



Review Article

# Renal Calculus (Hissat-e-kuliyah) and its Management through Unani Modalities - An Overview

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## I N F O

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## A B S T R A C T

The objective of the present study is the explanation and scientific validation of Unani modalities for the management of renal calculus. Renal calculi are known as Hissate Kuliyah in the Unani system of Medicine. It is one of the most common urologic problem affecting people of all countries and ethnic groups. In the United States, ~13% of men and 7% of women will develop kidney stones during their lifetimes, and prevalence is increasing throughout the industrialized world.

In some regions, the risk is higher, notably, Saudi Arabia, where the lifetime risk of developing renal stones in men aged 60-70 is just over 20%. The prevalence of renal calculi varies according to the geographical area & socio-economic conditions. India has a high incidence of renal calculi especially in Gujarat, Rajasthan, Punjab, and Madhya Pradesh.

The treatment modalities present in the Unani system of Medicine are quite effective with no or minimal adverse effects. In addition to this, the Unani treatment is cost-effective, economical and by far accessible. Therefore, the efficacy and outcomes of different treatment modalities described in the text should be further evaluated and validated by a randomized clinical trial.

**Keywords:** Renal Calculus, Hissat-e-Kuliyah, Unani Modalities, Unani System of Medicine

## Introduction

Renal calculi are known as Hissate kuliyah in the Unani system of Medicine. It is a crystalline mass or concretions or solid accumulations of material that is formed by the precipitation of various urinary solutes in the tubal system of the kidney.<sup>1</sup>

Kidney stones are one of the most common urologic

problems affecting people of all countries and ethnic groups. In the United States, ~13% of men and 7% of women will develop kidney stones during their lifetimes and prevalence is increasing throughout the industrialized world.<sup>2</sup>

In some zone, the risk is higher especially in countries such as Saudi Arabia, where risk of developing renal stones in men aged 60-70 is just over 20%.<sup>3</sup>



The prevalence of renal calculi varies according to the geographical area & socio-economic conditions. India has a high incidence of renal calculi, especially in Gujarat, Rajasthan, Punjab and Madhya Pradesh. These stones are more common in men than in women.<sup>1</sup>

Risk factors which are associated with the formation of stone like environmental factor, genetic, dietary factor, and different medical conditions like gout, primary and secondary hyperparathyroidism, excess intake of Vit-D, obesity, Crohn's disease.

Metabolic disorders like hypercalciuria, hyperoxaluria, hyperuricemia, and hyperuricosuria are associated with recurrent kidney stone formation.<sup>4</sup>

### Historical Background

According to the Unani system of Medicine, morbid material and stagnation of this morbid material are responsible for renal calculi. This morbid material (Ghaleez madda) is produced by Ghaleez aghzia e.g., Ghaleez meat, fish meat, concentrated milk Ghaleez Aghzia, those Dietary items that are dietary items which are not easily digestible.

*Su-e-Mizaj kuliya*, *Warm-e-Kuliya*, *Zof-e-Qoowate-Dafey'ah*, *Qurooh-e-Kuliya* are considered a potential cause of Hissat-e-Kuliya.<sup>5-7</sup>

Unani physicians have extensively described Hissat kuliya.

### Ibn-e-Abbas Majoosi (930-994 AD)

He states that more concentrated humour and highly viscous fluids bind to the kidney calyces, drying of these humours and fluid to form crystals result in stone formation by virulent higher temperature.<sup>5,6,8</sup>

### Ali Ibn-e-Sina (980-1037 AD)

According to him the etiology of stone formation in the kidney are similar to urinary bladder that is *Ghaleez Madda* and stagnation of *Madda*.<sup>6</sup>

### Ibn-e-Zohr (1091-1162 AD)

The kidney's inability to excrete dense humour due to weakness, resulting in deposition within the kidney.<sup>5</sup>

### Zakariya Razi (850-932 AD)

He States that body produces abnormal humours which are excreted in the form of a viscous fluid that moves towards the kidney and forms stones.<sup>5</sup>

Unani scholars have been treating the disease for ages. A large number of single and compound formulations have documented for valid in *Hissate Kuliya*.

### Unani Modalities for the Management of Renal Calculus

The management of diseases depends upon the pathology involved in the disease process. In the Unani system of

Medicine goal for the treatment for renal calculi is to make morbid and abnormal humours easily out of the body through the excretory system.

### Following Principles are Implicated in the Management of Renal Calculus

**Removal of underlying causes:** Through proper history, examinations, and investigations.

**Tanqiya mawad (cleansing of morbid matter) and tadeel mizaj:** The *tanqiya mawad* of this disease through the drugs which has the following properties like *muhallil-e-warm* (Anti-inflammatory), *mulattif* (deobstruent), *mufattit hissati* (lithotriptic), *mudire-bol* (diuretic) and *Muqawwi gurda*.

