Available online on 15.09.2024 at http://jddtonline.info

Journal of Drug Delivery and Therapeutics

Open Access to Pharmaceutical and Medical Research

*Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the CC BY-NC 4.0 which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited*

*Open Access Full Text Article*

Review Article

# Exploration of *Asbab wa Mahiyatul Marazi* (Etiopathogenesis) of *Iḥtibās al-Tamth* (amenorrhea) in comparison to modern medicine: A Literary Research

Farheen Zehra [1]*, Rayees Ahmad Mir[2], Abid Ali Ansari[3], Kubra Anam Farooqui[4]

[1] Assistant Professor at Hayat Unani Medical College & Research Centre, Department of Mahiyatul Amraz (Pathology), Hayat Complex, Hardoi Road, Lucknow - 226101, U.P., India

[2] Postgraduate Scholar at National Institute of Unani Medicine Bengaluru, Department of Ilaj Bit Tadbeer (Regimental Therapy), Bengaluru, India

[3] Professor at National Institute of Unani Medicine Bengaluru, Department of Mahiyatul Amraz, Bengaluru, India

[4] Assistant Professor at Inamdar Unani Medical College & Hospital, Department of Mahiyatul Amraz (Pathology), Gulbarga, Kalaburagi, Karnataka 585105, India

Article Info:

Article History:

Received 21 June 2024
Reviewed 13 August 2024
Accepted 28 August 2024
Published 15 Sep 2024

Cite this article as:

Zehra F, Mir RA, Ansari AA, Farooqui KA, Exploration of *Asbab* wa *Mahiyatul Marazi* (Etiopathogenesis) of *Iḥtibās al-Tamth* (amenorrhea) in comparison to modern medicine: A Literary Research, Journal of Drug Delivery and Therapeutics. 2024; 14(9):157-163

*DOI: http://dx.doi.org/10.22270/jddt.v14i9.6785*

*Address for Correspondence:

Farheen Zehra, Assistant Professor at Hayat Unani Medical College & Research Centre, Department of Mahiyatul Amraz (Pathology), Hayat Complex, Hardoi Road, Lucknow - 226101, U.P., India

## Abstract

**Background:** Amenorrhea is defined as the cessation of menstruation; it is a significant clinical sign of reproductive dysfunction that affects 1.5-3% of women of childbearing age and is a leading cause of female infertility. The increasing incidence is attributed to better healthcare access and awareness. The Unani system of medicine offers a distinctive perspective on reproductive ailments, yet its terminology and concepts often diverge from modern medical understandings.

**Research Problem and Aim:** This study aims to bridge the gap between classical Unani literature and contemporary medicine by exploring the etiopathogenesis (*asbāb wa mahiyatul marazi*) of *Iḥtibās al-Tamth* (amenorrhea) and comparing it with conventional medical definition, types, causes and its pathogenesis, thereby enhancing understanding of it from both perspectives.

**Methodology:** A systematic review was conducted in 2023, that includes: The primary and main sources of collection of material were from classical published books, manuscripts and their translations. The second type of sources of collection of material were from different types of available published and unpublished literature related to study topic i.e. journals, proceedings, thesis, reports, souvenir, dissertations etc. The third type of sources were from authentic digital material i.e. trusted online websites i.e. PubMed, internet archive etc.

**Results/Findings:** The research revealed a structured understanding of *Iḥtibās al-Tamth* in Unani literature, highlighting its nuanced classification and etiological factors in comparison to conventional medicine. The findings underscore the potential for integrating Unani insights into contemporary gynaecological practices.

**Implications:** This exploration contributes to a more comprehensive understanding of *Iḥtibās al-Tamth* (amenorrhea), suggesting that Unani medicine's holistic approach may offer alternative treatment avenues that could mitigate the side effects associated with conventional hormonal therapies.

**Keywords:** Amenorrhea, *Iḥtibās al-Tamth*, Unani medicine, Etiopathogenesis, *Mahiyatul marazi*

## 1. Introduction

In classical Unani literature, *Ihtibāsal-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.[1]Amenorrhea in Conventional medicine is the absence of menses in women of reproductive age which may be primary or secondary. **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.[2,3]**Secondary amenorrhea** is characterized as the cessation of previously regular menses for three months or previously irregular menses for six months.[2,4]Amenorrhea is not a diagnosis but rather a most common clinical sign of reproductive dysfunction.[5]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.[6] The incidence is increasing because of increased reporting, better utilization of healthcare, declining trend in the child marriage and increased awareness due to social media.[7]In Unani system of medicine, diseases of the reproductive system are described in

