

A critical literary review on *Dravyas* (herbal drugs) acting on *Mutravah Strotas* in *Ayurveda*

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Abstract-

Ayurveda has given prime importance to *Mutravaha srotas* (urinary system) and *Srotogata Vikaras* (urinary disorders). Being a system responsible for homeostasis of fluids in the body , it also detoxifies the body by eliminating certain waste products through urine. When diseased, people produce symptoms such as increased or decreased urine production, painful micturation, formation of stones, and thereby obstructed micturation, increased frequency of micturation, and so on. There are many herbs with varied actions specifically aimed at mitigating urinary system disorders. Drugs such as *Jambu*(*Eugenia jumbolana*), *Amrasthi*(*Mangifera indica*), and the like, reduce the increased flow of urine, and hence, are considered as *Mutrasangrahaneeya*, whereas, drugs like *Ikshu*(*Saccharum officinarum* Linn.),

Kustha(*Sassurea lappa*), and so on, increase the flow of urine, and hence, are considered as *Mutravirechaneeya*. There are drugs like *Padma*(*Prunus cyrasoidus*), *Utpala*, and so on, which impart normal color to the urine and are known as *Mutravirajaneeya dravyas*. *Asmarighna dravyas* break down the calculi and remove them through the urine. These *dravyas*, when used under proper direction, help in relieving the pain and apathy caused by the disease.

Keywords: Ashmarighna *dravya*,
Mutrasangrahaneeya dravya,
Mutravirajaneeya dravya,
Mutravirechaneeya dravya, urinary
system, herbs

Introduction-

In homes and communities there are many solutions for waste management. Similarly several body systems cooperate to meet

this need in the human body. One such system is the urinary system. The concept of the urinary system is explained under the *mutravaha srotas* in *Ayurveda*. It discharges the waste products, while efficiently conserving water and other valuable substances. However, this homeostasis is hampered during disease conditions like *Prameha*, *Somaroga*, *Mutrakrichra*, *Mutraghata*, *Ashmari*, *Udavarta*, and so on. In such conditions many herbs are used, some of which act directly on the urinary system and some act indirectly, maintaining the normal functioning of the system. However, in certain physiological conditions, avoidance of the causative factor and dietetics are more important than drugs. For better understanding of the drugs that are used for *Mutravaha srotas* ailments, they can be grouped as *Mutrasangrahaneeeya dravyas*, *Mutravirajaneeya dravyas*, *Mutravirechaneeya dravyas*, *Ashmarighna dravyas*, *Pramehagna dravyas*, and so on. Some of these have been discussed here.

Mutrasangrahaniya Dravyas-

These *dravyas* cause stoppage of excess *mutrapravritti* rather than altering the normal quantity, and are hence utilized in *kleda pradhana vyadhi* like *Prameha*,

where *mutra atipravritti* is seen. In such diseases, medications that are *kleda shoshaka*, *shleshmedohara*, *pramehaghna*, and *shleshmavatahara* are required. These functions are carried out efficiently by the *Mutrasangrahaneeeya dravyas*. Most of them are *tikta*, *katu*, *kashaya rasa*, and *ruksha guna pradhana*. *Dravyas* having such properties are said to cause *baddhamutrata*. Acharya Charaka has categorized some of these *dravyas* under *Mutrasangrahaneeeya dashemani*, whereas, *Nyagrodhadi* and *Saalasaradi gana* of Sushruta serve the same purpose. In case of *jambu*, *phala* is *mutrasangraha*. Some drugs like *Ketaki* (*Pandanus odoratissimus* Linn. F.), *Yashti* (*Glycyrrhiza glabra* Linn.), *Yava* (*Hordeum vulgare* Linn.), and so on, even though not included under classical *Ganas* have been seen to reduce polyuria. *Ketaki moola* is said to be *Mutrasangrahaneeeya*. Grains of *Yava* are *medoghna* and cause *baddhamutrata*. *Yashtimadhu*, when taken in large doses reduces urine output; the reason may be the presence of Glycyrrhetic acid, which causes sodium retention. Certain purgatives like *Senna* (*Cassia senna* Linn.) and *Aloe* (*Aloe vera* Tourn.) reduce water reabsorption thereby reducing urine output. The combination of *dravyas* like *Nishamlaki* and *Triphala* is also *Bahumutrashoshaka*.