**To correct indigestion and constipation:** If the patient is having these problems.

### In Unani System of Medicine, the Management of any Diseases is Laid down on the Following Parameters

- Dietotherapy
- Regimental therapy
- Pharmacotherapy
- Surgery

However, the first treatment preference is diet therapy, regimental therapy, followed by pharmacotherapy and surgery only if required.

### Dietotherapy

Diet therapy has an essential role in the prevention of disease rather than its control. Unani physicians give prime importance to diet and the state of digestion in a person, in both health and disease. According to Buqrat (*Hippocrate*), the quality (*Kaifiyat*) and quantity (*Kammiyat*) of diet, and the importance of a balanced diet concerning the occurrence of the disease are important factors. Specific dietary regimens are recommended while treating patients according to their temperament. Proper foods are assumed to produce good humours (*Akhlat Saliha*) while odd ones produce bad humours (*Akhlat Radiyya*). Thus, the humoral imbalance can be corrected by medication coupled with proper diet i.e diet plays a vital role in the management of disease.<sup>9</sup>

### Diet Recommended

- *Aab-e-Naryl* (coconut water), carrot, chicken
- Goats heart (*qalb-e-ghenam*) and sparrow (*Asaafeer*).

### Diet Restricted

High oxalate diet like Amlah, tomato, cashew nuts, pumpkin, spinach, amaranth leaves, mushrooms, cauliflower, brinjal etc.<sup>6</sup>

### Regimental Therapy

The basic aim of *Ilaj bil-Tadbeer* is to change the consistency

(soft) of morbid matter through the following regimental therapies such as:

- Purgation (*Mushilat*)
- Enema (*Huqna*)
- Venesection (*Fasd*)
- Sitz bath (*Abzan*)

**Purgation:** Mild purgatives like *Anjeer* (*Ficus Carica*), *Maghz-e-Amaltas* (*Cassia fistula*), *Asl-us-soos* (*Glycyrrhiza glabra*)

**Huqna (Enema):** *Huqna* of *Mulayyin* and *Muzliq* (Laxative and Emollient) like *Tukhm-e-Katan* (*Linum usitatissimum*), *Tukhm-e-Khatami* (*Althea Officinalis*)

**Fasad (venesection):** *Rag-e-Basaleeq* (Baselic vein).

**Aabzan (Sitz bath):** Decoction containing *murakhkhi* and *musakkin* drugs such as *Khatmi*, *Shibt*, *Hulba*, *Baboona*, *Khurfah* and *Banafasha*.<sup>6,10-12</sup>

### Pharmacotherapy

Drugs can be used which has the following properties like anti-inflammatory, deobstruent, lithotriptic, and diuretics for the treatment of renal calculus.

Single drugs - There are many single drugs which can be used as shown in the following table.

S. No.	Drug name	Botanical name	Medicinal uses <sup>13-19</sup>
1.	Habb-ul-Qilt	<i>Dolio biflorus</i>	Lithotriptics, mulattif, diuretic
2.	Khar-e-khasak	<i>Tribulus terrestris</i>	Diuretic, anti-inflammatory, lithotriptic
3.	Habb-e-Kaaknaj	<i>Physalis alkekengi</i>	Diuretic, lithotriptics
4.	Aaloo balu	<i>Prunus cerasus</i>	Anti-inflammatory, lithotriptic
5.	Shora qalmi	<i>Potassium nitrate</i>	Diuretic
6.	Sange sarmahi	<i>Fish stone</i>	Lithotriptic
7.	Jawakhar	<i>Potassium carbonates</i>	Lithotriptic, diuretic
8.	Hajrul yahood	<i>Lapis judaicus</i>	Lithotriptic
9.	Aqrab sokhta	<i>Burnt scorpion</i>	Lithotriptic
10.	Tukhme kharpaza	<i>Cucumis melo linn</i>	Diuretic, lithotriptic, mulattif

Compound formulations: Certain compound formulations used for renal calculus treatment are as follows.

S. No.	Compound name	Therapeutic action <sup>20-22</sup>
1.	Majoon Sangesarmahi	Lithotriptic
2.	Sharbate Aaloo balu	Lithotriptic
3.	Sharbate bazoori moatadil	Diuretic
4.	Qurse Kaknaj	Lithotriptic,
5.	Majoon-e-Ibn-e-Sarafiyun	Lithotriptic
6.	Majoon Aqrab	Lithotriptic
7.	Kushta Hajr-ul Yahood	Lithotriptic
8.	Jawarish Zarooni Ambari	Muqawwiye gurda
9.	Majoon Hajr-ul-yahood	Lithotriptic
10.	Majoon kaaknaj	Lithotriptic

### Surgery

*Masīhī* states, "In case of obstruction of urine due to calculus and when no other option is available except for surgery, bladder calculus can be removed by applying incision.