detail but more emphasis is given to the description of symptoms and not mentioned in that much systemic manner. The spectrum of disease occurring in a *Raḥim* from *Sū'-i-Mizāj* to *Tafarruqal-Ittiṣāl*. Some of the descriptions of diseases with their etiopathogenesis and associated symptoms e.g.,*'uqr*, *ihtibāsal-tamth*, *kathrat-i-ḥayḍ*, *sayalān al-raḥim* brilliantly described by Unani physicians. But due to the wide gap in ancient and modern knowledge and way of describing pathogenesis, the correlation of Unani with modern is quite difficult. The understanding of *mahiyatul marazi* of *amrāḍ* is important from Unani point of view especially in the field of gynecology because we know most of the diseases in conventional medicine is based on hormones and hence the treatment is very limited there and has its own side effects. So, in this paper exploration of *asbāb wa mahiyatul marazi* of *iḥtibās al-tamth* is explored in more organized and generative way, additionally comparing its etiology to the conventional medicine which is important for better understanding, further that may be helpful in knowing the course of disease from Unani point of view.

## 2. Methodology

This systematic review was designed and performed in 2023 in order to gather information regarding exploration of *asbab* wa *mahiyatul marazi* (Etiopathogenesis) of *Iḥtibās al-Tamth* in Unani and conventional medicine. This study has four steps: searching Unani literature and extracting the asbab of *Iḥtibās al-Tamth* in comparison with conventional medicine; classification of *Iḥtibās al-Tamth in Unani* as well as in conventional medicine; explored the etiopathogenesis of *Iḥtibās al-Tamth*; searching the electronic databases and finding evidences; ranking the data found in the studies. The main keywords were "*Tams,*" "*Ehtebas Heiz or Tams,*" "*Tams,*" "*Heiz,*" and any words Arabic that meant causing menstrual bleeding but not used Chinese words. In this part, the emmenagogue plants were identified and selected. The traditional name, temperament, and the exact phrases about its function in reproductive system and occurring menstruation were extracted. We have explored the full length research papers. Data for the primary objective of the review was collected from the full text of each publication and included the trial name, year of publication, type of study, sample size, results, and other details. In the fourth step, to investigate relevant information in conventional medicine, required data was gathered by using databases such as PubMed, Scopus, Google Scholar, Science Direct, and Web of Knowledge. Also, to increase scope of study, manual search in some of the valid journal databases was performed. The search terms were the scientific/common name of disease in the whole text AND "oligomenorrhea" OR "amenorrhea" OR "polycystic ovary" OR "PCOs" OR "ovarian" OR "menses" OR "menstruation" OR "menstrual" OR "emmenagogue" in title/abstract. As far as polycystic ovary syndrome is known to be one of the main causes of oligomenorrhea and secondary amenorrhea, articles regarding use of herbal medicine in polycystic ovary syndrome were also included in the study to enrich the articles collection.

## 3. Literature related works

### *Iḥtibās al-tamth* (Amenorrhea)

In classical Unani literature, *iḥtibās al-tamth*is defined as cessation of menstruation,[8,9] either it varies from scanty flow to complete cessation or it occurs at interval of more than or equal to 2 months.[1,10]**As explained by Abbas Majusi**: menstrual discharge and its cessation should occur by the *ṭabī'at* (innate power) of the body. Women start menstruating at the age of 8-14 years of age and cessation occurs up to 60 years of age and the *khinsi* women who possess the features of both male and female but having more characteristics of female does not menstruate at all. 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, it will be considered as abnormal. A woman's body becomes heavy when the days are nearer to menstruation, and the woman in whom menstruation comes with a longer period of time experiences more severe pain because the blood comes out of her body at once. The period of being free from menstruation is *zamāna tahar* and the minimum period of menstrual cycle is about atleast 20 days and the maximum should not be more than 2 months and if the menstruation comes after 2 months, it is termed as *iḥtibās al-tamth* (Amenorrhea).[1]**From the point of view of Ismail Jurjani:** menstruation and puberty in women occur after 14 years of age and for some it occurs later than this but the women who menstruate long before the age of 14 years are always thin and weak and they don't live long because their temperament is very hot. Because of their hot abnormal temperament, the vessels of the menstruation get dilated that leads to early discharge of menstrual blood. And the example of such a woman is like that of a flower that blooms too soon prematurely, and like a fruit that ripens before its time 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, vessels are very narrow and thin and the blood of menstruation is thickened that cannot come out from those vessels and deviate from the menstrual flow which spread out in the body.[11]Menstruations begins after the age of 14 years because firstly, before this age the blood is not mature enough and secondly, blood is spent in the growth and development of the body so no waste remains.[11]Menstruation stops after the age of 40 years, because after this age the temperament of a woman changes and tends towards coldness and hence the liver produces less blood.[11]Women start menstruating between the ages of 10-14 years, while it may be delayed in cold countries and earlier in hot countries. It stops between the ages of 36-60 years. The normal interval of menstruation is about 2 days to 7 days and if it is extending more than this could be considered as abnormal. The normal duration of two menstrual cycles is about 23 days but, in some women, it does not come for 2 months without any disease and if it is contrary to this, it will be termed as *iḥtibās al-tamth*.[11,12]

