrophic hypogonadism can also cause secondary amenorrhoea. Generally, they can be split into uterine, ovarian, druginduced, or physiological<sup>21,25-27</sup>.

# With Signs of androgen excess

- A. PCOS
- B. Late-onset of congenital adrenal hyperplasia
- C. Androgen-secreting ovarian cancer
- D. Cushing's syndrome

# Without signs of androgen excess:

- > Physiological causes:
- Pregnancy
- Menopause
- Lactation

# **Pathological Causes:**

- **Premature ovarian insufficiency:** Spontaneous (autoimmune) or following radiotherapy or chemotherapy.
- Uterine causes: Asherman's syndrome
- Hypothalamic causes: Stress, anorexia, excessive weight loss, chronic illnesses, renal disorders, cardiac disorders, infections
- Pituitary causes: Pituitary tumours, head injury, cranial irradiation, hypopituitarism, Sheehan's syndrome

Contraception: Post pill amenorrhoea, depot injection, drugs (for example, selective serotonin reuptake inhibitors, olanzapine, phenothiazines, metoclopramide).

#### **Uterine causes**

Asherman's syndrome can result as a consequence of intrauterine adhesions. These may occur as a sequela to uterine fibrosis after excessive postpartum curettage or postpartum endometritis. Adhesions can cause obliteration of the endometrial cavity, cervical OS or cervical canal leading to secondary amenorrhoea<sup>23</sup>.

Hysterosalpingogarm and hysteroscopy are useful investigations to evaluate uterine synechiae.

#### **Ovarian causes**

PCOS is the most common cause of secondary amenorrhoea. As per the Rotterdam criteria, two out of three of the following features should be present to diagnose PCOS:

- A. Oligomenorrhoea or amenorrhoea
- B. Clinical or biological evidence of hyperandrogenism
- C. Polycystic appearance of the ovaries on ultrasound.
- D. Oligomenorrhoea or amenorrhoea in women with PCOS may predispose to endometrial hyperplasia and later endometrial cancer<sup>25-27</sup>.

#### Premature ovarian insufficiency (POI)

It is defined as experiencing menopause before the age of 40 years. Secondary amenorrhoea with features of hyperandrogenism can be caused by the late onset of congenital adrenal hyperplasia, androgen-secreting ovarian tumours and Cushing's syndrome<sup>24</sup>.

# **Drug-induced**

Menstrual irregularities are common after the use of contraception techniques. The intrauterine system, progestogen-only injectable drugs and oral contraceptive pills can induce amenorrhoea. A spontaneous resumption of menstruation usually occurs after stopping contraception; however, it can take up to a year for fertility to return, especially in the case of progesterone injections. Medications such as selective serotonine reuptake inhibitors, olanzapine, phenothiazines and metoclopramide can cause hyperprolactinaemia. This can lead to amenorrhoea<sup>25-27</sup>.

# **Physiological**

Pregnancy and lactation are the most common causes of secondary amenorrhoea. These two conditions result in a hyper-prolactinaemic state. Menopause is also a physiological cause of amenorrhea<sup>26,27</sup>.

# **Causes of Amenorrhea in Unani**

Cessation of menstrual blood occurs either due to weakness of power of transformation (*Quat-i-mumayyaza*) or the cause lies in the *raham* itself or present in the whole body or may occur due to the following reasons<sup>19</sup>.

- 1. It may occur due to lack of nutrition in the body or may occur due to different routes of evacuation, for example epistaxis, piles, rupture of any vein may cause haemorrhage that leads to lack of blood in the body<sup>13,14,16,19</sup>.
- Sometimes lack of blood may occur due to any chronic illness that dries up the body's content/matter or the whole blood is so absorbed in the other substances of the body that no waste remains as it is found in such fatty and

healthy women whose temperament is resembling to those of men<sup>19</sup>.

