# Pelvic Inflammatory Disease in Unani System of Medicine: A Review

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## **Abstract**

he Unani terminology for Pelvic Inflammatory Disease is "Marz-e-Warm-e-Aana". Although there is no description of 'Marz-e-Warm-e-Aana' (pelvic inflammatory disease) as such in classical; but this term has been literally translated by the contemporary physicians in an attempt to explain the disease texts entity applicable to present day etymology. 'Warm-e-Reham' (inflammation of uterus) has been described in classical books. After the study of the description of warm-e-reham by different scholars, it was found that Unani physicians have described the inflammation of cervix, uterus, fallopian tubes and ovaries collectively with the name of warm-e-reham. Moreover, the causes, clinical features and pathology of warm-e-reham described by unani scholars seems to be similar to that of pelvic inflammatory disease which is described in modern medicine. Thus, we can say that warm-e-reham described in unani texts, corresponds to the description of marz-e-warm-e-aana (pelvic inflammatory disease). This paper presents a review of Unani literature with reference to Pelvic inflammatory Disease.

**Keywords:** Marz-e-Warm-e-Aana, Pelvic Inflammatory Disease, Warm-e-Rahm

## Introduction

Acute pelvic inflammatory disease (PID), the clinical syndrome associated with ascending infection of the female genital tract, remains a major source of gynaecological morbidity (Anonymous, 1998). PID is perhaps the most important avoidable cause of female tubal factor infertility and its association with other chronic sequelae is well documented (Mc Cormack, 1994). The general term pelvic inflammatory disease has been used to describe infection of the uterus and fallopian tubes usually occurring following ascent of bacteria present in the cervix and presents with history of abnormal vaginal discharge, fever and adnexal tenderness (Hager *et al.*, 1983; Jacobson and Westrom, 1969; Anonymous, 2002).

PID is a polymicrobial infection. Excellent data support the role of the sexually transmitted micro-organisms *Chlamydia trachomatis, Neisseria gonorrhoeae*, and facultative gram-negative and anaerobic bacteria in causing the symptoms and signs of the infection itself as well as the damage that often ensues (Anonymous, 1987; Wasserheit *et al.*, 1986; Heinonen *et al.*, 1985; Paavonen *et al.*, 1987; Brunham *et al.*, 1988; Soper *et al.*, 1994; Hillier *et al.*, 1996). Investigators have suspected for a long time that other specific agents might function prominently in the pathogenic process, although consistent reproducible evidence to support

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this contention has been lacking. Anaerobic and facultative bacteria are frequently recovered from the endometrium and fallopian tubes of women with acute PID (Sweet *et al.*, 1980).

The actual burden of disease is unknown, but data from the USA suggest that > 10.0% of women of reproductive age have a history of PID (Anonymous, 1997). The majority of clinically recognized cases occur in sexually active women under the age of 25 years (Anonymous, 1998). In modern industrialized countries, the annual incidence of PID in women 15 to 39 years of age seems to be 10 to 13 per 1,000 women, with a peak incidence of about 20 per 1,000 women in the age group 20 to 24 years. The incidence of PID is correlated strongly with the prevalence of sexually transmitted diseases, although a fraction of the infections might be of endogenous origin. Use of intrauterine contraceptive devices and operations for legal abortions contribute to the increase in incidence (Westrom, 1980).

Although incidence rates may have declined, PID remains a major source of short- and long-term morbidity in women. There is no evidence to suggest that there has been any reduction in the serious reproductive complications traditionally associated with PID, which include infertility, ectopic pregnancy, and chronic pelvic pain.

A crude marker of PID in resource-poor countries can be obtained from reported hospital admission rates, where it accounts for 17% to 40% of gynecological admissions in sub-Saharan Africa, 15% to 37% in Southeast Asia, and 3% to 10% in India (Wikipedia).

Treatment goals encompass not only the amelioration of the acute inflammatory condition but also the prevention or lessening of the risk for long-term reproductive sequelae. Hence, an early and accurate diagnosis of pelvic inflammatory disease (PID) is of paramount importance for the effective management of the acute illness and for the prevention of long-term sequelae.

