

Concept of Kidney Disorders & Its Treatment in Unani System of Medicine

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ABSTRACT

According to the concept of Unani medicine, kidneys are important organs that perform many important functions of the body. Kidney performs several important functions whether it is formation of urine or elimination of nitrogenous substance from the body. Kidney disorders (*Amraze Kulliya*) have always remained a major area of concern for Unani Scholars since a long time. The kidney disorders is a term with broad meaning which is applied when kidney does not function properly and these disorders are listed by various names in Unani classical texts viz, *Huzal-e-Kulliya* (renal hypertrophy), *Zauf-e-Kulliya* (weakness of Kidney), *Auram-e-Kulliya* (nephritis), *Qurooh-e-Kulliya* (renal ulcer), *Hissat-e-Kulliya* (Nephrolithiasis), *Suemijaz-e-Kulliya* (alteration of *Mijaz* of Kidney), *Laghri-e-Kulliya* (renal dystrophy), *Dubella-e-Kulliya* (renal atrophy), *Suddad-e-Kulliya* (Renal obstruction), There is mention of many single drugs in classical texts which were recommended by Unani physicians for kidney disorders. Studies on these drugs have also shown nephroprotective activity.

Key Words: Unani; Unani Medicine; Kidney disorders; *Kulliya*; single drugs

INTRODUCTION

Kidney is one of the vital organs of the body that performs several important functions in the body viz, excretion of waste products resulting from protein metabolism, regulation of acid base balance by excretion of H⁺ ions (acidification) and bicarbonate ions, regulation of salt water balance by hormones secreted both intra and extra-renal, formation of renin and erythropoietin and there by a role in the regulation of blood pressure and erythropoiesis respectively. Most often it is attacked by a variety of micro-organism, drugs, and chemicals that alter the renal functions with adverse effects on the human health. As per Global Burden of disease GBD study in 2015, about 1.2 million people died from kidney failure, an increase of 32% since 2005. In 2010, an estimated 2.3–7.1 million people with end-stage

kidney disease died without access to chronic dialysis. Additionally, each year, around 1.7 million people are believed to die from acute kidney injury. Overall, an estimated 5–10 million people die annually from kidney disease¹.

As per the Unani concept of kidney disorders, kidneys are important organs that perform several important functions of the body. Kidney disorders have always remained a major area of concern for Unani Scholars and therefore plethora of text is available in classical literature.

Unani Concept:-

According to *Ibn-e-Rushd*² the famous Unani Physician, functions of kidney depend upon its *Quwwas* (Faculties). For every living being certain functions are vital to preserve the life. For these functions to take place, certain power (*Quwa*) is

prerequisite. According to Unani medicine, there are three types of power inherent in every human being to maintain the life and propagate the generation. *Quwa Tabaiyah* (Natural faculty), *Quwa Nafsania* (psychic and mental faculty) and *Quwa Haywaniya* (vital faculty) are the three powers present in human body. Each and every organ is furnished with a power through which physiological functions are performed by that particular organ. Whenever any faculty becomes weak kidney disorders appear. These faculties may be further classified as under:

1. *Quwwat-e-Mumayyaza* (power of discrimination)
2. *Quwwat-e-Hazima* (digestive power)
3. *Quwwat-e-Jaziba* (absorptive power)
4. *Quwwat-e-Masika* (retentive power)
5. *Quwwat-e-Dafia* (power of excretion)