- Sometimes the viscosity of blood changes as it becomes so thin that it continues to dissolve, and no waste remains or sometimes due to coldness or due to dryness it becomes thick<sup>16</sup>.
- Sometimes the strength (*Quwwat*) becomes weak due to abnormal temperament and other causes (*asbab-i-muzaefa*)<sup>16,19</sup>.
- 5. Sometimes the cause is present in the organ itself because generally the causes of amenorrhea are present in the vessels in the form of obstruction (*sudda*). The cause of obstruction is either due to unhealed ulcers or sometimes a membranous or muscular flesh or fat is attached to the uterus<sup>13,14,16,19</sup>.
- Sometimes it is due to exhaustion, or sometimes it is caused by injury to the uterus or sometimes it happens due to any ulcer or due to any abortion.
- 7. If the causelies in the whole body, then it could be chronic fever or due to any disease of cold temperament like ascites<sup>13,14,16,19</sup>.
- 8. Sometimes amenorrhea occurs due to the involvement of other organs like when the liver is weak it will not produce blood in enough amount or it is unable to differentiate the menstrual blood, or sometimes obstruction occurs in the liver itself<sup>13,14,16,19</sup>.
- 9. If the organ involved is stomach, then it will cause abnormal temperament of digestion so that it will disturb the formation of *kailoos* that leads to amenorrhea<sup>13,14,16,19</sup>.

# **Etiopathogenesis of Amenorrhea in Unani**

# 1. Su'-i-mizāj of Raḥam

Ihtibās al-Tamth usually occurs due to zoaf (weakness)in quwwat dafya (elimination pawer) of raham due to su'-i-mizaj barid-yabis sada/maddi. As a result, quwwat masika overpowers the quwwat dafiyah<sup>28</sup>. Ibn Rushd described sudda (which is formed by ghilzat and lazujat of balgham) as one of the causes of zoafquwwatdafiah<sup>20</sup>.

- 2. Su'-i-mizāj umūmi: Majūsi mentioned that if temperament of woman becomes bārid as in farbahi, it causes zoaf-i-jigar as a result liver is unable to convert chyme into blood; in its place it converts it into tenacious balgham<sup>13</sup>. All those organs which receive this balghami khūn; become cold and moist in mizāj like that of balgham. Even the mizāj of uterus changes to cold and moist which is not suitable for its normal functions<sup>13</sup>.
- 3. **Defect in** *madda khūn haiz*: It may be qualitative, quantitative or both; qualitative disturbance leads to *ghilzat-i-khūn* as a result blood is unable to diffuse into the minute capillaries. It has been mentioned that intake of *ghaliz aghziya* leads to a greater quantity of *balgham* and *sauda*, which increases viscosity of blood which does not pass out easily from minute blood vessels. Quantitative disturbance is either due to *Qillatdam* because of *Qillat-i-ghiza*, haemorrhage, chronic debilitating diseases strengthening of *QuwwatHazima*<sup>19</sup>. In all these conditions no *fuzla* left behind to be excreted in the form of menstruation<sup>28</sup>.
- 4. **Defect in** *Ala-i-mukhrijahaid*: It is mainly due to formation of *sudda* which is caused by:
- a) Harārat Mujaffifa (extreme heat), Barudat Mujaffifa (due to excessive intake of cold water) or Yubūsat produce kasāfat and inqibad in the sphincters of the uterine

capillaries and cause obstruction in the flow of  $KhunHaid^{13,16,28,29}$ .

- b) Accumulation of *Madda Saudāwi* or *Balgham lazīj* in the body due to consumption of *Ghalīz Aghziya*. These *Saudāwi mādda* or *Balgham lazīj* flow with circulation and blocks the vessels which carry the menstrual blood<sup>13</sup>.
- c) Obstruction caused by Ratqi.e Zaida ghosht (cryptomenorrhea) covers the uterine OS or vaginal opening, which does not allow the blood to expel out resulting in *Ihtibās al Tams*<sup>14,28</sup>.
- d) Warm Raham blocks the uterine vessels28.
- e) Mailan al Rahim (dislocation of uterus)28.
- f) *Farbahi* (obesity): Due to obesity narrowing of the lumen of blood vessels develops and reduces blood circulation which results in *Ihtibas Tams*<sup>13,16</sup>.
- g) Laghri ba Ifrat due to Su'-i-mizaj (Barid or Barid Yabis, Har or Har Yabis) causes Ihtibās al-Tamth<sup>19</sup>.