**Classification of *Iḥtibās al-Tamth* (amenorrhea) in Unani as well as in Conventional medicine:** In

modern medicine, amenorrhea is classified as physiological and pathological. In physiological amenorrhea, it may occur primarily before puberty and secondarily during pregnancy, at the time of lactation, and following menopause.[13,14,15,16]

In Unani also, it can be classified into:

1.Primary amenorrhea

2.Physiological amenorrhea

3.Secondary/pathological amenorrhea

**1. Primary amenorrhea**

(a)The first case is that the flow of blood towards the internal organs of a woman is not that much that the *fuḍlāt ṭamth* can be separated from the blood and eliminated as menstruation so that in such women, their uterus or ovaries or both the organs are much smaller than its normal size at birth as compared to the rest of the body because *quwwat nāmiya* could not able to increase these organs to their normal size. So, they could not achieve physical perfection even in their youth, which we could term as primary amenorrhea.[17,18]As in modern medicine also hypothalamic-pituitary-ovarian (HPO) axis enters a period of relative quiescence until the activity resumes during puberty and the pituitary gonadotrophins are not adequate enough to stimulate the ovarian follicles for effective steroidogenesis, so that the estrogen levels are not sufficient enough for the menstruation to occur before puberty.[14]

(b)Sometimes, those organs are completely absent since birth, and such women never menstruate from the beginning to the end of their lives. The body wastes of such women that cannot be eliminated through menstruation are naturally discharged or dissolved in some other way [17]which we can correlate with congenital anomalies/syndromes in modern medicine.

(c). ***Ratq* (Cryptomenorrhea) -** It is a type of growth in the vagina that increases to such an extent that it prohibits sexual intercourse, and this growth is caused by any excess, whether it is muscular or membranous or due to the adhesion of any wound that causes obstruction. Sometimes the vagina is very narrow or completely closed, or the structure of the vagina is completely absent since birth. As a result of this, there is no way for menstruation to come out of the body. This is termed as Cryptomenorrhea in conventional medicine.[17,19,20]

2. **Physiological amenorrhea**

(a). In old age, blood storage and its production in the body decreases, besides *a'ḍā' al-tanāsul* (reproductive organs) also 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 the body because all the *quwā* i.e. *quwwat ghādhiya, quwwat-i-tanāsuliyya* at this age become weak that we could termit as *sinn-i-*yaas/menopause.[17,18] In modern medicine also, following menopause there are no more responsive follicles available in the ovaries for the gonadotrophins to act.[14]

(b). **Amenorrhea due to Pregnancy-**

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 provide nutrition to the fetus hence, menstruation stops.[21] Contrasting to conventional medicine in pregnancy there is large amount of estrogen and chronic gonadotrophins secreted from the trophoblasts suppress the pituitary gonadotrophins hence there is no maturation of the ovarian follicles.[14]

**Amenorrhea due to lactation**

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 *thadyayn* (breasts) which is connected to the *raḥim* (uterus) through vessels and converted into milk; thus, after delivery, it provides nutrition to the baby and causes *iḥtibās al-tamth.*[22]As opposed to this, in conventional medicine, gonadotrophin secretion is inhibited by high concentrations of prolactin (a hormone that is responsible for the synthesis of breast milk) in the blood, which is termed hyperprolactinemia. This hyperprolactinemia induces the suppression of hypothalamic neurons that directly control the pulsatile manner of GnRH secretion, resulting in a strongly decreased frequency of corresponding LH pulses. Inadequate LH secretion and lack of a pre-ovulatory surge inhibit the progression of the follicular phase of a menstrual cycle, causing anovulation and resulting in amenorrhea during lactation.[23]

**3. Pathological amenorrhea**

According to different causes, it could be of seven types: it may occur as a result of

deficiency of blood in the body, exercise or excessive elimination of blood through epistaxis or by venesection, due to *ghalīẓ khūn* (concentrated blood) or dominancy of any *akhlāṭ* (humor) like *ghalīẓ sawdā'*or *ghalīẓ balgham* or may occur by the cause of any *sudda* (obstruction) to the vessels or due to simple or complex morbid temperament of either body or *raḥim* that results in *iḥtibās al-tamth.*[17]

