

# Comparative Analysis of Pancreatitis in Unani and Modern Medicine, with A Focus on the Role of *Ilaj Bil Ghiza* in Contrast to Modern Dietary Management

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## ABSTRACT

Pancreatitis, an acute or chronic inflammatory disorder of the pancreas, is managed in both Unani and modern medicine through distinct yet occasionally converging paradigms. This review presents a comparative analysis of the understanding, classification, and therapeutic approaches to pancreatitis, focusing on the role of *Ilaj bil Ghiza* (diet therapy) in Unani medicine and its parallels with modern nutritional strategies. In the Unani system, pancreatitis-like symptoms are associated with humoral imbalances—primarily an excess of *Safra* (yellow bile)—and are managed through temperament-based interventions aimed at restoring equilibrium, particularly via dietary modifications using cooling and mucilaginous foods like barley water (*Ma'ul Sha'eer*) and cucumber. Modern medicine, grounded in pathophysiological mechanisms, emphasizes diagnostic imaging, enzyme profiling, and standardized dietary protocols that prioritize early enteral nutrition and low-fat intake. While differing in epistemological frameworks, both systems acknowledge the centrality of diet in both the acute and convalescent phases of pancreatitis.

**Keywords:** Pancreatitis, Unani Medicine, *Ilaj bil Ghiza*, Dietotherapy

## INTRODUCTION

Pancreatitis is inflammation of the pancreas. Inflammation is immune system activity that can cause swelling, pain, and changes in how an organ or tissues work.

The pancreas is a long, flat gland that's tucked behind the stomach. The pancreas helps the body digest food and regulates blood sugars.

Pancreatitis can be an acute condition. This means it appears suddenly and generally lasts a short time. Chronic pancreatitis is a long-term condition. The damage to the pancreas can get worse over time.

## CONCEPT OF PANCREATITIS IN UNANI

### Pancreas in Unani Perspective

Although the pancreas is not described as a distinct organ in classical Unani texts, its functions (especially related to digestion and insulin production) are attributed to organs like:

Liver (*Jigar*) – Main organ for production of digestive juices

Stomach (*Meda*) – Primary for digestion

Spleen (*Tihal*) – Role in blood purification and humor balance

Intestines (*Ama 'a*) – Responsible for nutrient absorption and digestion.

The pancreas' role in secreting digestive enzymes can be conceptually associated with the function of liver and stomach in Unani theory.

### Pancreatitis in Unani Terms

Possible Equivalent Terms / Concepts:

*Warme Meda* (Inflammation of the stomach)

*Warme Kabid* (Hepatic inflammation, which can include adjacent organs)

*Soo-e-Hazm* (Indigestion)

*Hiddat-e-Dam / Hiddat-e-Safra* (Excess heat of blood or yellow bile)

These terms collectively describe symptoms like abdominal pain, nausea, vomiting, indigestion—similar to symptoms of acute or chronic pancreatitis.

Though Unani texts don't mention the pancreas specifically (as anatomy was limited to observable organs), symptoms of acute abdominal inflammation are extensively described under *Waram-e-A'da-e-Batinah* and corresponding *Humma-e-Warmiyah*.

*Humma-e-Warmiyah*: Febrile condition from internal organ inflammation

*Ghalba-e-Safra*: Biliary or choleric conditions like pancreatitis

*Humma-e-Uffu-Niyah*: Early phase or idiopathic fever in pancreatitis

### MATERIALS & METHODS

A systematic literature review was performed by surveying relevant peer-reviewed research articles retrieved from several online bibliographic databases such as Research Gate, PubMed, Central Library of Govt Nizamia Tibbi College and Hospital, Hyderabad was also accessed for the literature search.

### PATHOPHYSIOLOGY & CAUSES:

#### MODERN CONCEPT:

The pathogenesis of acute pancreatitis can occur by the following mechanisms: pancreatic duct and acinar injury. In acute pancreatitis, digestive enzymes within the pancreas are not secreted properly, and this

leads to auto-digestion and inflammation of the pancreas.