*Su'-i-Mizaj Barid Sada* increases the viscosity of blood whereas *Har Sada* dries up the *Rutubat* of blood and makes it *Kasif.* Due to increased viscosity or *Kasafat* blood fails to diffuse into minute capillaries of uterus<sup>13,14,16</sup>.

*Ibn Sina* and *Ibn Hubl Baghdadi* mentioned *Qillat Haiz* (oligomenorrhea) under the title of *Ihtibās al-Tamth* as the causes and the pathophysiology of both are same <sup>16,19</sup>.

# **SYMPTOMS:**

#### According to Ismail Jurjani:15

- 1. If the cause is *waram*, cryptomenorrhea, trauma, lack of appetite, obesity, or weakness (*laghiri*), its symptoms will appear in their respective places <sup>13,14</sup>.
- 2. And if the cause is weakness of liver, then there will be signs of liver diseases  $^{13,14,16,19}$ .
- 3. It could be due to viscous substances like thick phlegm or black bile<sup>13,14,16,28</sup>.
- 4. Amenorrhea causes various problems such as discoloration of the face and diseases of the head like headaches, grabbing language and tongue can reach to such an extent that the woman cannot speak with her mouth due to the weakness of the muscles of the tongue<sup>14</sup>.
- 5. Cessation of menstruation leads to paralysis, and some suffer from gastrointestinal diseases and the digestive power becomes weak and the appetite decreases, desire to eat bad things increases, feels like nausea and stomach burning and feels thirstier<sup>13,14</sup>.
- Some women experience cough and shortness of breath, some have difficulty in urination and some women experience weakness in the muscles, pain in the back and neck<sup>13,14</sup>.
- 7. Some women get *muharrika* fever and chills and some develop liver diseases that ends up with ascites but in some women, ascites is caused by dripping of yellowish fluid that separates from the blood and accumulates in the abdomen and sometimes it spreads with the blood to all the organs resulting in *warm* all over the body<sup>13,14,18,19</sup>.

# According to temperament:16

1. Amenorrhea that occurs due to simple cold abnormal temperament, it includes, sleep is deeper, and flatulence is more in the dream state and the body colour becomes white, the pulse becomes irregular(mitfawit) and the

sweat is cold, urine is profuse and mucus predominates in faeces  $^{13,14,16,19}$ .

- 2. Amenorrhea that occurs due to simple hot abnormal temperament, it will be indicated by inflammation and the uterus will remain dry and the other symptoms will be those only that indicate abnormal hot temperament 13,14,16,19.
- Amenorrhea that occurs due to simple abnormal dry temperament that includes (laghiri) and emptying of veins<sup>16</sup>.

# **Management**

In conventional medicine, only treatment of secondary amenorrhea is through hormone supplements based on estrogen and progesterone compounds is the mainstay of the treatment for these conditions which though effective have got their own consequences like weight gain, migraine, mood swings, abdominal distention etc<sup>30,31,32</sup>. Moreover, they are contraindicated in patients with thromboembolism, stroke, hypertension, myocardial infarction and liver disease<sup>33</sup>.Hence, there is a need for alternate therapy which is safe, effective, easily available and has long-lasting effects.

The treatment methodology of the Unani system of medicine is called *Ilaj bil Zid*. It means, the medicine which has the opposite *Mizaj* (Temperament) of the affected *Akhlat* is chosen. In secondary amenorrhea the patient is treated with lifestyle modifications through *tadbir* (regimental therapy), *ghiza* (diet), *dawa* (medicines), use of strong emmenogogue drugs to induce menstruation, use of *Munzij* (coctive) *wa mushil-i-balgham advia* (purgative) drugs for *tanqia-i-badan* (detoxification of the body<sup>18</sup>.