The kidney disorder is a broad term which is applied when kidney does not function properly and as a result of it several diseases occur viz, *Huzal-e-Kulliya* (renal hypertrophy), *Zauf-e-Kulliya* (weakness of Kidney), *Auram-e-Kulliya* (nephritis), *Qurooh-e-Kulliya* (renal ulcer), *Hissat-e-Kulliya* (Nephrolithiasis), *Suemijaz-e-Kulliya* (alteration of *Mijaz* of Kidney), *Laghri-e-Kulliya* (renal dystrophy), *Dubella-e-Kulliya* (renal atrophy), *Suddad-e-Kulliya* (Renal obstruction), etc. These disorders may be produced due to the changes in *Mizaj* (Temperament), *Akhlat* (Humours) and *Quwwa* (Faculties). If any one of these altered in kidney, disorders would appear^{3, 4, 5, 6}. The increased workload of *Quwwat-e-Jaziba* (Absorptive faculty) causes weakening of *Quwwat-e-Masika* (retentive power) and *Quwwat-e-Hazima* (digestive power), this result in formation of *nao-pukhta* (unmetabolised) urine. The kidney disease may also occur due to change in *Mizaj* (temperament) or *Amraz Alliya* (compound diseases) or both^{2, 3, 4, 6, 7}.

As per the Unani Scholars the kidney disorders may be classified as follows

1. *Iltihabi* (inflammatory disease)

2. *Ghair Iltihabi* (Non-inflammatory disease)

3. *Amraz-e-Shirki* (associated with other disease)

1. ***Iltihabi* (inflammatory disease):-**

Inflammatory diseases are caused by alteration in *Akhlat* (Humours) e.g. *Warm-e-Kulliya Haad* (acute nephritis), *Warm-e-Kulliya Muzmin* (chronic nephritis)^{3,4,6}.

2. ***Ghair Iltihabi* (Non Inflammatory disease):-**

Non inflammatory kidney diseases occur due to weakness of *Quwwas* (faculties) e.g. *Zauf-e-Kulliya*, *Laghri-e-Kulliya* etc⁵

3. ***Amraz-e-Shirki* (associated with other disease): -**

Sometimes kidney may be involved due to the liver diseases and sometimes vice versa.

According to *Mizaj* (Temperament), the kidney disorders may be classified based on *Quwwas* (faculties) and *Akhlat* (Humours).

Classification according to the *Quwwa* (Faculties)

The weakness of *Quwwas* (Faculties) results in *Zauf-e-Kulliya* (Weakness of Kidney) which also includes other manifestations like the above-mentioned kidney disorders^{3,4,5,6}.

ZAUF-E-KULLIYA (WEAKNESS OF KIDNEY)

Unani physicians have described *Zauf-e-Kulliya* as a condition in which the kidneys are incapable of separating or differentiating water and other substances from the blood and pass them as such into the urinary bladder. This blood comes into the kidney from the liver. Thus urine finally excreted, is diluted and contains proteins^{2,8,9}. When absorption from kidney becomes weak, it results in haematuria and ascites. Sometimes the absorptive faculty becomes weakened because of excessive waste products¹⁰. According to Azam Khan⁶ *Zauf-e-Kulliya* is a condition in which Kidneys are completely or partially incapable of performing their functions. According to some other Unani physicians kidneys cannot perform their normal

filtration process due to weakness of *Quwwat-e-Masika* (Retentive faculty) or *Quwwat-e-Hazima* (Digestive faculty) and result in *Ghussali* (Blood stained) urine. Qarshi⁸ also described *Sammiyat-e-Baul* (toxic urine), as a condition in which the urinary toxic substances accumulate in the blood and affect the nervous systems which results in coma, delirium etc.

According to the Unani concept the causes of *Zauf-e-Kulliya* are as under:-

1. Excessive labour
2. Excessive fatigue
3. Excessive use of diuretics
4. Excessive journey
5. Excessive coitus
6. Excessive riding (Horse riding)
7. Excessive intake of cold substance
8. Concentrated blood (*Ghaleez dam*)
9. Inflammation of kidney
10. Looseness of kidney mass
11. Prolonged standing
12. Pulling heavy articles (Weight lifting)
13. Diluted bile (*Raqeeq safra*)
14. Reduced power of *Quwwat-e-hazima* (Digestive faculty)
15. Reduced power of *Quwwat-e-jaziba* (Absorptive faculty)
16. *Su-e-Mizaj barid*
17. *Su-e-Mizaj yabis*
18. Trauma of the kidney
19. Urinary obstruction (Urinary stone)
20. (Ibn-e-Sina, 1927, Khan, 1940; Jurjani, 1903; Kabiruddin, 1969)