Alcohol can cause acute pancreatitis through direct toxicity and immunologic processes. Gallstones can lead to temporary obstruction of the pancreatic duct, and this is also believed to be the mechanism of ERCP-induced pancreatitis.

Chronic pancreatitis can occur by repeated acute attacks which leads to inflammatory infiltrates and fibrosis within the pancreas. Over time, this leads to pancreatic insufficiency.

#### UNANI CONCEPT:

In Unani medicine, fever is termed *Hummā*, and it is classified based on underlying causes and temperament of the body. Two important types of fever in Unani thought are *Hummā-e-Warmiyah* (inflammatory fever) and *Hummā-e-Uffuniyah* (infective or septic fever), each with distinct pathophysiological explanations grounded in the humoral theory.

*Hummā-e-Warmiyah* is an inflammatory fever caused by localized *Waram* (inflammation), often due to a dominance of *Safra*' (yellow bile) and a hot-dry temperament (*Har Yābis*). Inflammation increases innate heat (*Harārat Gharīziyah*), which spreads through the blood, causing systemic fever. Symptoms include high-grade fever, localized pain, restlessness, and dryness.

*Hummā-e-Uffuniyah*, on the other hand, is an infective or septic fever caused by the putrefaction (*Uffūnat*) of humors, especially *Dam* (blood) or *Balgham* (phlegm). This decomposition produces toxic substances that enter the bloodstream, leading to systemic toxicity. The fever in *Hummā-e-Uffuniyah* tends to be persistent, sometimes accompanied by chills, foul-smelling sweat or breath, nausea, delirium, and signs of systemic toxicity. This type of fever is considered more dangerous, especially if it leads to *ūffunīyat* (sepsis-like toxicity).

## CO RELATION OF HUMMA- E-UFFUNIYAH AND HUMMA-E-WARMIYAH WITH PANCREATITIS

*Humma-e-Uffuiyah* and *Humma-e-Warmiyah* are two classical fever types described in Unani medicine, and they can be correlated—conceptually—with certain modern pathologies, including pancreatitis, based on their symptomatology and pathophysiological understanding in the Unani framework.

### 1. Humma-e-UffuNiyah (Primary Fever):

**Definition:** A fever that originates without any apparent preceding illness or organ pathology.

**Cause (Asbab):** Direct result of imbalance in *Akhlat* (humors)—usually due to diet, environment, or internal derangement.

#### Symptoms:

1. Sudden onset of high-grade fever
2. Body ache
3. Loss of appetite
4. Thirst
5. Nausea or vomiting

This can resemble the early presentation of acute pancreatitis, which often starts with systemic symptoms before specific abdominal findings.

### 2. Humma-e-Warmiyah (Inflammatory Fever):

**Definition:** A fever resulting from *Waram* (inflammation) of internal organs, such as the liver, intestines, or other viscera.

*Waram-e-A'da-e-Batinah* (Inflammation of internal organs) is a subcategory relevant to pancreatitis.

**Cause:** Humoral imbalance (e.g., dominance of *Safra* (yellow bile) or *Dam* (blood))

Leads to *Hararat* (heat) and *waram* (inflammation) in organs like pancreas (though not named as such in classical texts, but functionally implied through symptoms)

#### Symptoms:

1. Intense abdominal pain (especially epigastric)
2. High-grade fever
3. Nausea/vomiting

4. Aggravated by movement or food intake
5. Sometimes yellowish discoloration (related to hepatic involvement or biliary inflammation)

These features closely align with modern-day acute pancreatitis, especially if the cause is biliary or related to choleric humor (*Safra*).