It seems that diseases of female reproductive system are one of the greatest challenges for modern medicine. Menstrual irregularities as one of the most frequent gynecologic complaints can affect the several aspects of women's health including their physical, mental, and social health34,35. Amenorrhea and its different etiologies can lead to various complications such as infertility, pregnancy complications, cardiovascular disease, metabolic diseases like diabetes, hypertension, and fatty liver, and psychological disorders such as anxiety and depression and reduce quality of life in women<sup>36</sup>. Nowadays, due to some complications of hormonal therapy, many women have considered using alternative and complementary medicine<sup>37</sup>.USM is known as one of the main branches of alternative and complementary medicine, which tries to treat illnesses with change in lifestyle and using medicinal plants.

# Ilaj-bil-Dawa

Emmenagogue drugs used to treat amenorrhea and oligomenorrhea were systemically searched<sup>38,39</sup>.

Some *mufrad* drugs like *badiyan* is a Carminative, Concoctive of phlegm and black bile, Analgesic, Emmenogogue, Anti flatus, Spermatogenic, Galactopoietics etc. It is used in the treatment of Amenorrhoea, galactopoietics, Halitosis, Cataract, Diuretic, Flatus colic, Stomatitis and Jaundice diseases<sup>40</sup>.

The effect of *Majoon Dabidul* ward may be attributed to its anti- inflammatory, emmenagogue, antispasmodic, astringent, antiseptic, anti-microbial as well as anti-oxidants properties of all ingredients which are well documented in pharmacological and Classical Unani literature<sup>41</sup>.

**Borax** can use internally and externally in different doses according to diseases. Internally in doses varies from 10-30 grains, in acidity, amenorrhea, dysmenorrhea, menorrhagia, puerperal convulsions (PIH) and increase uterine contraction during labour pains<sup>42</sup>.

#### Famous Murrakkab:

- 1. Habb-e-Tinkar
- 2. Habb-e-Kabid Naushadri
- 3. Sufoof-e-Chutki
- 4. Habb-e-Tihal43

# Ilaj-bil-ghiza

Jalinoos also recommended four important facts about diet:

- a) Time of the food
- b) Type of the food
- c) Quantity of the food d) mizaj of the food.

Diet is one of the six essential factors which can modify the *mizaj* of an individual, e.g in PCOS patients it is deviated from balanced state to cold and moist state, high fat mass indicates the cold temperament as in case of PCOS patient <sup>44</sup>.

The reproductive features of PCOS were noted by *Buqrat* in the 5th century B.C (Hanson, 1975) has been associated with *Sue Mizaj Barid Ratab* (Excess of coldness and moisture) which is caused by qualitative and quantitative disturbances in the equilibrium of *akhlat* causing excessive production of *Balgham* (phlegm) resulting in chronic anovulation<sup>44</sup>.

According to Unani physician *Razi, mizaj* of the obese person becomes *Barid* (cold) and in such condition, the *Haar-Yabis* (hot and dry) diet, drug and exercise are most suitable to reverse the conditions, however, cold and moist diet should be avoided <sup>18</sup>.

Best diet (Hot and Dry) for PCOS				
Chicken	Eggs	Mustard oil	Red and green pepper	Chilli sauce
Cashew	Hazel nuts	Chickpeas	Meat of small bird	Onions
Grapes	Bitter melon	Garlic	Fish and prawns	Lemon

### Ilaj-bil-Tadbeer

*Jurjani* and *Ibn Sina*, mentioned that application of wet cupping over the calf muscles induces the menstruation in amenorrhea as it diverts the flow of blood towards the uterus and facilitates *Tanqia badan* by eliminating the toxic substances in the form of menstruation. Unani concepts in the management of amenorrhea are proved scientifically in various studies<sup>14,16</sup>.