**Symptoms**

Due to the cessation of menstruation, the body becomes heavier, the appetite disappears, and the woman experiences shivering, restlessness, and nausea. Sometimes uterine prolapse also occurs.[21]It causes various problems such as discoloration of the face[24] 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.[1,11]Some women experience cough and shortness of breath, some have difficulty in urination and several women experience weakness in the muscles, pain in the back and neck.[1,11,21] At times swelling appears in the ureters that indicates some *waram* in the other *'uḍw*.[21]In case of involvement of liver, the conditions are changed from the beginning like there is no sense of heaviness in the pelvis, sexual intercourse and the specific conditions of the uterus will

be normal, but there is a change in color of the body and heaviness is felt in the area of the liver under the ribs. The urine is white and is sometimes followed by blood and hardness/stiffness is also felt under the ribs[12] and if the cause is weakness of liver, then there will be sign of liver diseases.[1,11]Some of the liver diseases ends up with ascites resulting in 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 *waram* all over the body[1,11] and when there is involvement of stomach: firstly, the appetite deteriorates and the condition of the stomach becomes variable and then menstruation stops.[12]Amenorrhea that occurs due to simple morbid cold temperament results in deeper sleep and flatulence in the dream state and the body color becomes white, the pulse becomes irregular and the sweat is cold, urine is profuse and mucus predominates in faeces.[19]If amenorrhea develops from a simple morbid hot temperament, it will be indicated by inflammation, dryness of the uterus, and other symptoms similar to morbid hot temperament. In the case of simple morbid dry temperament, amenorrhea includes weakness and emptying of veins.[19]

## Etiopathogenesis of *Iḥtibās al-tamth*

### A. *Umoomi Asbāb*

Different body organs are provided with different types of temperament as per their functional requirements. So, every organ has a distinctive temperament, which is essential for its normal structure and functions. If the organ deviates from its normal temperament, it results in *sū'-i-mizāj.*[25,26,11]

### Production of *Akhlāṭ*

The liver is the site of the production of four humors[27]. *ṣāliḥ ghidhā'* produces *ṣāliḥ khilṭ* whereas the *ghayr ṣāliḥ ghidhā'* produces *ghayr ṣāliḥ khilṭ* which is responsible for the diseases.[11]As the humors are synthesized in the liver, according to the nature of the food eaten and the degree of their digestion. They are transferred to the vascular system, and from there, they are distributed to all bodily cells, tissues, and organs. The production of humors is influenced by the quality of heat, which prevails during the liver's metabolic processes. The phlegmatic humor with Cold & Moist qualities requires the least amount of heat, so is produced first. This is followed by sanguineous (Hot & Moist), bilious (Hot & Dry), and finally melancholic (Cold & Dry), which needs the most heat.[28,29]

One of the main functions of the humors is to maintain the ideal qualitative state, in accordance with the overall qualities of an individual's temperament. Any change can happen either qualitatively from the effects of heat, coldness, dryness, and moistness, or quantitatively, resulting from different concentrations of the four humors, both of which impact the overall quality of the humors and result in different types of diseases in the body.[29]

**1.** ***Sū'-i-mizāj miʿda***- As we know,*haḍm miʿdī* is the first stage of digestion, after the formation of the *kaylūs* (chyle) in *miʿda*, it passes into the portal vein and then into the liver by the action of attractive faculty and then the innate heat and the digestive faculty of the liver works on this extract of *kaylūs* to form *akhlāṭ* in the liver.[1,11,26,30,31]

So**,** if *sū'-i-mizāj miʿda* develops due to deterioration in the *kaylūs*, less/altered blood is produced in the liver, which may further become any of the causes of amenorrhea.

**2.** ***Sū'-i-mizāj- jigar-*** The temperament of the liver is hot and moist, and it performs its normal function only when its specific temperament remains within the normal limits (equilibrium).[25]

Thus, the derangement in the temperament of the liver is known as *sū'-i-mizāj jigar*. It may be *sāda* (simple) or *māddī* (with substance). The temperament of the liver may change from normal to abnormal and results in the following types:[1,11,25,32,33,34]

a. *Sū'-i-mizāj ḥārr jigar*

b. *Sū'-i-mizāj bārid jigar*

c. *Sū'-i-mizāj raṭb jigar*

d. *Sū'-i-mizāj yābis jigar*

a. ***Sū'-i-mizāj ḥārr jigar-*** When the temperament of liver is altered due to increase in its *ḥarārat*, it leads to abnormality in its functions known as *sū'-i-mizāj ḥārr jigar*[25,33]and that may cause the excess and abnormal synthesis of *khilṭ ṣafrā'* (bilious humor) and bile will increase abnormally[25]. The gall bladder is unable to absorb and store this in excess quantity. So, this abnormal bilious humor mixed with blood reaches to different body organs and affect them[1,] and because of this excessive *ḥarārat,* sometimes the viscosity of blood changes as it becomes so thin that it continues to dissolve[12] and no waste remains in *haḍm kabidī* to form *fuḍlā ḥayḍ* which results in amenorrhea.