Clinical symptoms:-

In classical Unani literature, the general clinical features of renal disease, *Zauf-e-Kulliya* are mentioned as under:-

1. Backache
2. General debility
3. Loss of libido
4. Pain in renal angle
5. Poly dyspsia (Due to sue *Mizaj Haar*)
6. Proteinuria
7. Urine reddish in color with strong smell
8. Weakness of *Quwwat-e-masika* (Retentive power)
9. White coloured and diluted urine (*Sue mizaj barid*)^(4, 6, 9, 11)

Treatment as per Unani concept for Kidney Disorders:-

Elimination of the puterified humours (*Akhlat*) by way of *Emala* (diversion) which may be achieved by *Fasad* (Venesection), *Qai* (Vomiting), *Ishaal* (purgation), and *Idraar* (diuresis). *Muhallil-e-auram* (anti-inflammatory) drugs are used in case of inflammatory disease of the kidney. Beside these measures, *Muqwwi-e-Kulliya* (nephrotonics) drugs are used for the treatment of these disorders. In fact the concept of tonics is unique in Unani system of medicine. Several drugs have been described as tonic for various impairments of the organ. These drugs strengthen and tone up the particular organ and protect them against the harmful substances.

Dietary Recommendations:

In addition to drug therapy, Unani Physicians have laid great emphasis on role of diet. They have advised to take easily digestible, absorbed and easily assimilated diets like *Aab-e-Naryal* (coconut water), *Choozah* (chick), *Gazar* (carrot), *Karela* (bitter guard), *Nashpati* (pear), *Jau* (barley), *Himsiyah* (gram), *Magz-e-Badaam* (Almond), *Khushkari Nan* (non-leavened chapati), *Qalb-e-Ghenam* (goat's heart) and *Asaafeer* (sparrow) should be used. High quantity oxalate & uric acid containing diets such as *Cholayi* (Amaranth leaves), *Asfanakh* (Spinach), *Amlah* (Emblica Myrobalan), *Tamatar* (Tomato), *Kaju* (Cashew nut), *Cheekoo* (sapodilla), *Kheyar* (Cucumber), *Kadu* (Pumpkin), *Mushroom*, *Phool Gobhi* (Cauliflower), *Baigan* (Brinjal) should be avoided. Similarly hard and late digestible diets like meat, milk, mutton, *Maidah ki Roti*, guava and apple to be avoided^{4,6,9,11,12}.

Single Drugs used in Unani Medicine:

Various physicians in Unani system of medicine have recommended many single drugs as nephrotonics (*Muqavvi-e-Kulliya*). Studies on these medicines have also suggested nephro-protective activity.

