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Review Article

Understanding Waram Ḥārr in Unani Medicine: A Classical and Pathophysiological Review

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Abstract

Background: Waram is a fundamental pathological concept in Unani medicine, referring to abnormal swelling associated with structural and functional derangement of tissues. Among its various types, Waram Ḥārr is considered clinically significant due to its acute presentation and active progression. Classical Unani scholars provided detailed explanations of its humoral basis, pathogenesis, and management principles.

Objective: To systematically compile and analyse classical Unani descriptions of Waram Ḥārr and present its conceptual and pathological framework coherently.

Methods: A narrative review of major primary classical Unani texts, including works of Ibn Sina, Zakariya Razi, and Ali ibn Abbas al-Majusi, was undertaken. Relevant sections describing definition, classification, etiology, pathogenesis, clinical manifestations, stages, and principles of management were analysed and thematically organized.

Results: Classical sources demonstrated substantial conceptual uniformity regarding Waram and its division into hot (Ḥārr) and cold (Bārid) types. Waram Ḥārr was consistently described as an acute inflammatory condition resulting from abnormal or acquired heat within humoral matter, frequently associated with putrefaction and impaired digestion. Both Damwī and Ṣafrawī forms were recognised, differentiated by dominant humour and clinical features. The literature agreed on the stages of progression and the principles of management, including evacuation and cooling measures.

Conclusion: Classical Unani literature presents a coherent and systematic understanding of Waram Ḥārr, highlighting its distinct pathological basis and clinical importance within traditional medical theory.

Keywords: Inflammation, Traditional Medicine, Unani Medicine, Humour

Introduction

Traditional medical literature recognises swelling as a common phenomenon of disease, within which inflammatory changes are described. In Unani medicine, swelling is described under the broad concept of Waram, a term used to describe pathological enlargement of an organ associated with a disturbance of its normal structure and function. The classical Unani literature treats waram as an important disease entity rather than a mere symptom, reflecting its clinical relevance and diverse presentations.

Among the various types of waram, Waram Ḥārr holds a central position due to its frequent occurrence and association with pain, heat, redness, and rapid progression. Classical physicians devoted considerable attention to this condition, as it often represents an active and acute state of disease requiring timely understanding and intervention. The descriptions of Waram Ḥārr found in traditional Unani medical literature reveal a structured approach to inflammation, grounded in humoral theory, temperament, and the

functional state of organs. This paper aims to review and organise the classical Unani perspectives on Waram Ḥārr, with particular attention to its conceptual foundations within Unani pathology.

Material and Methods

This study was designed as a narrative review of classical Unani medical literature, conducted in the Department of Ilmul Amraz, Ajmal Khan Tibbiya College, Aligarh Muslim University, Aligarh, in 2025. The methodological framework followed standard principles of narrative literature review as described in previous methodological guidelines¹. The objective was to compile and systematically present descriptions of Waram Ḥārr exclusively from authoritative primary Unani sources. The texts included Al-Qānūn fi'l-Ṭibb by Ibn Sina; Kitāb al-Ḥawī and Kitāb al-Manṣūrī by Zakariya Razi; Kāmil al-Ṣinā'a by Ali ibn Abbas al-Majusi; Firdaws al-Ḥikmat by Ali ibn Sahl al-Tabari; Zakhīra-i Khwārazm Shāhī by Ismail Jurjani; and Kitāb al-Kulliyāt by Ibn Rushd. Standard Urdu translations published by recognized academic institutions were consulted.

Relevant sections addressing definition, classification, etiology, humoral basis, pathogenesis, clinical manifestations, stages, and principles of management of Waram Ḥārr were identified through manual textual review. Extracted material was organized thematically and subjected to comparative textual analysis to identify similarities and variations among authors. Terminology was retained within its original Unani conceptual framework to preserve doctrinal accuracy. Modern biomedical literature, secondary interpretations, and experimental or clinical studies were excluded to maintain the classical framework. As no human participants or clinical data were involved, ethical approval was not required.