b. ***Sū'-i-mizāj yābis jigar***-When the temperament of liver is diverted towards the extreme *ḥarārat* i.e. abnormal and excessive hotness, it can lead to the dissolution of the liquid portion of the body humors and the quality of *mizāj* of the humors will be changed and produces excessive dryness, that results in constriction of the vessels,[12] makes the *aḍā'* dense and making its route and pores narrow due to which the *rūḥ* and the *quwwat* cannot able to penetrate through this, therefore the blood is not able to reach the vessels of the uterus and leads to amenorrhea.[26]

c. ***Sū'-i-mizāj bārid jigar***-Based on Majusi's thought, sū'*-i-mizāj bārid* interfere with digestive capacity of the liver, it results in production of *balghamī khūn*, which spread in the body and used for nourishment of all the organs, making these organs *bārid.*[22]And when liver produces excess of *khilṭ balgham* causes formation of *sudda* in*'urūq jigar* which results in *ḍu 'f-i-jigar.*[1,11,12,19]

Moreover, *sū'-i-mizāj bārid* also causes obstruction in the vessels of the body or *raḥim*, so that the menstrual blood will not able to reach to the *raḥim* resulting in amenorrhea.[1,11,12,19]

d. ***Sū'-i-mizāj raṭb jigar***-Due to excessive *ruṭūbat*, the organs become loose and their pores and routes are blocked as these organs become loose and fall on each other causing obstruction.[26]

3. ***Ḍu'f-i-haḍm***- If *ḍu'f-i-haḍm* develops as a result of *sū'-i-mizāj*, there will be disturbance in either some or all faculties of the liver, so that the liver becomes weak and it will not produce blood in enough amount or it is unable to differentiate the menstrual blood due to weakening of the *quwwat mumaiyyza* of the *jigar*[1,11,12,19,25]
4. **Obstruction of the liver**- *ḍu'f-i-haḍm* leads to obstruction due to retention of the matter. However, it is more common in vessels in which chyme penetrates to achieve ripening and dissolution.[10,34]

**Causes-**

1.Viscosity of humors.

2.Narrowing of the vessels.

3.Weakness of the *quwwat dāfi'a* and *hāḍima*.

4.Strong *quwwat māsika*[10,34]

**B. *Asbāb* that causes *sudda***

1. **Obesity**

It is associated with *sū'-i-mizāj bārid-raṭb* which is caused by qualitative and quantitative disturbances in the equilibrium of *akhlāṭ* causing excessive production of *balgham* resulting in chronic anovulation and leads to amenorrhea. It also causes constriction of the vessels in the whole body and ultimately causes hindrance in the blood flow that reaches to the uterus.[1,11,12,19]

2. ***Laghiri***

It means when there is excessive weakness in the body, it could be either due to *sū'-i-mizāj bārid sāda* that freezes the *mādda* and produces *sudda*, and sometimes due to *sū'-i-mizāj bārid –yābis* that causes the constriction and dryness of the vessels and can also by *sū'-i-mizāj ḥārr* that burns the blood and its *tari* (essence) is consumed by dissolution and the remaining *ghalīẓ* part remains that leads to obstruction.[1,11,12,19]

3. ***Aqsām-i-Waram***-Any *waram* that forms due to any cause either in uterine vessels or its nearby organs causes obstruction and results in amenorrhea.[1,11,12,19]

**C. Other causes**

1. Sometimes due to starvation or lack of food, the blood in the body is not enough that the *fuḍlā ḥayḍ* remains in the blood or even forms that can be expel out through menstruation.
2. It may occur due to any chronic illness that dries up the body's content/matter leads to amenorrhea.[1,11,12,19]
3. Sometimes it is caused by excessive evacuation or it may arise in some of the conditions like epistaxis, piles, rupture of any vein that may cause hemorrhage causes excessive loss of blood from the body. As a result, *ṭabī'at* is not able to perform its normal function, it get diverted and hence menstruation stops.[1,11,12,19]