### LINE OF TREATMENT:

Although classical Unani medical literature does not explicitly reference the pancreas or its diseases, conditions resembling acute pancreatitis are discussed under various categories such as *Waram-i-Hār* (acute inflammation), *Waram-i-Falghamāni* (sanguineous inflammation), *Humma 'Ufuāniyyah* (infective fever), and *Humma Warāmiyyah* (inflammatory fever). These were described by Ali Ibn al-'Abbās al-Majūsī (930–994 AD) in *Kāmil al-Ṣanā'ah al-Ṭibbiyyah* (The Complete Art of Medicine) and by Avicenna (Bu 'Alī Sīnā) (980–1037 AD) in *Al-Qānūn fī al-Ṭibb* (The Canon of Medicine).

*Waram-i-Bānqarās* (acute pancreatitis) can often be managed by applying the treatment approach for *Waram-i-Hār* (acute inflammation) Treatment principles for *Waram-i-Hār* involve removing the underlying causes (*Asbāb*), reducing internal congestion (*Imtilā'*), and ensuring rest (*Sukūn*) of the affected organ. These goals can be achieved through Unani medications with multiple therapeutic actions such as *Muhallil-e-Waram* (anti-inflammatory), *Musakkin-i-Alam* (analgesic), *Mudirr-i-Bawl* (diuretic), *Mufattiḥ-i-Sudūd* (deobstruent), and *Dāfi '-i-Ṣafra* (antibilious).

### General Unani Approaches for treatment of pancreatitis:

#### 1. Ilaj bil Tadbeer (Regimenal Therapy):

Bed rest, avoidance of fatty/spicy foods  
Cold compresses if high fever

#### 2. Ilaj bil Ghiza (Dietotherapy):

Barley water (*Ma-ul-Sha'eer*)  
Pomegranate juice (if no vomiting)  
Avoid meat, fats, heavy diets

#### 3. Ilaj bil Dawa (Pharmacotherapy):

Herbs used to address Waram (inflammation), *Safra* dominance, and pain: *Tukhm-e-Kasni* (*Cichorium intybus*) – anti-inflammatory, hepatic tonic  
*Shahtara* (*Fumaria parviflora*) – detoxifying  
*Unnab* (*Ziziphus jujuba*) – soothing, anti-inflammatory  
*Sana Makki* – mild laxative to expel morbid matter

*Sandal Safed* (*Santalum album*) – cooling

**4. Mushil Safra (Purgation of yellow bile):**  
 Carefully used purgatives to eliminate excess *Safra* if indicated

Purgation is only advised after *tahaffuz* (stabilization) of the patient and if not contraindicated by severe dehydration or weakness.

**Nutritional Therapy**

A low-fat solid diet can be administered to subjects with mild acute pancreatitis after the abdominal pain has resolved. Enteral nutrition should be considered 2-3 days after admission in subjects with more severe pancreatitis instead of total parenteral nutrition (TPN) Enteral feeding maintains gut barrier integrity, limits bacterial translocation, is less expensive, and has fewer complications than TPN. The choice of gastric versus nasojejunal enteral feeding is currently under investigation.

**DISCUSSION & CONCLUSION**

**Comparison Table: Unani vs. Modern Medicine (Pancreatitis Context)**

Category	Unani Medicine	Modern Medicine
Terminology	Humma-e-Warmiyah (Inflammatory fever) due to Waram-e-A'da-e-Batinah	Acute Pancreatitis
Organ Recognition	Not explicitly “pancreas” – symptoms under stomach/liver/abdomen inflammation	Recognized as inflammation of the pancreas
Etiology (Causes)	Imbalance of <i>Safra</i> (yellow bile) - Waram from indigestion, heat, or toxic matter	- Gallstones - Alcohol - Hyperlipidemia - Medications - Idiopathic
Pathophysiology	-Morbid matter ( <i>Madda</i> ) causes inflammation - Produces <i>Hararat</i> (heat) and <i>Waram</i>	- Pancreatitis involves premature activation of pancreatic enzymes within the pancreas, leading to autodigestion, inflammation, and tissue damage. - Leads to inflammation and systemic response
Fever ( <i>Humma</i> )	- High-grade fever with inflammatory nature - Occurs due to heat from morbid substance	- Fever common in moderate to severe cases, especially with necrosis or infection
Pain Location	- Severe abdominal pain (referred to stomach/liver region)	-Epigastric pain, radiating to back
Nausea/Vomiting	- Often present due to <i>safra</i> dominance - Indicative of internal organ disturbance	- Very common; hallmark symptom
Appetite	- Loss of appetite	- Anorexia is common
Thirst & Dryness	Due to increase in <i>Hararat</i> (innate heat) - Leads to dehydration-like symptoms	- Dehydration common due to third spacing and vomiting
Stool/Urine Changes	- Possible yellow/green stool, indication of biliary <i>Safra</i> involvement	- May see clay-colored stools (if bile duct obstructed) or dark urine
Diagnosis Approach	- Based on <i>Mizaj</i> (temperament), pulse ( <i>Nabz</i> ), tongue, stool, urine color	- Labs: Amylase, Lipase - Imaging: Ultrasound, CT scan