Current modern treatment depends on the cause and generally involves use of antibiotic therapy. Despite of the claim of modern medicine with regard to the presence of anti-bacterial, anti-parasitic medicines that there is a definite treatment of PID, the above mentioned incidence of different organisms in causing pelvic inflammatory disease is still prevailing.

Every antibacterial drug in modern medicine produces more or less adverse effects in the human body. In present era, everyone tends to become more health conscious and seeks the safer side in respect to treatment. The holistic and herbal traditional medicine is now being seen with an eye of great interest and hope. Unani medicine is one of them. This system not only provides the drugs

information in abundance but also claims that the drugs are having least adverse effects.

Although, Pelvic Inflammatory Disease (PID) has been translated into 'Maraz-e-Warm-e-Aana' but this syndrome, as such, does not exist in Unani Medicine. However, conditions corresponding to it exist which can be identified by comparing signs and symptoms. Therefore, the objective of this paper is to search classical Unani literature: (i) to identify the syndrome most closely corresponding to PID; (ii) to collect the pathology, diagnosis and treatment of the Unani syndrome corresponding to PID; (iii) these findings may be applicable for providing Unani Health-Care and also to design clinical research in this area.

## Method

The classic and relevant books of Unani Medicine were studied; the literature and claims in support of this article were taken from these books. The databases utilized for obtaining information are scientific research publications from journals indexed/available through Google Scholar, Scopus, PubMed, and Science Direct. Relevant facts were also obtained from general databases such as Google.

# Review of Literature

After going through the classical Unani literature, it was found that there is no such description with the name of 'marz-e-warm-e-aana' (pelvic inflammatory disease). However, 'warm-e-reham' (inflammation of uterus) has been described in classical books. After the study of the description of warm-e-reham by different scholars, it was found they have described the inflammation of cervix, uterus, fallopian tubes and ovaries collectively with the name of warm-e-reham. Moreover, the causes, clinical features and pathology of warm-e-reham described by Unani scholars seems to be similar to that of pelvic inflammatory disease which is described in modern medicine. Thus, we can say that warm-e-reham described in Unani texts, covers the description of marz-e-warm-e-aana (pelvic inflammatory disease). Therefore, in this work, the term marz-e-warm-e-aana has been referred to as warm-e-reham as have been stated above.

The inflammation of uterus occurs like that of other organs. The anatomical texture and position of uterus makes it difficult to expell out the unwanted matter. In the inflammation of uterus, the muscular layer is principally involved and it extends to other layers of the uterus (Ibn Zuhr Amam, 1986).

# Classification and Etiology

Different Unani scholars classified warm-e-reham differently; Ibn-e-Zohr classified

it into four types i.e., Damvi, Safravi, Saudavi and Balghami, according to the humours (Ibn Zuhr Amam, 1986).

Most of the ancient Unani scholars such as Razi (860-925 AD), Ibn-e-Sina (980-1037 AD), Ibn-e-Nafees (1210-1288 AD), Jurjani (1878 AD), Majoosi (1160-1240 AD) have broadly classified warm-e-reham into three categories, i.e,

- Warm Haar
- Warm Balghami
- Warm Sulb

Warm Balghami and Warm Saudavi are considered Auram Barid.

## Warm Haar

According to Jurjani (1878), warm haar of Reham is caused by five factors:

- 1) Trauma.
- 2) Difficulty in labour.
- 3) Abortion.
- 4) Amenorrhoea.
- 5) Excessive sexual intercourse.
- 6) Intercourse for the first time.

While Ibn-e-Sina (1992) divides the causes of warm-e-rehamhaar into two categories:

- 1) Asbab-e-badi (kharji)
- 2) Asbab-e-batini
- Asbab-e-Badi:

Trauma, excessive sexual intercourse, carelessness of attendant during labour and abortion are the main causes.

- Asbab-e-Batini:
  - Amenorrhoea which may be due to stagnation of blood after delivery, abortions and difficult labour.
  - 2) Congestion of uterine vessels.
  - 3) Excessive moisture.

According to Ibn Habal (Ibn Habal, 2007), warm haar is either safravi or damvi, which produces inflammation in the body of uterus.