For congestive pelvic conditions like PCOD, infertility, uterine fibroids etc. salt sitz baths and sulphur sitz baths are recommended  $^{13,14,29}$ .

Phlebotomy (*Faṣd*) and wet cupping (*Hijama bish Shart*) are two important non-pharmacological curativewaysthat are recommendedin amenorrhea<sup>45</sup>.

**Phlebotomy** is an important treatment that restores equilibrium through bleeding from veins. In this technique *Mawad-e-Fasida* is excreted by breaching in the blood vessels<sup>46</sup>. Faşd of the saphenous vein is effective in restoring menstruation<sup>47</sup>.

**Wet cupping** is the process of using a vacuum on surface of the body, along with the use of incisions, to remove capillary blood<sup>48</sup>. Dry cupping is a process to divert the morbid material from one part to another by the use of vacuum inside the cup <sup>49</sup>.

# **REFERENCES:**

- Crawford P. Attitudes to menstruation in seventeenth-century England. Past Present. 1981;91:47-73. https://doi.org/10.1093/past/91.1.47 PMid:11615077
- Kumar P, Malhotra N. Jeffcoate's Principles of Gynaecology.7th ed. New Delhi: Jaypee Brothers Medical publishers (P) Ltd;2008:56-57,79-84,534-35,579-95.
- McIver B, Romanski SA, Nippoldt TB. Evaluation and management of amenorrhea. Mayo Clin Proc. 1997 Dec;72(12):1161-9. https://doi.org/10.4065/72.12.1161 PMid:9413300
- Doody KM, Carr BR. Amenorrhea. Obstetrics and Gynecology Clinics of North America. 1990 Jun;17(2):361-87. https://doi.org/10.1016/S0889-8545(21)00219-9 PMid:2234749
- Birnbaun SL. Primary Care Medicine. 6th ed. Lippincott Williams & Wilkins;2009:836-43.
- Schorge JO, Schaffer JI, Halvorson LM, Hoffman BL, Bradshaw KD, Cunningham FG. Williams Gynaecology. New York: McGraw Hill;2008:110-114,334,348-61,365-80,383-99,420.
- 7. Dutta UR, Ponnala R, Pidugu VK, Dalal AB. Chromosomal abnormalities in amenorrhea: A retrospective study and review of 637 patients in South India. Archives of Iranian Medicine. 2013; May;16(5):267-70. PMID: 23641739.
- 8. Wachtell SS. The genetics of intra sexuality: clinical and theoretic perspective. ObstetGynecol1979;54:671-83.
- 9. WHO, WHO Traditional Medicine Strategy. 2002-2005,2002.
- Shahabi S, Hassan Z M, Mahdavi M, Dezfouli M, Naseri M, Jazani N H, et al., Hot and Cold Natures and Some Parameters of Neuroendocrine and Immune Systems in Traditional Iranian Medicine: A Preliminary Study. The Journal of Alternative and Complementary Medicine. 2008; 14(2):147-156. https://doi.org/10.1089/acm.2007.0693 PMid:18307392
- Rezaeizadeh H, Alizadeh M, Naseri M, Shams Ardakani M. The Traditional Iranian Medicine Point of View on Health and Disease. Iranian Journal of Public Health. 1;38(Supple 1):169-172.
- L. Lu, C-H Hu. Personality, leisure experiences and happiness. Journal of Happiness Studies. 2005;6(3):325-342. https://doi.org/10.1007/s10902-005-8628-3
- Majoosi AIA. Kamil-us-Sanaa (Urdu translation by Kantoori GH)
   Vol 1&2. New Delhi: Idara Kitab-ush-Shifa; 2010:39-40,344,533-34.128.
- Jurjani I. Zakheera Khawarzam Shahi (Urdu translation by Khan AH.). Vol VI. Lucknow: Munshi Nawal Kishore; 1903:220-25,590-91,598-602.
- 15. Khan HA. Moalijat Amraz Niswan. New Delhi: Jayyad Barqi Press;1 937:187.
- 16. Ibn Sina. Al Qanoon Fil Tib (Urdu translation by Kantoori GH). New Delhi: Ejaz Publication House; 2010:228-29,333-34,435-36,1058-59,1065,1088-89,1095-98.
- 17. Khan HA. Haziq. 1st ed. Karachi: Madina Publishing Company;1983.
- 18. Razi Z. Kitab Al Hawi. Vol 9. Delhi: CCRUM;2001.
- Baghdadi IH. Kitabul Mukhtarat-fil-tib (Urdu translation by CCRUM). Vol 4. New Delhi: CCRUM;2007.
- Ibn Rushd. Kitabul Kulliyat (Urdu Translation). Lahore: Maktaba Daniyal;2017.
- 21. Anitha C, Kanagal D. Case series of primary amenorrhoea. International Journal of Scientific Research.2019;8(12): 52-55. https://doi.org/10.36106/ijsr
- 22. Choussein S, Nasioudis D, Schizas D, Economopouloset K.
  Mullerian dysgenesis: A critical review of literature. Archives of
  Gynecology Obstetrics 2017; 295:1369-1381
  https://doi.org/10.1007/s00404-017-4372-2 PMid:28434104