Treatment Principles	- <i>Tanqiya</i> (evacuation of bile) - <i>Tabreed</i> (cooling) - <i>Ghiza-e-lateef</i> (light diet)	- Supportive: Fluids, pain relief, fasting - Treat underlying cause
Herbal Drugs ( <i>Mufradat</i> )	- Kasni, Unnab, Shahtara, Sandal Safed, Sana Makki	- Not used in modern biomedicine; some herbs explored as adjuncts in integrative care

*Humma-e-Warmiyah* closely reflects acute febrile inflammatory conditions like pancreatitis, especially with features like fever, abdominal pain, vomiting, and internal heat.

Unani treatments focus on cooling the system, balancing Safra, and promoting elimination of morbid matter.

Though organ-specific concepts were limited, the functional and symptomatic descriptions in Unani match closely with visceral inflammatory syndromes like pancreatitis.

#### Declaration by Authors

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#### REFERENCES

1. Majoosi, A. H. A. I. A. (2010). *Kamil-usSana'ah*, Urdu Translation by Ghulam Husain Kantoori. (1st vol.). New Delhi: Idarah Kitab-usShifa, (Chapter 8).
2. Ibn-e-Sina AAIH. (2010). *Alqanoon Fit Tib*. Urdu Translation by Syed Ghulam Husain Kantoori. 4th vol. New Delhi: Idarah Kitab-usShifa, (Chapter 3).
3. Hamdani, S. K. H. (2011). *Usool-e-Tib*. New Delhi: National Council for Promotion of Urdu Language, (Chapter 1, 5).
4. Kabeeruddin, H. M. (1999). *Moalajat Sharah Asbaab* (Tarjama-e-Kabeer). (2nd vol.). New Delhi: Ejaz Publishing House, (Chapter 12)

5. Kabeeruddin, H. M. (1999). *Beyaz-e-Kabeer*. (2nd vol.). Haiderabad Deccan: Hikmat Book Depo, (Chapter 16)
6. Kabiruddin, H. M. (2014). *Makhzanul Mufradat*. New Delhi: Idara Kitabus Shifa, pp 94-403
7. SRB'S CLINICAL METHODS IN SURGERY, Sriram Bhat MMS (General Surgery) FRCS (Glasgow), Jaypee Brothers Medical Publishers; 4th edition (30 September 2022)
8. *Harrison's Manual of Medicine* (17th Edition) Author: Jameson, Fauci, Kasper, Hauser, Longo, Loscalzo Publisher: McGraw Hill (2009)
9. Mohy-ud-din N, Morrissey S. Pancreatitis. [Updated 2023 Jul 4]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan
10. Tasfiya Hakeem Ansari. "Humma-e-Yaum (Ephemeral Fever): A Unique Concept of Humma (Fever) in the Unani System of Medicine". *Acta Scientific Medical Sciences* 7.5 (2023):143-149.
11. Mohammad Shamim Khan, Unani interventions in the Management of Acute Necrotizing Pancreatitis (*Waram-i-B?qar?s Nakhri H?d*): A Case Report, *Int. J. Sci. R. Tech.*, 2025, 2 (2), 199-205.

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