***D. Asbāb* within *raḥim***

1. ***Sū'-i-mizāj raḥim***-As we know menstruation is a way to eliminate immature blood from the body. So *ṭabī'at* expels this menstrual blood towards the uterus to be expelled out of the body through the process of menstruation but if *sū'-i-mizāj raḥim* develops due to any cause it will lead to *ḍu'f-i-raḥim*, which finally results in *ḍu'f* in all the *quwā* of *raḥim* because if the *mizāj* of uterus changes to either *sū'-i-mizāj ḥārr* or *sū'-i-mizāj bārid* which is not suitable for its normal functions, like if *quwwqt dāfi'a* of *raḥim* will altered causes *iḥtibās.*[1,11,12,19,21]
2. ***Gosht fizuni***- Obstruction caused by *Ratqi.e Zaida ghosht* covers the uterine os or vaginal opening, which does not allow the blood to expel out[19,22,26,35,36]
3. **Any injury or trauma**- Any injury or trauma due to abortion or any unhealed ulcer results in *iḥtibās al-ṭamth.*[1,10,11,12,19]

For whatever the above-mentioned cause, if *iḥtibās al-ṭamth* occurs, then the bad/waste humors will go back into the body which will result in some of the *mādda* going to the weak organs, which absorb the *mādda* more easily or some will go to its *mushtaraka* organs. In case of *sū'-i-mizāj ḥārr*, *ḥārr* organs are quickly affected and if there is *sū'-i-mizāj bārid*, *bārid'uḍw* will affect more and some *mādda* will goes to the *a'ḍā' ra'īsa* as uterus is connected to these vital organs like it is connected to the brain by a nerve and the brain is severely affected by its diseases, it is connected to the heart by the arteries and to the liver by the veins. So, if *iḥtibās al-ṭamth* occur, it also affects these vital organs.[12] Consequently, results in various complications in the body.[37]

On contrary to this causes and pathophysiology of amenorrhea in modern medicine is distinct as it is purely based on hormones. It is based on five factors i.e., normal female chromosomal pattern, coordinated hypothalamic-pituitary-ovarian (HPO) axis, anatomical presence and patency of the outflow tract, responsive endometrium and active support of thyroid and adrenal glands.[14]

## Causes of *Iḥtibās al-tamth* (amenorrhea) in comparison to Conventional medicine:

| CAUSES OF *Iḥtibās al-tamth* IN UNANI MEDICINE | CAUSES OF AMENORRHEA IN CONVENTIONAL MEDICINE [2-7,38-44] |
|---|---|
| ***Umoomi Asbāb*** [11,12,19,25,26,32,33]<br>*1.Sū'-i-Mizāj-i-Mi'da*<br>*2. Sū' Mizāj al-Kabid*<br>*3. Ḍu'f-i-haḍm*<br>*4. Ḥummā muzmina*<br>*5. Istisqā'* | 1. ***Hypothalamo-pituitary-ovarian axis defect***<br>(a) Hypogonadotropic hypogonadism<br>(b) Hypergonadotropic hypogonadism<br>2. Dysfunction of thyroid and adrenal cortex<br>3. Metabolic disorders - Juvenile diabetes<br>4. Systemic illness - Tuberculosis, anaemia, malnutrition, weight loss |
| ***Asbāb* that produces *sudda*** [1,11,12,19]<br>1.Obesity<br>2.Laghiri<br>3.*Aqsām-i-Waram*<br>*4.Gliḥẓ akhlāṭ* | Cryptomenorrhea, cervical stenosis, obesity, anatomical obstruction. |
| **Asbāb within *Raḥim*** [1,10,11,12,19,22,26,35,36]<br>1.*Sū'-i-mizājraḥim*<br>2. *Ratq*<br>3.*Waramraḥim*<br>4.Unhealed ulcer<br>5. Any injury or trauma | Any anatomical defect of uterus, Asherman's syndrome,tubercular endometritis, PCOS, Premature ovaian failure, trauma or surgery, endometriosis |
| **Asbāb related to defect in *Quwā***<br>Defect in *quwwat nāmiya* [18,35]<br>Defect in *quwwat ghādhiya* [18,35]<br>*Ḍu'f* in *quwwat muwallida* [18,35] | 1.Congenital Anomalies<br>2.Chromosomal abnormalities |
| **Other Causes** [1,11,12,19]<br>1.Lack of blood in the body:<br>(a). Nutritional (b).Chronic illness<br>2.Excessive *istifrāgh*- venesection, cupping, Epistaxis. | Malnutrition, Severe chronic disease, excessive exercise, stress, poor diet, haemorrhage, pshychotic drugs, depression, psychiatric disorders or any systemic disease. |