- 23. Dan Y, Wong YM, Cheong Y, Xia E, Li TC. Asherman syndrome--one century later. Fertility and Sterility. 2008 Apr;89(4):759-79. https://doi.org/10.1016/j.fertnstert.2008.02.096 PMid:18406834
- 24. Jankowska K. Premature ovarian failure. PrzMenopauzalny. 2017 Jun;16(2):51-56. https://doi.org/10.5114/pm.2017.68592 PMid:28721130 PMCid:PMC5509972
- Klein DA, Poth MA. Amenorrhea: an approach to diagnosis and management. American Family Physician. 2013 Jun 1;87(11):781-8. PMID: 23939500.
- 26. Moore TR, Reiter R. Gynaecology and Obstetrics: A Longitudinal Approach. New York: Churchill Living Stone; 1993: 765-9.
- Sengupta BS, Chattopandhyay SK, Varma TR.Gynaecology for Postgraduates and Practitioners.2nd ed. New Delhi: Elsevier India(P)Ltd;2007:47,56-57,59.
- 28. Khan MA. Akseer Azam (Urdu translation by Kabeeruddin M). New Delhi: Idara Kitab-ush-Shifa;2011.
- 29. Arzani MA. Tib-e- Akbar (Urdu translation by Hakeem Mohd. Hussain) Deoband Faisal Publication; YNM.
- 30. DeVilliers TJ, Gass MLS, Haines CJ, Hall JE, Lobo RA, Pierroz DD, et. al. Global consensus statement on menopausal hormone therapy. Climacteric.2013;16(2): 203-204. https://doi.org/10.3109/13697137.2013.771520 PMid:23488524
- 31. Conway G, Dewailly D, Diamanti-Kandarakis E, Escobar-Morreale HF, Franks S, Gambineri A. et al. The polycystic ovary syndrome: a position statement from the European Society of Endocrinology. European Journal of Endocrinology. 2014 Oct;171(4):1-29. https://doi.org/10.1530/EJE-14-0253 PMid:24849517
- 32. Kort DH, Lobo RA. Preliminary evidence that cinnamon improves menstrual cyclicity in women with polycystic ovary syndrome: a randomized controlled trial. American Journal of Obstetrics & Gynecology. 2014 Nov;211(5):487.e1-6. https://doi.org/10.1016/j.ajog.2014.05.009 PMid:24813595
- 33. Parveen R, Shameem I. Effect of wet cupping in the management of secondary amenorrhoea. STM Journal; A Journal of Unani, Siddha, Homeopathy. 2014; 1(1):12-19.
- 34. Dars S, Sayed K, Yousufzai Z. Relationship of menstrual irregularities to BMI and nutritional status in adolescent girls. Pakistan Journal of Medical Sciences. 2014 Jan;30(1):141-4. https://doi.org/10.12669/pjms.301.3949 PMid:24639848 PMCid:PMC3955559
- Yavari M, Khodabandeh F, Tansaz M, Rouholamin S. A neuropsychiatric complication of oligomenorrhea according to Iranian Traditional Medicine. Iranian Journal of Reproductive Medicine. 2014;12(7):453-458.
- 36. Fauser BC, Tarlatzis BC, Rebar RW, Legro RS, Balen AH, Lobo R, et al. Consensus on women's health aspects of polycystic ovary syndrome (PCOS): the Amsterdam ESHRE/ASRM-Sponsored 3rd PCOS Consensus Workshop Group. Fertility and Sterility. 2012 Jan;97(1):28-38.e25. https://doi.org/10.1016/j.fertnstert.2011.09.024 PMid:22153789
- 37. Dennehy CE. The use of herbs and dietary supplements in gynecology: an evidence-based review. Journal of Midwifery & Women's Health. 2006 Nov-Dec;51(6):402-9. https://doi.org/10.1016/j.jmwh.2006.01.004 PMid:17081929
- YassinSA.HerbalRemedyusedbyruraladolescentgirlswithmenstrua ldisorders.Journal of American Science. 2012; 8(1):467-473.
- 39. Zargaran A, Borhani-Haghighi A, Faridi P, Daneshamouz S, Mohagheghzadeh A. A review on the Management of Migraine in Avicenna's Canon of Medicine. Neurological Sciences. 2016 Mar;37(3):471-8. https://doi.org/10.1007/s10072-016-2498-9 PMid:26861565
- 40. Naquibuddin M, Hamiduddin, Reyaz Z. Badiyan (Foeniculum vulgare mill.): An important Drug of Unani System of Medicine. European Journal of Pharmaceutical and Medical Research. 2020;7(6): 307-312.