Clinical Features (Ibn-Habal, 2007; Razi, 2001):

- Abnormal vaginal discharge.
- High grade fever with chills.
- Coated tongue.
- Nausea.
- Headache, pain in orbital area, neck and in extreme cases pain extends to arms also.
- Backache, pain in pelvic region and extends to groins, hip joints and in extreme cases to both legs. Patient feels difficulty in walking.
- If the posterior wall of uterus is involved, pain occurs in back and there is difficulty in defecation, and when anterior wall is involved, patient feels difficulty in micturition.
- Tachycardia and tachypnoea.
- Indigestion, loss of appetite and increased thirst.
- If the lower part of uterus is involved, the pain occurs in pelvic region. In extreme cases of inflammation, flatus is not passed.

Warm Balghami [Ibn-e-Sina, 1992; Ibn-Habal, 2007; Majoosi, 1898; Ibn Nafees, 1894).

The difference between warm haar and warm balghami is that warm balghami is accompanied with heaviness and pain in back. Abdominal muscles are relaxed. Pain is less severe or absent in warm-e-balghami. There is ascites like appearance in warm-e-balghami due to bulging of pelvic area. There is no fever.

Warm Sulb/Saudavi (Ibn – Habal, 2007; Razi, 2001)

Warm saudavi is also called warm muzmin or chronic inflammation. Sometimes, there is chronic inflammation from the beginning but most of the times it begins as acute and progresses to chronic inflammation. In this condition, uterus is turned to contralateral side. In other words, uterus turns away from the site of inflammation as described by Ibn-e-Sina. If the inflammation is on right lateral side, it turns towards left and vice versa. Likewise if the inflammation is on anterior wall, it turns posteriorly.

If this condition is not treated well on time, it may leads to ascites.

Warm saudavi is also called 'saqearus' in Unani terminology. The cause of this inflammation is black bile (sauda) produced in the uterus.

## Clinical Features

- Dysuria and heaviness in pelvic region.
- Pain is less severe till this warm is transformed into malignancy.
- Extreme general weakness, both legs are malnourished and odematous.
- · Ascites develops if firmness occurs in inflammation.
- There is bulging at pelvic and umbilical region, leucorrhoea and dysfunctional uterine bleeding.
- Loss of appetite, indigestion, constipation may also be present.

# Sailan-ur-Raham (Abnormal Vaginal Discharge)

It is the most striking and the commonest symptom of all types of warm-e-raham. This discharge is derived either from the uterus itself or from other organs of the body. This discharge is mostly balghami and sticky and sometimes watery in consistency (Ibn – Habal, 2007).

Excess of vaginal discharge is abnormal and its presence signifies falling of abnormal humours on uterus. The type of humour involved in causation of abnormal vaginal discharge can be recognised, if a woman places a clean pad and when it gets filled with the discharge, it is removed and air dried. If the colour of the pad remains the same, it is of balghami humour and if it becomes reddish, it is of damvi matter. Presence of yellowish colour on drying signifies involvement of safravi matter, while that of blackish colour signifies involvement of saudavi matter (lbn – Habal, 2007).

It involves mucous coat of uterus and is from a type of chronic inflammation, which disturbs its quwat-e-ghaziya (Ibn Nafees, 1894).

USOOL-E-ILAJ (Principles of Treatment) (Ibn – Habal, 2007; Razi, 2001; Ibn Nafees, 1894; Kabiruddin, 2007).

According to a renowned Unani physician, the local application of the drugs is more effective than the systemic (Ahmad, 1331 Hijri).

- 1. To remove the cause.
- 2. To maintain hygienic condition.
- Use of Munzijwa Mushil-e-Balghamadvia (Concoctive and purgatives of phlegm).
- 4. Use of Munzijwa Mushil-e-Saudaadvia (Concoctive and purgatives of black bile)

- 5. Muhallilatwa Dafa-e-tafunadvia (Anti-inflammatory and Antiseptic drugs)
- 6. Mudire tams wa Mudire Haizadvia (Emmenogogue and diuretic drugs)
- 7. Ilajbil Tadabeer (Regimenal therapies)
- 8. For local application use of Abzan (Sitz bath), Humool (Pessary), Zimad (Paste), etc.
- 9. Musakkin-e alamwa Dafe Tashannujadvia (Analgesic and antispasmodic drugs)
- 10. If the cause is leucorrhoea, then use of Mujazzifat (dessicative drugs) in addition to other drugs.
- 11. Correction of generalized weakness of body.