Waram

Waram (inflammation or swelling) is described as a pathological state characterized by the accumulation of impure or waste matter within an organ, leading to distension and tension of its tissues. ‘Alī ibn al-‘Abbās al-Majūsī defines Waram as a form of impurity and swelling that develops in an organ. Its cause is the waste materials that fill the empty spaces, producing distension and tension. This matter either flows from another organ towards the affected organ, because that organ expels the material towards another organ and removes it from itself, or it is produced specifically within the organ that has become swollen ².

A closely similar understanding is presented by Ibn Sīnā, who likewise describes waram as a condition encompassing all general categories of disease. Su’-imizaj is present in waram because there is no swelling that arises without a material derangement of temperament. Su’-i-tarkeeb is also necessarily present in waram, for there is no swelling in which some defect in the form and size of the organ does not occur. Sometimes diseases of configuration and associated conditions are also found in conjunction with waram. Tafarruq-i-ittisal occurs in such a manner that, due to the falling and settling of the waste matter, the components become separated from one another. These definitions reflect a shared foundational concept, where inflammation is viewed as a consequence of material accumulation and disturbed internal balance, rather than an isolated local event ³.

1. Classification

I. Based on the Mādda:

- Waram Damawī
- Waram Ṣafrāwī
- Waram Balghamī
- Waram Sawdāwī
- Waram Riḥī/ Rikhw
- Waram Mā’ī ^{3,4}

II. Based on the Quality:

- Awrām Ḥārra
- Awrām Ghayr Ḥārra ³

III. Based on the temperament of the material:

- Hot-Dry Māddī Awrām
- Cold-Dry Māddī Awrām
- Hot-Moist Māddī Awrām ⁵

Waram Ḥārr

Waram Ḥārr refers to a form of inflammatory swelling that arises from humours such as blood (Dam) and yellow bile (Ṣafrā’), that is, substances whose fluidity and temperament correspond to those of blood and bile. Waram Ḥārr may develop not only from humours that are inherently hot in nature but also from any humour that acquires pathological heat as a result of putrefaction (‘Ufūnat). In certain cases, a composite morbid material formed by the admixture of blood and bile gives rise to inflammatory swelling. When the swelling is produced exclusively from blood, it is termed Phlegmon (Falgamūnī), whereas swelling arising purely from yellow bile is designated as Ḥumra. When both blood and bile jointly contribute to the formation of the swelling, it is described as Falghamūnī Ḥumra or Ḥumra Falghamūnī ³.

2. Etiology

The etiological factors of Waram Ḥārr described in Unani literature can be broadly classified into external causes, internal causes, and humoral imbalance. These factors are summarised in Table 1.

Table 1: Etiology of Waram Ḥārr

Etiological Classification	Etiological Factors	Brief Description
External Causes	Mechanical Injuries	Wounds, Blunt Trauma, Falls, Crush injuries, Fractures, Dislocation, Sprains ^{3, 6, 7, 8}
	Thermal factors	Excessive heat exposure, burns, and application of hot fomentations ^{3, 6, 7, 8}
	Chemical and irritant agents	Caustic substances, irritant drugs, and poisonous materials ⁴
	Escharotic agents (Kāwī)	Corrosive substances causing tissue damage, e.g., <i>Tez Pāt</i> ⁴

	Vesicant drugs (<i>Munaffit</i>)	Agents producing blisters on the skin, e.g., <i>Samm al-Fār</i> , <i>Strychnos nux-vomica</i>
	Eruptive drugs (<i>Mubaththir</i>)	Substances causing cutaneous eruptions, e.g., arsenic
	Environmental factors	Hot climate and prolonged sun exposure ^{3, 6, 7, 8}
Internal Causes	Imbalance of expulsive faculties	Strong expulsive power of the receiving organ with weak expulsive power of the corresponding organ ³ .
	Structural factors	Wide pathways for reception and narrow pathways for the expulsion of material ³ .
	Impaired digestion of the organ	Incomplete digestion leads to the accumulation of waste matter ⁴
	Excessive organ heat	Increased heat attracts and retains morbid material ³
	Types of heat	<i>Natural heat</i> (e.g., inherent in muscle) and <i>unnatural heat</i> due to pain, excessive movement, or heating substances ³
Humoral Imbalance	Sanguine predominance	Qualitative or quantitative excess of blood (<i>dam</i>) ⁵
	Bilious predominance	Qualitative or quantitative excess of bile (<i>ṣafrāʿ</i>) ⁵
	Putrefied hot material	Morbid substances that are hot or become hot due to putrefaction ³