Table 1:- Single drugs used for Kidney disorders in Unani medicine

S.No.	Name	Scientific name	Part used	Action	Reference(s)
1.	<i>Aalu balu</i>	<i>Prunus cerasus</i> Linn.	Dried fruit	lithotriptic	13,14,15,16,17
2.	<i>Jau</i> (Barley)	<i>Hordeum vulgare</i> Linn.	Dried fruit	Detergent	18,19,20,21,22
3.	<i>Amaltas</i>	<i>Cassia fistula</i> Linn	Whole plant	Antiseptic, lithotriptic	18,19,20,21,22
4.	<i>Dar chini</i>	<i>Cinnamomum zeylinicum</i>	Dried Bark	Diuretic , Nephroprotective	14,15,16,17,23
5.	<i>Aab-e-anannas</i>	<i>Ananas sativus</i>	Fruit	Diuretic	14,15,16,17,22
6.	<i>Persiao-sshan</i>	<i>Adiantum capillus veneris</i>	Fern	Diuretic	18, 20,22, 24,25
7.	<i>Baadiyaan</i>	<i>Foeniculum vulgare</i>	Seed	Diuretic, lithotriptic	15,20,22,25
8.	<i>Behi</i>	<i>Pyrus cydonia</i>	Fruit	Diuretic	20,22,25
9.	<i>Bishkrapra</i>	<i>Boerhaavia diffusa</i>	Whole plant	Diuretic	19,22,24
10.	<i>Izkhar</i>	<i>Andropogon jwarancusa</i>	Whole plant	Diuretic, lithotriptic	19, 20,22,24
11.	<i>Kasni</i>	<i>Cichorium intybus</i>	Whole plant	Diuretic, lithotriptic, antiseptic	19, 22,24
12.	<i>Kulthi</i>	<i>Dolichos biflorus</i>	Seed	lithotriptic,	19, 20, 22
13.	<i>Kharkhask</i>	<i>Tribulus terresteris</i>	Fruit.	Diuretic	19, 20, 21, 22
14.	<i>Kaaknaj</i>	<i>Physalis alkekengi</i>	Berries	Diuretic	19, 20, 21, 22
15.	<i>Tukhm Khayar</i>	<i>Cucumis sativus</i>	Seed	Diuretic, cooling	19, 20, 22
16.	<i>Tukhm Kaddu</i>	<i>Cucurbita moschata</i>	Seed	Diuretic, cooling	19, 20, 22, 24
17.	<i>Tukhm Kharpozah</i>	<i>Cucumis melo</i>	Seed	cooling	19, 20, 21, 22
18.	<i>Tukhm Gazar</i>	<i>Daucus carota</i>	Seed	Diuretic	19,22,24
19.	<i>Karafs</i>	<i>Apium graveolens</i>	Seed	Diuretic, lithotriptic	19, 20,22, 24
20.	<i>Turb</i>	<i>Rafanus sativus</i>	Whole plant	Diuretic	20,22
21.	<i>Revand chini</i>	<i>Rheum emodi</i>	Root	Diuretic	19, 20,22, 24
22.	<i>Khas</i>	<i>Andropogon muricatus</i> Retz	Whole plant	refrigerant, febrifuge, antispasmodic	19, 22, 26
23.	<i>Mocharas</i>	<i>Bombax ceiba</i> L.	Fruit, root, gum, bark	Diuretic.	19, 22, 26
24.	<i>Mazereon</i>	<i>Clitoria ternatea</i> Linn.	Root	Diuretic.	19, 22, 26
25.	<i>Sapistan</i>	<i>Cordia dichotoma</i>	Fruit	Diuretic	19, 22, 26
26.	<i>Asl-us-soos</i>	<i>Glycyrrhiza glabra</i> Linn.	Root	Diuretic	19, 22, 24, 26
27.	<i>Gul-e-Surkh</i>	<i>Rosa damascena</i> Mill	Flower	Cooling, refrigerant	19, 22, 26
28.	<i>Hammaaz.</i>	<i>Rumex vesicarius</i> Linn.	Plant, Seed	Diuretic	19, 22, 26
29.	<i>Baamiyaa</i>	<i>Abelmoschus esculentus</i> (Linn.) Moench.	Fruit, seed, root	Diuretic	19, 22, 26
30.	<i>Ghunchi</i>	<i>Abrus precatorius</i> Linn.	Roots , Leaves	Uterine stimulant	19, 22, 26
31.	<i>Kanghi</i>	<i>Abutilon indicum</i> Linn. Sweet	Root, bark seed	Diuretic	19, 22, 26
32.	<i>Aqaaqia</i>	<i>Indica</i> Benth.	Bark, pods	Anti-inflammatory	19, 22, 26
33.	<i>Chirchitaa.</i>	<i>Achyranthes aspera</i> Linn.	Whole plant	Diuretic	19, 22, 26
34.	<i>Piyaz</i>	<i>Allium cepa</i> Linn.	Bulb	Anti-spasmodic, diuretic	19, 22, 26
35.	<i>Chaulai</i>	<i>Amaranthus spinosus</i> Linn.	Whole plant	Spasmolytic, diuretic	19, 22, 26
36.	<i>Tabaashir</i>	<i>Bambusa bambos</i> (L.) Voss.	Whole plant	Cooling, antiinflammatory	19, 22, 26
37.	<i>Dhaak</i>	<i>Butea monosperma</i> (Lam.) Taub.	Whole plant	Diuretic	19, 22, 26
38.	<i>Bathuaa</i>	<i>Chenopodium album</i> Linn	Leaves	Diuretic	19,26,27
39.	<i>Brahmi</i>	<i>Centella asiatica</i> (Linn.)	Whole plant	Diuretic	19,22,28
40.	<i>Bakaayan</i>	<i>Melia azedarach</i> Linn.	Leave, flower, fruit	Diuretic	19,22,28
41.	<i>Gilo</i>	<i>Tinospora cordifolia</i>	Stems	Diuretic	19, 22, 28
42.	<i>Ginger</i>	<i>Zingiber officinale</i> Rosc.	Rhizome	Diuretic.	14, 15, 16, 17, 19, 22, 28, 29, 30
43.	<i>Chal Sandal Safed</i>	<i>Santalum album</i> Linn	Bark	Cooling, diuretic, Urinary antiseptic	19, 22, 29
44.	<i>Zard Chob.</i>	<i>Curcuma longa</i>	Rhizome	Diuretic	19, 22, 31
45.	<i>Sataavar</i>	<i>Asparagus racemosus</i>	Root	Diuretic	19, 22, 31
46.	<i>Tulsi</i>	<i>Ocimum sanctum</i> Linn	Whole plant	antispasmodic	19, 22, 28, 32
47.	<i>Hinaa</i>	<i>Lawsonia inermis</i> Linn.	Leaves	antispasmodic	19, 22,28
48.	<i>Manjeeth</i>	<i>Rubia cordifolia</i> Linn	Stem, root, leaves, seed	Diuretic, deobstruent	19,22
49.	<i>Naishakar</i>	<i>Saccharum officinarum</i> Linn	Juice of stem	Cooling, diuretic	19,22
50.	<i>Miswaak</i>	<i>Salvadora persica</i> Linn	Whole plant	Diuretic, lithotriptic	19,22