## Warm Haar

Venesection (Fasd):

Venesection should be done firstly on basilic vein so that there should not be any further production of diseased matter (maddah), then in saphenous vein so that the present matter gets absorbed. It is important to note that the patient should be in lithotomy position while venesection is done.

Patient should not be given food immediately after venesection. For the first three days, she should be given very little food and water and should be kept in well ventilated room and should be allowed to sleep after venesection.

- Humool (Pessary), Nutool (Irrigation) and Abzan (Sitz Bath) are very helpful to minimize the symptoms related with disease.
- Emesis is also very helpful in this condition.

# Warm Balghami

- Emesis is helpful to eliminate the phlegmatic matter from the body.
- Tanqiya-e-badan:

As per Unani system concepts, the health of a person depends on four basic humours (*Akhlat*) flowing in the body. Till these humours remain in proper quantity and quality, health is preserved but if there is any alteration in the composition of these *Akhlats*, disease is caused. These alterations lead to the formation of *Akhlat-e-Radiya* (unwanted matter) in the body. Therefore, to get back to health this toxic unwanted matter must be removed from the body, which is known as tangiya-e-badan. The process of tangiya-e-badan involves use of munzijat

(concotives) first followed by mushilat (purgatives) after a specified duration of time.

## Taqwiyat-e-reham:

It is done to make uterus healthy so that the *Akhlat-e-Radiya* (unwanted matter) do not accumulate and affect the uterus further. These drugs are known as uterine tonics. They are also used to maintain the tone of uterine muscles.

## Warm Sulb

#### Venesection:

Venesection should be done on basilic vein and blood should be allowed to flow to clear out sauda (black bile).

- Istafragh-e-Akhlat-e-Ghaliza (elimination of viscid humours) to evacuate sauda (black bile) from the body.
- Zimad-e-mohallil: liniments or pastes of anti-inflammatory drugs is useful to reduce the "salabat" of warm-e-saudavi.
- Hugna (enema) with anodyne drugs.

References of few successful Unani drugs (Ghulam Nabi; 2006; Anonymous, 2006; Ghani, 2010; Hafiz, 2005; Ibn Baitaar, 2003).

- Munzij wa Mushile Balghamadvia (Concoctive and purgatives of phlegm):
   Khatmi (Althaea officinalis), Arusa (Adhatoda vasica), Parsyaushaan (Adiantum capillus-veneris), Sapistaan (Cordia latifolia), Injeer (Ficus carica), Aslessoos (Glycyrrhiza glabra), Gauzaban (Borago officinalis), Maghz-e amaltas (Cassia fistula), Sapistan (Cordia dichotoma).
- Munzijwa Mushile Saudaadvia (Concoctive and purgatives of black bile):
   Ustukhuddus (*Lavendula stoechas*), Aftimoonvilayti (*Cuscuta epithymum*),
   Gauzaban (*Borago officinalis*), Unnab (*Zizyphus sativa*), Shahtra (*Fumaria officinalis*), Baranjboya (*Mellisa officinalis*), Sapistan (*Cordia latifolia*), Badyan (*Foeniculum vulgare*), Maghz Jamal gota (*Croton tiglium*), Shahme Hanzal (*Citrullus colocynthis*), Halela Siyah (*Terminalia chebula*), Turbud (*Ipomea turpethum*), Ghariqoon (*Agaricus alba*).
- Muhallilat wa Dafa-e-tafunadvia (Anti-inflammatory drugs and Antiseptic drugs): Baboona (*Matricaria chamomilla*), baranjasif (*Artemesia vulgaris*), barge kasni (*Cichorium intybus*), barge-mako (*Solanum nigrum*), izkhar (*Andropogon jawarancusa*), Hasha (*Thymus vulgaris*), hilteet (*Ferula foetida*), darchini (*Cinnamomum zeylanicum*), kafoor (*Cinnamomum camphora*).