3. Types of Waram Ḥārr

Waram Damawī (Falgamūnī): Phlegmon (Falgamūnī) represents a form of Waram Ḥārr in which blood (Dam) is the predominant morbid material. Classical descriptions, particularly those of Ibn Sīnā, clearly differentiate inflammation arising from healthy blood (Dam Ṣāliḥ) from that produced by corrupted blood (Fāsīd Dam), a distinction crucial for understanding the site, extent, and severity of the swelling. According to the WHO International Standard Terminologies on Unani Medicine, Khilt Ṣāliḥ denotes a normal or healthy humour, capable of sustaining physiological functions when present in appropriate quality and quantity ³.

When inflammation arises from healthy, normal blood, especially when it is thick, the resulting phlegmon typically develops in muscle and soft tissues, where the abundant vascular supply and tissue spaces allow material to accumulate. Such swellings are usually large, warm, tense, and pulsatile, reflecting intact circulation and the dominance of blood as the sole humoral contributor. The presence of pulsation indicates that the blood, although excessive or thick, has not undergone putrefaction. These swellings are commonly observed in soft tissue regions and lymph-rich areas, such as the groins and axillae, where the body tends to divert excess blood away from vital organs.

In contrast, when healthy blood is thin (raqīq), the resulting inflammation is generally confined to the skin, owing to the greater mobility and superficial diffusion of thinner blood. Although such swellings still exhibit redness and warmth, their limited depth and size indicate a lesser capacity for tissue infiltration. In both scenarios, the inflammation remains fundamentally sanguineous and may be regarded as a pure blood-derived phlegmon ³.

However, once blood undergoes corruption, most commonly due to putrefaction ('ufūnat) or admixture with other humours, particularly yellow bile (Ṣafrāʿ), it ceases to remain a healthy humour. Inflammation arising from such corrupted blood displays increased irritability, marked redness, and a more aggressive course, often resembling Ḥumrah. Further attenuation or bile admixture results in mixed inflammatory forms such as Ḥumrah Falgamūnīyah, indicating a transition from a pure sanguineous pathology to a composite humoral disorder ³. Thus, the Unani concept emphasizes that pure phlegmon arises from healthy blood, while corrupted blood signifies humoral admixture and pathological transformation, leading to more severe and destructive inflammatory states ^{4, 9, 10, 11, 12}. In continuation, Unani scholars further explain that phlegmon fundamentally results from the accumulation of sanguineous matter within the cavities or interstitial spaces of an organ, producing a state of Waram Ḥār due to the inherent heat and fluidity of blood. This accumulation may involve either thick (ghalīz) or thin (raqīq) blood, and only rarely does it occur from absolutely pure blood without admixture of other humours. When inflammation develops from pure, high-quality sanguineous matter, it is designated as Falgamūnī Khālīṣ (pure phlegmon). Owing to the abundance of arterial supply and heightened sensory innervation, such a phlegmon predominantly affects organs with strong sensation, leading to pronounced pain, heat, and throbbing. These features reflect active circulation and the dominance of blood as the principal inflammatory substrate ^{4, 6}. Classical texts also acknowledge the frequent coexistence of sanguineous and bilious inflammations. When blood remains the predominant humour, the condition is termed Ḥumra Falgamūnī, whereas predominance of bile shifts the diagnosis toward Ḥumra Falghamūnī, signifying a more intense and irritable inflammatory

state. Importantly, if phlegmon inclines toward Ḥumra, or Ḥumra inclines toward phlegmon, and suppuration ensues, the lesion continues to be classified under Falgamūnī, underscoring the primacy of the sanguineous component in its pathogenesis.