*Abū al-Qāsim al-Zaharāwī* (936-1013 AD) in his medical encyclopedia "Altasriyf liman ajiza anialta lify" has described over 200 surgical instruments with illustrations and method of their manufacture. In urology, he described the drilling on urethral stones and the operation of vaginal lithotomy. Ibn Sīnā introduced the technique of instillation of medication into the urethra.<sup>4</sup>

### Preventive Measures

- **Fluid:** Intake should be 3-4 lit/day and output 2 lit/day at least. Intake is distributed throughout the day
- **Sodium:** Restrict intake
- **Protein:** Moderate, not high
- **Calcium:** Avoid supplements from meal, avoidance of milk, cheese
- **Oxalate:** Avoid foods rich in oxalate e.g., spinach, rhubarb, etc.<sup>2</sup>

### Conclusion

Kidney stones are one of the most common urologic problems affecting people of all countries and ethnic groups. 90% of stones measuring 4mm pass spontaneously, 50% of stones measuring 5-10 mm need conservative management, Unani medicines has beneficial effects like *mufattit-e-hissat*, *muhallil-e-warm*, *mudir-e-baul advia* for crushing and spontaneous expulsion of calculi. Large stones especially those obstructing the urine flow need surgical interference. Since the unani system of Medicine has several single as well as compound Unani drugs, which are in use for centuries for effectively treating the disease. The treatment modalities present in the Unani system of Medicine are quite effective with no or minimal adverse effects. In addition to this, the Unani treatment is cost-effective, economical and by far

accessible. Therefore, randomized clinical trial should be further assessed for efficacy and outcomes of different treatment modalities described in the Unani text.

**Conflict of Interest:** None

## References

1. Rajesh. Study of Hasate Kulya(Renal Calculus) with Therapeutic Evaluation of Unani Formulation (Sufoof Hajrul Yahud) in its Management. *International Journal of Science and Research* 2016; 5(10): 268-271.
2. Kasper, Fauci, Haucer, longo, Jamson, Loscalzo. Harrison's principle of internal Medicine 18<sup>th</sup> edition McGraw Hill. : page no-1886.
3. Walker BR, Colledge NR, Ralston SH, PenmanID. Davidson's Principle and practice of medicine .22<sup>nd</sup> edition, Elsevier 2014; 507.
4. Aliya. Hassat kulyah( Nephrolithiasis): A review with unani concept. *International journal of Unani and integrative Medicine* 2018; 2(2): 104-107.
5. Hussain T. Pathophysiology and treatment of Urolithiasis in Unani Medicine. *Indian journal of History of Science* 2016; 51(2): 1217-1226.
6. Khan A. Akseer Azam (Urdu Translation by Kabiruddin). Idare kitab-us-shifa New Delhi. 2011; 709-715.
7. Rushd I. Kitab Al-Kulliyat. (Urdu). Central Council for Research in Unani Medicine, New Delhi, 1987, 224-227.
8. Al-Majusi, Ibn-Abbas, Tarjuma-I Kamilus Sana. (Urdu Translation by Gulam Hussain Kantoori), 1889; 1-2:7889.
9. Dossier. Unani system of Medicine, the science of health and healing department of AYUSH , Ministry of health and family welfare, Government of India New Delhi edit -2013, page-1.
10. Waseem AA. Daum M. Qaumi counsel baraye urdu zaban. 1997 edition 2<sup>nd</sup> page-481.
11. Khan A. Haziq. Sheikh Mohammed Bashir & Sons Lahore YNM: page-389-392.
12. Arzani AM. Tibbe Akbar, Idara Kitab ul Shifa Daryaganj, New Delhi, page no-527-529.
13. Haleem AM. Bustanul Mufradat Jadeed. Idara Kitabul Shifa, New Delhi, 2002: 83-84, 347, 446.
14. Rafeequddin M. Kanzul Advia Mufrada. Aligarh Muslim University Press 1985: page no-108-109, 277, 296, 297-298, 313, 436-437, 304-305.
15. Ghani Hakim N. Khazainatul Advia. Idara Kitab ul Shifa Daryaganj, New Delhi, YNM page no-182.
16. Kabeeruddin Hkm. Makhzanul Mufradat. Ejaz Publishing House, New Delhi. YNM: page no-11, 189, 226, 257, 260, 262.
17. Tariq HNA (2004). Tajul mufradat (Khawasul advia), 1st edition, HS offset press, Idara Kitab ul Shifa Daryaganj, New Delhi page no-564.
18. Anonymous. The Unani pharmacopeia of India, part I, Ministry of health and family welfare, Govt. of India, New Delhi, 2008 ; Vol\_V : page 40-41.
19. Khare CP. Indian. Medicinal Plants-An illustrated Dictionary. New York, Springer Science & Business Media, Spring Street 2007: page-222, 669.
20. Anonymous. National Formulary of Unani Medicine, part II, Ministry of health and family welfare, Govt. of India, New Delhi, 1993; page no-72.
21. Allama Hakim Mohd Kabiruddin, Biyaz-e-khaas al maroof Ilaaj-ul-amraaz idare kitabul shifa. page no -573-576.
22. Kabeeruddin. Hkm Al-Qarabadeen, page-84, 649, 932, 1172.