## Complications

Due to cessation of menstruation, there is a back flow of *mādda ḥayḍ* in the body due to this it will affect all the organs of the body and as a result of this, firstly temperament of liver changes so that the *kaylūs* will not processed well therefore, *akhlāṭ khām* (immature humors) increases[25,45] in the body and get blocked the walls of cavities and vessels causing them narrow, consequently it decreases the supply of blood and *rūḥ ḥaywāni* (vital pneuma) causing cardiovascular diseases.[25] The functions of heart are related with *ḥarārat*, if *burūdat* affects the heart can cause death immediately.[46] Moreover if the vapors of the retained menstrual blood begin to rise up to the heart, there will be syncope and anxiety and if these vapors go up to the brain, it will cause a *shaqīqa* (migraine)[1] and if its vessels are also involved then diseases like *fālij* (paralysis), *laqwa* (facial palsy) and numbness may also occur.[1]

## 4. Conclusion

As *iḥtibās al-tamth* is becoming more common day by day due to variation in lifestyle and nutritional deficiency which results in complications such as infertility, psychosocial development delays, osteoporosis, fracture that affects physically as well as emotional well-being of an individual. The findings of this study will be useful in better understanding of etiopathogenesis of *iḥtibās al-tamth* and the basic concepts of gynecology which form the basis of gynecological diseases in Unani medicine. In spite of advancement in modern medicine, gynecological diseases still lack complete cure and the treatment is very limited i.e., only the use of estrogen and progesterone in most of the diseases and that has its own side effects. This is because a disease can be treated completely only when its etiology is known. So, during the literature surveyed we got to know that there is much description of *Iḥtibās al-tamth* that is mentioned in Unani literature, hence we can say that some of the etiology of amenorrhea is similar in Unani as well as in

Conventional medicine. As in modern medicine, regardless of so many processions in diagnostic tools, the exact etiology of various gynecological diseases could not be identified completely like infertility, PCOD, AUB, endometriosis, premature ovarian failure etc. Hence, there is no complete cure for some of the gynecological diseases till today. Consequently, gynecological diseases can be treated well in Unani than compared to the Conventional medicine. Because our eminent Unani physicians gave favorable elucidation of most of the gynecological diseases long ago be that as it may there is a time gap of 1000 years and the temperament-based approach is very important diagnostic tool in various pathological conditions. So, it can be considered as a level of choice for diagnosis from ancient to modern era.