Certain advanced or severe forms of phlegmon were regarded by classical physicians as belonging to the spectrum of Ṭā'ūn (plague-like inflammations), particularly when the swelling occurs in regions associated with vital waste drainage. When such inflammation develops beneath the axillary lymph nodes, it is described as Ṭā'ūn Khabīth (malignant plague), attributed to the reception of cardiac wastes by these glands and the intense heat associated with the heart. Conversely, when similar inflammatory swellings arise in other anatomical sites without specific vital association, they are referred to as Falgamūnī Muṭlaq (general phlegmon). This classification highlights the Unani emphasis on site, humoral dominance, and systemic significance in determining both the severity and prognostic implications of phlegmonous inflammation ^{2, 6, 9, 10, 12, 13}.

Waram Damwī According to the Site of Affliction

The nomenclature of Waram Damwī also varies according to the specific organ in which the inflammation develops. When this inflammation occurs in the head or the face, it is termed Māshrā, characterised by marked facial redness and swelling of the head. When it involves all parts of the conjunctival layer, it is called Āshūb Chashm (ophthalmic inflammation).

If the inflammation appears in the pleural membrane, it is known as Dhāt al-Janb (pleuritis). When it develops in the lung parenchyma, it is termed Dhāt al-Ri'a (pneumonitis). If it occurs either in the diaphragm or the thoracic region, it is called Barsām (diaphragmitis).

When the inflammation appears near the nail, it is called Dākhis (paronychia). If it develops in the soft tissues, whether in the groin, neck, or behind the ears, and rapidly suppurates, it is termed Ṭā'ūn (plague) ².

Waram Ṣafrāwī: It refers to a type of inflammation in Unani medicine that occurs due to the predominance or abnormal accumulation of Ṣafrā' (yellow bile) in a particular organ or tissue. It may develop through two principal mechanisms.

First, the humour may be expelled from one organ to another. If the receiving organ is unable to digest or assimilate this material, it accumulates and leads to enlargement of that organ. This displacement occurs when the expulsive power (quwwat dāfi'a) of the originating organ is strong, while that of the receiving organ is weak. The openness of the channels (majārī) and the relative anatomical position of the organs also facilitate this movement. For example, when the organ from which the humour is expelled is situated above the organ receiving it, the downward flow becomes easier, particularly if the humour is thick and earthy in nature.

Second, inflammation may arise when the nourishment reaching an organ is abnormal in quality or quantity, and the organ itself is weak. In such circumstances, the

material is not properly eliminated and gradually accumulates, resulting in enlargement. The innate heat may subsequently transform into infective heat, thereby aggravating the inflammatory process ⁵.

Bilious swellings produced through this second mechanism are described as two types. One is termed Humrah, characterized by marked redness due to the presence of healthy sanguineous humour (Dam). This type of swelling is generally smaller in size. The second type is called Namla, in which bilious humour predominates and becomes more evident ².

4. Pathogenesis

The initiation of Waram Ḥārr does not depend merely on the inherent hot temperament of blood (Dam) or bile (Ṣafrā'); rather, it arises due to the acquisition of abnormal heat following putrefaction ('ufūnat) and faulty digestion. Classical Unani scholars, particularly Ibn Sīnā, have clearly stated that any humour, irrespective of its original temperament, may give rise to hot inflammation if it becomes putrefied ³. According to classical descriptions, this pathological process begins at the level of digestion, especially during the gastric and hepatic stages.

At the stage of primary or gastric digestion, improper dietary practices such as excessive quantity of food intake, eating before complete digestion of the previous meal, irregular timing of meals, and the consumption of incompatible or unnatural foods weaken the gastric digestive power (Quwwat Hādimah). As a consequence, food is not fully digested and remains in a crude or raw state (Ibn Sīnā; Majūsī). This improperly digested material becomes highly susceptible to fermentation and putrefaction, generates abnormal heat, and serves as the primary substrate for the formation of morbid humours.