- Mudire tams wa Mudire Haizadvia (Emmenogogue and diuretic drugs) like, Sheerakhurfa along with Sharbate Bazoori, Roghan badam talkh (*Prunus amygdalus*), Tukhme Gandana (*Allium ascalonicum*), Tukhme Shalgham (*Brassica rapa*), Darchini (*Cinnamomum zeylanicum*), Sazaj Hindi (*Cinnamomum, tamala*), Tarmas (*Lupinus albus*).
- Ilajbil Tadabeer (Regimenal therapies): Venesection (Fasad) and leeching (application of leeches): Before menstruation venesection of Rage Safin can be done. Cupping of lower limb near ankle is also advisable.
- Abzan (Sitz bath): With decoction of several drugs individually like, Baranjasaf (Artemesia vulgaris) and Babuna (Matricaria chamomilla), Murmuki (Commiphora myrrh), Saleekha (Cinnamomum cassia), Marzanjosh (Origanum vulgare), Podina (Mentha arvensis), Izkhar (Andropogon jwarancusa), Qust (Saussurea lappa), Akleelul Mulk (Trigonella uncata).
- Humool (Pessary): by, Zaravand mudahraj (*Aristolochia rotunda*), Chiraita (*Swertia chirata*), Podina (*Mentha arvensis*), Afsanteen (*Artemisia absinthium*) along with honey.
- Zimad (Paste): Zimad-e-Izkhar (Andropogon jawarancusa).
- Musakkin-e alam wa Dafe Tashannuj advia (Analgesic and antispasmodic drugs) like-.Abhal (Juniperus communis), Aftimun Hindi (Cuscuta reflexa), Asrol (Rauwolfia serpentina), Afyun (Papaver somniferum), Lehsun (Allium sativum) in case of spasmodic dysmenorrhea.
- To correct the generalized weakness of the patient, use of Kushta faulad along with Dawaulmisk motadil jawaherwali, Khamira Abresham Hakeem Arshad wala, Maul Laham, Sharbat Anar are indicated.
- Muhallilat advia (Resolvent drugs). Kasni (Cichorium intybus), Baboona (Matricaria chamomilla) Baranjasif (Artemesia vulgaris), Marzanjosh (Origanum vulgare)
- If the cause is leucorrhoea then Kushta sadaf, Kushta Marwareed, Majoon Suparipak, Majoon Mooslipak is indicated.
- Single herbal drugs, which are effective include Balcharea (*Nardostachys jatamansi*), Saunf (*Foeniculum vulgare*), Lehsun (*Allium sativum*), Qust (*Saussurea lappa*), Hilteet (*Ferula asafoetida*), Izkhar (*Andropogon jwarancusa*), Asrol (*Rauwolfia serpentina*), Siyah mirch (*Piper nigrum*), Babuna (*Matricaria chamomilla*), Kasus (*Cuscuta reflexa*), Podina (*Mentha arvensis*), Dalchini (*Cinnamomum zeylanicum*), Turmas (*Lupinus albus*), Hasha (*Thymus serpyllum*), Abhal (*Juniperus communis*).

• Effective Compound formulations: Majoon Dabidul Ward, Majoon Suparipak, Majoon Mocharas, Tiryaqe farooq, Marham Dakhiloon, Dawa-e-Mudir, etc.

# Conclusion

Pelvic Inflammatory Disease (PID) is a very common problem among young females in reproductive age group with social stigma of infertility attached with it. After the review of different classical Unani Textbooks, it is found that PID is a modern term used for the description of "Warm-e-Reham". Unani Physicians have described the inflammation of cervix, uterus, fallopian tubes and ovaries collectively with the name of Warm-e-Reham. The causes, clinical features and pathology of "Warm-e-Reham" described by Unani scholars seem to be similar to that of Pelvic Inflammatory Disease (PID). The etiopathogenesis of the disease and the treatment beside regimental therapy and the diet have been mentioned in details in classical texts.

It can be concluded that the etiology, pathogenesis and complications of PID were known to Unani physicians. Unani Physicians have been treating this disease with success since long back. The miracle claim of Unani Medicine in the treatment of infertility may be attributed to the successful management of Pelvic Inflammatory Disease in females.

Therefore, Unani system of medicine might play an important role in curing this ailment as it contains many safe and effective medicinal herbs, various modes of ilaj-bil-tadabeer and other dietary recommendations prescribed by the famous and experienced Unani physicians to treat various disorders.

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