51.	Mouz	<i>Musa paradisiaca</i> Linn.	Rhizome, pulp of fruit.	Lithotriptic	19,22
52.	Baobarang.	<i>Embelia ribes</i> Burm	Root, seed	Diuretic	19,22
53.	Hilteet	<i>Ferula foetida</i>	Exudate	Diuretic , Nephroprotective	14, 15, 16, 17, 23

CONCLUSION

Kidneys have numerous biological roles to play. The primary role is to maintain the homeostatic balance of bodily fluids by filtering and secreting metabolites (such as urea) and minerals from the blood and excreting the nitrogenous wastes along with water, as urine. Chronic renal failure (CRF) is a debilitating condition responsible for high morbidity and mortality. It is also a financial burden on government and society. Because of the complexity of its treatment and cost involved, proper care is available to very few patients in India. On the basis of clinical experience diseases were diagnosed and treated based on Usoole Ilaj. Unani scholars (*Ghani, Ibne Rushd, Rhazi, Ibn Sina, Jurjani*) described various single drugs for the treatment of *Zofe Kulliya* (Weakness of Kidney) and some of these have shown nephroprotective effects in scientific studies. Further research is need of an hour to explore hidden active chemical constituents and their mechanism of action to validate the claims made by the Unani scholars/physicians in past. This review will be beneficial for young scientists, Unani physicians and other researchers interested in the subject of nephrology to develop & provide safe herbal medicine(s) to the mankind.

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