When this crude material reaches the liver, hepatic digestion (Hazm Kabidī) is likewise impaired. Instead of producing normal and balanced humours, the liver generates qualitatively abnormal blood that is overheated, thick, and irritant, along with morbid bile possessing corrosive and spreading tendencies. Even when blood or bile is normal in origin, the superimposition of putrefaction ('ufūnat) imparts pathological heat, thereby transforming these humours into hot morbid matter ^{3,4}.

Classical texts further explain that this pathological transformation is intensified by the presence of excess heat derived from both endogenous and exogenous sources. Endogenous factors include a congenitally hot-dry temperament, while exogenous contributors comprise excessive physical exertion, emotional disturbances such as anger and stress, insomnia, exposure to hot climates, pain, trauma, or excessive movement of an organ. These factors either increase the intrinsic heat of the organ or introduce abnormal or morbid heat (Ḥarārat Ghariba), which accelerates the putrefaction of humours already present and hastens the development of hot inflammation ^{5,7}.

Under physiological conditions, innate heat (Ḥarārat Ghariziyya) plays a constructive role by supporting

digestion and metabolism. However, when heat becomes excessive, digestion remains incomplete, and waste material accumulates. At this point, the same heat loses its constructive function and becomes destructive, thereby initiating inflammation. This fundamental principle explains why hot inflammation can arise even from a humour that is not inherently hot, provided it acquires abnormal heat through putrefaction, as emphasized by Ibn Sīnā (al-Qānūn fi'l-Ṭibb).

In essence, Waram Ḥārr is not restricted to blood or bile alone; rather, any humour that acquires pathological heat as a result of putrefaction is capable of producing hot inflammation, a principle firmly established in classical Unani pathology³.

5. Manifestation of Inflammatory Signs

Due to the dominance of heat and the accumulation of matter, classical signs of Waram Ḥārr appear:

- Heat – due to abnormal heat generation
- Redness – from dominance of blood and bile
- Swelling – due to retained morbid matter
- Pain – from tissue tension and irritation

When the morbid material responsible for Waram Ḥārr undergoes further putrefaction (‘ufūnat), the inflammatory process advances toward suppuration. Progressive corruption of the humours leads to tissue softening and breakdown, culminating in the formation of pus. This stage signifies loss of tissue integrity and marks a transition from simple inflammation to a destructive pathological state. In cases where yellow bile (Ṣafra’) predominates, its sharp, hot, and corrosive temperament exerts a damaging effect on surrounding tissues, predisposing to ulceration (Qurūḥ) and erosion (Ta’akkul). Such bile-dominant inflammations tend to spread rapidly and exhibit greater severity due to their irritant nature. Classical descriptions recognize distinct pathological expressions within this spectrum, such as Ḥumrah, where blood remains the dominant humour, and Namlah, a more aggressive bile-dominant form characterized by rapid tissue destruction. These variations illustrate how humoral dominance determines the clinical behavior, depth of tissue involvement, and severity of complications in Waram Ḥār^{4,9,10}.

6. Stages of Waram Haar (Hot Inflammation)

Waram Ḥārr progresses through four distinct stages: Initiation, Progression, Stasis, and Resolution.

- i. **Stage of Initiation:** During this stage, the morbid humour begins to move toward the affected organ, and the swelling starts to become apparent. At this time, the blood vessels begin to dilate.
- ii. **Stage of Progression:** In this stage, the size of the swelling increases, and the inflammation spreads. The blood vessels become engorged, and the accumulation of irritant matter at the site of inflammation leads to the development of burning and irritation.

- iii. **Stage of Stasis:** This is the stage in which the swelling reaches its maximum extent. During this phase, the flow of blood increases, resulting in marked redness at the affected site. Due to the excess of blood, the area feels warm to the touch.
- iv. **Stage of Resolution:** The stage of resolution is the period during which the swelling begins to subside. The morbid matter undergoes maturation, leading either to resolution of the inflammation or to suppuration with the formation of pus⁷.