## References


1. Kamil-us-Sana'a (Urdu Translation by Kantoori GH) Vol-1, Part l New Delhi: CCRUM; 2010.
2. Kumar P,Malhotra N. Jeffcoate's Principles of Gynaecology.7th ed. New Delhi: Jaypee Brothers Medical publishers(P)Ltd;2008.
3. Mciver B, Romanski SA, Nippoldt TD. Evaluation and Management of amenorrhea. Mayo Clin Proc Dec 1997;72:1161-68. https://doi.org/10.4065/72.12.1161 PMid:9413300
4. Birnbaun SL. Primary Care Medicine. 6th ed. Lippincott Williams &Wilkins; 2009:836-43.
5. Gindoff PR, Jewelewicz R. Gynaecology and Obstetrics. LippincotWillkins; 2004.
6. Schorge JO, Schaffer JI, Halvorson LM, Hoffman BL, Bradshaw KD, Cunningham FG. Williams Gynaecology. New York: McGraw Hill;2008.
7. Dutta UR, Ponnala R, Pidugu VK, Dalal AB. Chromosomal abnormalities in amenorrhea: a retrospective study and review of 637 patients in south India. Arch Iran Med 2013.
8. Qarshi HNH. Jame-ul-Hikmat. New Delhi: Idara Kitab-us-Shifa; 2011.
9. Arzani A. MufarrehulQuloob. New Delhi: Idara Kitabul Shifa; 2002.
10. Khan MA. Akseer-e -Azam (Urdu translation by Kabiruddin HM). New Delhi: Idara-e-Kitab-ul-Shifa; 2011.
11. JurjaniI. Zakheera Khawarzam Shahi (Urdu translation by Khan AH.). Vol VI. Lucknow: Munshi Nawal Kishore;1903.
12. Baghdadi IH. Kitabul Mukhtarat-fil-tib (Urdu translation by CCRUM). Vol 4. New Delhi: CCRUM;2007.
13. Kumar S, Padubidri VG, Daftary SN. Howkins & Bourne, Shaw's Textbook of Gynecology, 17edition-EBOOK.Elsevier India;2018.
14. Dalal A. DC Dutta's Textbook of Gynaecology and Textbook of Obstetrics. J ObstetGynaecol India.2016Aug. https://doi.org/10.1007/s13224-016-0848-4 PMCid:PMC4912495
15. Berek JS, Novak E. Berek & Novak's Gynecology. 2012.
16. Hoffman BL, WhitridgeWilliams.William's gynecology. New York: Mcgraw-Hill Education;2016.
17. Khan HA. MoalijatAmrazNiswan. New Delhi: JayyadBarqi Press;1937.
18. Ahmed SI. Introduction to Al-Umoor-Al-Tabi'yah.1st ed. New Delhi: CCRUM;2009.
19. Ibn Sina. Al Qanoon Fil Tib (Urdu translation by Kantoori GH). New Delhi: Ejaz Publication House;2010.
20. Chandpuri K. Mujazul Qanoon. 3rd ed. New Delhi: Qaumi Council BraiFarogh Urdu Zaban; 1998.
21. Razi AMBZ. Kitabul Hawi. (Urdu Translation by CCRUM) Vol. 9. New Delhi: CCRUM Ministry of H&FW; 2007
22. Baghdadi IH. Kitab-al-Mukhtarat Fit Tibb. Vol.1. New Delhi: CCRUM; 2004.
23. Majumdar A, Mangal NS. Hyperprolactinemia. J Hum Reprod Sci. 2013 Jul;6(3):168-75. doi: 10.4103/0974-1208.121400. PMID: 24347930; PMCID: PMC3853872. https://doi.org/10.4103/0974-1208.121400 PMid:24347930 PMCid:PMC3853872
24. Khan HA. Haziq. Karachi: Madina publishing company; 1983.
25. Rushd I. Kitab-ul-Kulliyat. New Delhi: CCRUM; 1987.
26. Sina I. AAHIA. Kulliyat-e-Qanoon (Urdu Translation by Kabiruddin HM) New Delhi: Aijaz Publication House; 2006.
27. Ansari AH. Umoor-e- Tabiya. New Delhi: Idara Kitabul Shifa; 2012.
28. Masihi AS. Kitab-ul-Miah.Vol.1. New Delhi: CCRUM; 2008.
29. Abu-Asab M, Amri H, and Micozzi MS (2013). Avicenna's Medicine. Healing Arts Press, Vermont, USA.
30. Zulkifle M, Zaidi, Ansari AH. Quwate tabiya- A concept. UNIMED 2005-2006 Oct -March.
31. Chandramauli R. Textbook of Physiology. 2nd ed. New Delhi: Jaypee Brothers;2003.
32. Qamri AMH. Ghina Muna (Urdu translation). New Delhi: CCRUM; 2008.
33. Tabri AHAIM. Al Moalijat-ul- Buqratiyah. (Urdu translation by CCRUM) Vol.3. New Delhi: CCRUM; 1995-97.
34. Baghdadi IH. Kitab-ul-Mukhtarat-fil-tib (Urdu translation by CCRUM). Vol 3. New Delhi: CCRUM;2005.
35. Nafis IB. Kulliyat-e-Nafisi (Urdu Translation by Kabiruddin HM) New Delhi: Idara Kitab-us-Shifa;1954.
36. Arzani A. Tibbe Akbar. Deoband: Faisal publications; 1890.
37. Razi AB. Kitab-ul-Mansuri. New Delhi: CCRUM; 1991.
38. Berek JS, Novak E. Berek & Novak's Gynecology. 2012.
39. Hoffman BL, Whitridge Williams. William's gynecology. New York: Mcgraw-Hill Education;2016.
40. Catherine HJ, Adam BH. Primary amenorrhoea: investigation and treatment. Obstet Gynecol Reprode Med. 2007.
41. Quilligan EJ, Zuspan FP. Current Therapy in Obstetrics and Gynaecology. 5th ed. Pennsylvania, Philadelphia: WB Saunders Company; 2000.
42. Obeagu EI, Obeagu GU, Gut Mucosal Immunity in HIV-Exposed Infants: A Review. *Asian Journal of Dental and Health Sciences*, 2024; *4*(2), 50–55. https://doi.org/10.22270/ajdhs.v4i2.82
43. Mortimer CH. Yeo T. Gonadotropin releasing hormone. J. clin. Path. YNM; 30(7):46-54. https://doi.org/10.1136/jcp.s1-7.1.46 PMid:801478 PMCid:PMC1436119
44. Ransom SB. Practical Strategies in Obstetrics and Gynaecology. 1" ed. London: WB Saunders Company: 2000. https://doi.org/10.1016/S0015-0282(00)00648-8
45. Jalinoos. Kitab-Fi-Firaq Al-Tib. (Edited and translated by Zillur Rahman HS.) Aligarh: Ibn Sina Academy;2008.
46. Raban Tabri A. Firdaus-ul-Hikmat Fit Tibb (Urdu Translation by Nadvi HRA).New Delhi: CCRUM; 2010.