Mutra virechaneeya dravyas-

<u>Latine Name</u>	<u>Family</u>	<u>Locations</u>	<u>Part used</u>	<u>Ayurvedic Term</u>
<u><i>Abutilon indicum</i></u>	<u><i>Malvaceae</i></u>	<u>Throughout the tropical parts of India</u>	<u>Whole plant</u>	<u><i>Atibalaa</i></u>
<u><i>Acacia suma</i></u>	<u><i>Mimosaceae</i></u>	<u>West Bengal Bihar western</u>	<u>Wood</u>	<u><i>Shvetakhadira</i></u>

International Journal of Research in Indian Medicine

		Peninsula		
<i>Achyranthes bidentata</i>	<i>Amaranthaceae</i>	Temperate and subtropical Himalayas from Kishtwar to Sikkim	Seeds, roots	<i>Shvetaapaamaarg</i>
<i>Aerva lanata</i>	<i>Amaranthaceae</i>	Tropical parts of India	Entire plant	<i>Paashaanab-heda</i>
<i>Allium sativum</i>	<i>Liliaceae</i>	Native to Central Asia and cultivated throughout India	Bulbs	<i>Lashuna</i>
<i>Terminalia arjuna</i>	<i>Combretaceae</i>	Throughout India	Bark	<i>leaves</i>
<i>Azima tetracantha</i>	<i>Salvadoraceae</i>	Peninsular India Orissa West Bengal	Roots	<i>leaves</i>
<i>Benincasa hispida</i>	<i>Cucurbitaceae</i>	Cultivated largely in Uttar Pradesh Punjab Rajasthan and Bihar	Roots, leaves fruits	<i>Kushmaanda</i>
<i>Boerhaavia diffusa</i>	<i>Nyctaginaceae</i>	Throughout India	Weed, roots	<i>Punarnavaa</i>
<i>Capparis spinosa</i>	<i>Cappariadaceae</i>	Rajasthan Peninsular India	Bark, flower	
<i>Daucus carota</i>	<i>Umbelliferae</i>	Punjab Haryana Uttar Pradesh and Madhya Pradesh	Roots	<i>seeds Gaajara</i>
<i>Centella asiatica</i>		Marshy places	Leaves	<i>Manduukaparni</i>

International Journal of Research in Indian Medicine

		throughout India		
<i>Centratherum anthelminticum</i>	<i>Asteraceae</i>	Himalayas and Khasi Hills	Seeds	<i>Aranya-Jiraka</i>
<i>Cichorium intybus</i>	<i>Compositae</i>	North West India Tamil Nadu and parts of Andhra Pradesh	Entire herb	<i>Kaasani</i>
<i>Cocos nucifera</i>	<i>Palmae</i>	Kerala, Tamil Nadu and Karnataka	Fruit, husk	
<i>Cordia rothii</i>	<i>Boraginaceae</i>	Rajasthan Gujarat Deccan and Karnataka	Fruits	<i>Laghu shleshmaatak</i>
<i>Erythrina indica</i>	<i>Papilionaceae</i>	Ornamental plant throughout India	Bark leaves	<i>Paaribhadra</i>
<i>Euphorbia thymifolia</i>	<i>Euphorbiaceae</i>	Found in tropical plains and lower hills of India	Leaves, seeds	<i>Dudhi</i>
<i>Ipomoea aquatic</i>	<i>Convolvulaceae</i>	Throughout the greater part of India	Leaves, stem	<i>Kalambi</i>
<i>Jasminum auriculatum</i>	<i>Oleaceae</i>	Cultivated throughout India; especially in Uttar Pradesh, Tamil Nadu	Flowers	<i>Yuuthikaa</i>
<i>Lagenaria siceraria</i>	<i>Cucurbitaceae</i>	Throughout India	Fruits, Leaves	<i>Katu-tumbi</i>
<i>Mimusops elengi</i>	<i>Sapotaceae</i>	Cultivated	Fruits, leaves,	<i>Bakula</i>

International Journal of Research in Indian Medicine

		in North India, Western Peninsula and South India.	flowers, bark	
<i>Moringa oleifera</i>	<i>Moringaceae</i>	Punjab	leaves	<i>Shigru</i>
<i>Opuntia ficus indica</i>	<i>Cactaceae</i>	Throughout India	Fruits, flower stem	<i>Nagphana</i>
<i>Cuscuta reflexa</i>	<i>Convolvulaceae</i>	A parasitic climber common throughout India	Entire plant	<i>Amarvalli</i>

The *dravyas* causing increased urinary output are utilized in the management of *Mutrakrichra*, *Mutraghata*, and the like. *Trinapanchamoola* and *Mutravirechaneeya dashemani* of *Charaka* are considered to be the best diuretics. These *dravyas* cause diuresis by increasing the production of urine, causing easy flow of urine and stimulating the organs of the urinary system. Most of the *Mutravirechaneeya dravyas* like *Ikshu* (*Saccharum officinarum* Linn), *Shali* (*Oryza sativa* Linn.), *Ksheera* (Milk), *Navadhanya*, and so on, being *sheeta*, increase *Kapha* and *dravata* in the *Shareera*. Among them *Ikshu* and *Gokshura* (*Tribulus terrestris* Linn.) are considered to be *shreshta*, whereas, *dravyas* like *Ela*, *Gomutra* (Cow's urine), and *Vana palandu* (*Urginea indica* Roxb) being *ushna veerya*, cause *virechana* of the *mutra*.