7. Principles of Management of Waram Ḥārr (Acute Inflammation)

The management of *Waram Ḥārr* focuses on removing the underlying cause of inflammation rather than only treating the local swelling. Treatment should be directed toward the source of morbid matter. Resolvent measures (*muḥallil*) are used when inflammation arises from a local lesion, while their early use is avoided in systemic causes to prevent the spread of morbid material to vital organs.

Unnecessary use of repellent measures (*rādi’āt*) is discouraged, as these may divert morbid matter toward important organs. Evacuation of morbid material, especially through venesection, along with suitable local measures, is preferred in the early stage. As inflammation subsides, softening and resolving measures are employed, while severe cases may require astringent and evacuative approaches.

Rest and immobilization of the affected part are essential to support healing. Reducing congestion (*imtilā’*) through diversion, elevation, bloodletting, and cooling measures helps limit pain and progression. In infective inflammation, treatment aims at removing putrefaction through drainage, cleansing, hygiene, and appropriate external applications.

Results and Discussion

Result: Major classical Unani texts, including the works of Ibn Sina, Zakariya Razi, and Ali ibn Abbas al-Majusi, were reviewed. Analysis of these sources demonstrated substantial conceptual uniformity regarding Waram and its hot variant, Waram Ḥārr. All authors described Waram as a swelling caused by the accumulation of morbid matter and classified it into two types: Ḥārr (hot) and Bārid (cold).

Waram Ḥārr was consistently characterized as an acute inflammatory condition resulting from hot or qualitatively altered humoral matter. Classical texts describe Damwī and Ṣafra’wī forms of Waram Ḥārr, differentiated by the dominant humour and clinical features. The present review focuses primarily on the general conceptual and pathological principles rather than detailed subtype comparison. The reviewed literature showed agreement regarding its etiological factors, pathogenesis involving vascular influx and retention of heated material, characteristic clinical signs such as redness, heat, pain, and swelling, defined stages of progression, and general principles of management, including evacuation and cooling measures. No major contradictions were observed among classical

authorities; later scholars largely expanded upon earlier descriptions.

Discussion: Classical Unani physicians did not restrict hot inflammation to inherently hot humours such as blood (Dam) or yellow bile (Şafrā’); instead, they explained that any humour could produce Waram Ḥārr after undergoing qualitative change through putrefaction caused by defective digestion, a principle strongly emphasized by Ibn Sina. In this view, inflammation was understood as a dynamic pathological process arising from corruption of bodily material rather than temperament alone. The origin of Waram Ḥārr was traced to impaired gastric and hepatic digestion, leading to the formation of crude, overheated morbid matter whose localization depended on tissue susceptibility, vascularity, and pre-existing weakness. The classical classification into Falgamūnī, Ḥumrah, and mixed forms reflects an early effort to relate the dominant humour to differences in clinical presentation, including redness, heat, swelling, pain, and pulsation. Scholars also stressed that treatment should address the underlying morbid cause rather than merely suppress visible symptoms. Although classical texts provide clear explanations and detailed clinical observations, further systematic study is needed to understand their relevance in the context of modern pathology.

Conclusion

This review brings together classical Unani descriptions of Waram Ḥārr and presents them in a structured and coherent manner. The condition has been shown to be consistently described in Unani literature as an acute swelling resulting from hot morbid material, with clear differentiation based on the dominant humour and the stage of the disease. The classical sources provide a systematic account of its causes, progression, and clinical expressions. By drawing on concepts from classical Unani texts, the present work explains the theoretical basis of Waram Ḥārr while preserving its original framework. This compilation aims to help students, clinicians, and researchers gain a clear and organized understanding of Unani views on acute inflammatory swellings. Future analytical and clinical studies may build on this work to examine its usefulness in present-day medical practice.

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