- 41. Nadkarni AK. Indian Materia Medica. Vol. I, 3rd ed., Bombay Popular Prakashan, Mumbai, 1954, p. 168,173,314,334,390,475,836,970,1072
- 42. Shaikh SM, Doijad RC, Shete AS, Sankpal PS. A Review on: Physicochemical evaluation of ayurvedic mineral drug Tankan Bhasma. PharmaTutor. 2016 Apr 1;4(4):23-7.
- 43. Usmani MI. Tanqiul Mufarad, New Delhi; YNM:270.
- 44. Hameed L, Farooq AD, Qureshi T, Mohiuddin E. Dietary management of Takayus al mebyadh (polycystic ovarian syndrome). Hamdard Medicus. 2017;6(1):67-81.
- 45. Firdose KF, Shameem I. An approach to the management of polycystic ovarian disease in Unani system of medicine: A review. International Journal of Applied Research. 2016; 2:585-590.
- 46. Kordafshari G, Ardakani MRS, Keshavarz M, Esfah-ani MM, Nazem E. The Role of Phlebotomy (Fasd) and Wet Cupping (Hijamat) to

Manage Dizziness and Vertigo from the Viewpoint of Persian Medicine. Journal of Evidence-Based Integrative Medicine.2017;22:369-373.

https://doi.org/10.1177/2156587216672757 PMid:30208737 PMCid:PMC5871156

- 47. Nafees B. Kulliyat-e-Nafeesi. (Urdu Translation by Kabiruddin M.) Vol. 2. New Delhi: Idara Kitab-ush-Shifa; 1954. p. 513.
- 48. Akhtar J, Siddiqui MK. Utility of cupping therapy Hijamat in Unani medicine. Indian Journal of Traditional Knowledge.2008;7:572-574.
- 49. Abuzar Lari, Mohd Nayab, Mohd Tausif, Javed AH Lari, Mohd Anzar Alam, "Therapeutic Potentials of Hijama-bila-Shart (Dry Cupping Therapy): A Review", International Journal of Unani & Integrative Medicine. 2017;1(1):21-24.

https://doi.org/10.33545/2616454X.2017.v1.i1a.6