Certain active principles derived from the plants have been found to cause diuresis.

Vidarikanda contains sugar and due to their osmotic activity these substances oppose the reabsorption of water from the glomerular filtrate. These substances produce more elimination of water than sodium, and hence produce diuresis. Many plants from *Fabaceae*, *Liliaceae*, *Solanaceae*, and so on, contain spironolactone, which is a diuretic steroid. Drugs like *Arjuna* (*Terminalia arjuna* Roxb.) contain triterpinoid saponin called arjunolic acid, which produces diuresis. Other saponins called Bacosides A and B found in *Brahmi* (*Bacopa monneiri* Linn.), also cause diuresis. Certain glycosides called Cardiac glycosides, are found in *Vanapalandu* and *Shatavarin* 1, found in *Shatavari* (*Asparagus racemosus* Linn.); and Flavonol glycoside Psoralen found in *Bakuchi* seeds also cause diuresis. Other than glycosides certain alkaloids like Punernavoside found in *Punarnava* (*Boerhavia diffusa* Linn.) and Purin alkaloids like Caffeine, Theobromine, Theophylline found in drugs like Coffee,

Cocoa, Tea, and so on, are said to be diuretic.

Mutravirajaneeya Dravyas-

Dravyas, which reduce the *dosha dushti* and bring about normal *varna* to *mutra*, are known as *Mutravirajaneeya dravyas*. In some conditions like *agnimandya* and *amajeerna*, the *pachana* of *Ahara* and subsequent *sara kitta vibhajana* do not take place properly leading to improper formation of urine or discolored urine. In conditions like *Kamala*, *Pandu*, *Haridra meha*, *Manjishta meha*, and so on, *srotavarodha* and *dosha dushti* leads to discolored urine. *dravyas* like *Haridra* (*Curcuma longa* Linn.), *Chitraka* (*Plumbago zeylanica* Linn.), *Vidanga* being *Katu* and *Ushna* cause *samyak pachana* and *sroto shodhana*. Drugs like *Padma*, *Utpala*, *Nalina* and so forth, of *Mutravirajaneeya dashemani*, being *kashaya* and *sheeta*, bring about *dushita pitta* to the normal condition, and hence, are useful in the case of discolored urine. Many plants mentioned in the *Mutravirajaneeya gana* of *Charaka* have also found place in the *Utpaladi gana* of *Sushruta*, hence, similar properties may be expected from the *Utpaladi gana dravyas* also.

Ashmarighna Dravyas-

Ashmari in *Ayurveda* refers to urolithiasis; and the herbs that break the formed stones, expel it from the body, and prevent further formation of stones are known as *Ashmarighna dravyas*. *Dravyas* of *Veeratarvadi gana* and *Laghu*

panchamoola serve this purpose. Other than these herbs, *Pashanabheda* (*Bergenia ciliata* Sternb.), *Kulattha* (*Dolichos biflorus* Linn.), *Shigru mula* (Roots of *Moringa olifera* Lam.), *Varuna* (*Crataeva nurvala* Buch-Ham.), *Gorakshaganjja* (*Aerva lanata* L.) have proved to be the best *Ashmarighna dravyas*. A drug like *Gokshura* has potassium nitrates and thus helps in preventing urolithiasis.

DISCUSSION-

When describing the herbs and their actions, the terms '*mutrala*' and '*Mutravirechaneeya*' seem to be similar, although there is a minute difference in their understanding. *Mutrala dravyas* are those that increase the quantity of the urine and may not necessarily expel it. However, *Mutravirechaneeya dravyas* are those, which irrespective of the quantity of urine produced, cause easy expulsion. *Mutravirajaneeya dravyas* are believed to impart normal color to the urine. However, their action over urobilin, which is responsible for imparting color according to modern physiology, is not clear, and further research in this field of science is expected.

CONCLUSION-

The purview of *Mutravaha srotas* is large and hence the diseases under it are many. Even the conditions like hypertension, general edema, and so on, involve the urinary system. Based on this factor, *dravyas*, which act on the system, are categorized into many groups in the classics. Researches and experimental studies have contributed many newer

drugs in this regard. Many *dravyas* perform varied actions in the urinary system. Drugs like *Gokshura* act as both a *mutrala* and an *Ashmarighna*. *Punarnava* has diuretic and hepatoprotective actions. It is left to the intelligence of the physician to decide the suitable herb in a particular condition.

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