

**ROLE OF PRATHAMA TRIPHALA RASAYANA IN THE MANAGEMENT OF
MUTRAGHATA W.S.R.T CHRONIC KIDNEY DISEASE (CKD)**

Dr. Sanjivani N. Rathod¹ and Dr. Sunil Hariram Pal^{2*}

¹PhD. Scholar, ²M.D. Scholar, Dept. of Kayachikitsa.
A.S.S. Ayurved Mahavidyalaya Arogyashala Rugnalaya, Panchavati, Nashik 422003, Maharashtra.

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*Corresponding author: Dr. Sunil Hariram Pal

M.D. Scholar, Dept. of Kayachikitsa A.S.S. Ayurved Mahavidyalaya Arogyashala Rugnalaya, Panchavati, Nashik 422003, Maharashtra.

ABSTRACT

Chronic kidney disease (CKD) is the 16th leading cause of years of life lost worldwide. CKD affects 8% to 16% of the population worldwide. In developed countries, CKD is most commonly attributed to diabetes and hypertension. CKD is considered when glomerular filtration rate (GFR) falls below 90ml/min. In *Ayurveda* it can be correlated with *Mutraghata* belonging to pathology of *Mutravaha srotasa*. The conventional approach of management includes Dialysis and Renal Replacement Therapy (RRT) which are not reasonable by Indian Populations due to economic status. Therefore, it is need of era to find out supportive, rejuvenating treatment for such patients to banish the toxins from the body. *Prathama Triphala Rasayana* contains *Survary Haritaki, Amalaki, and Vibhitaki*. It is *anulomaka, dhatu vardhaka* acts on *pakwashaya*, and regulates *Apana vayu*. The present article takes review of study of *Prathama Triphala Rasayana* therapy in the light of *Mutraghata*.

KEYWORDS: Mutraghata, Mutravaha srotasa, Prathama Triphala Rasayana, CKD.

INTRODUCTION

Chronic kidney disease (CKD) is a syndrome characterized by progressive and irreversible deterioration of renal function due to slow destruction of renal parenchymal, eventually terminating in death when sufficient numbers of nephrons have been damaged over a period of months or years. It is also called as Chronic Renal Failure (CRF). It is an internationally recognized public health problem affecting 5-10% of world population.^[1] Generally signs and symptoms of renal disease are often non-specific. The signs and symptoms may appear at the stage of irreversible damage, which include nausea, vomiting, anorexia, sleep problems, changes in urine output, decreased mental sharpness, muscle twitches, cramps, hiccups, anasarca, persistent itching, shortness of breath, fatigue & weakness etc. Often, it is diagnosed as a result of high blood pressure or diabetes and those with a blood relative with renal disorders. It is considered as long term form of kidney disease and is differentiated from acute kidney disease in that the reduction in kidney function must be present for over 3 months.^[2] According to *Ayurveda* it can be correlated with *Mutraghata* belonging to pathology of *Mutravaha srotasa*. *Mutraghata* is one of the most common and distressing disease among the group of urinary disorder. For easy to understand, the 12 types of

Mutraghata are being classified into three categories. The first category is based on the neurogenic disturbances of the bladder and the types that can be included under this are - *Vatakundalika, Vatabasti and Mutrajathara*. The second category with the symptomatology of obstructed flow of urine, increased frequency of urination, sense of incomplete voiding etc. includes *Bastikundalika, Mutragranthi, Mutrotsarga* and *Ashteela* types. The third category is termed as 'Others', where the types included are *Mutrakshaya* (Anuria), *Ushnavata* (Hematuria), *Mutroukasada* (Abnormal colorization of urine), *Vidvighata* (faecum passed per uretherum) & *Mutrashukra* (Retrograde flow of semen). *Mutraghata* is a condition in consequence with some kind of Obstructive Uropathy either mechanical or functional, related either to upper or lower urinary tract resulting in to either partial or complete retention of urine as well as Oliguria or Anuria.^[3]

Classical view of Mutraghata

Normal functions of *Mutravaha srotasa* (urinary system) is regulated by *Apana vayu* one among the five types of *Vayu*. Any derangement in *Apana vayu* leads to the pathology of the urinary system. So, the treatment principle is to correct the vitiated *Apana Vayu*, thereby attaining the normal physiology of the urinary system.

This controls the symptoms of the *Mutravaha Srotasa*. Acharya Charaka has mentioned eight types in *Sutrasthana*.^[4] Further, in *Siddhithana*, thirteen types of *Basti rogas* have been described under the heading of 'Mutradosha'.^[5] Acharya Sushruta has explained twelve types of *Mutraghata* in *Uttaratantra* but in spite of *Bastikundalika* and *Vidvighata* varieties as described in *Charaka*. Sushruta has described the two type of *Mutroukasada* i.e. *Pittaja & Kaphaja* while *Charaka & Vagbhata* described only one type i.e. *Mutroukasada*.^[6] *Ashtanga Sangraha & Ashtanga Hridaya*, includes *Mutrakricchra* and *Ashmari rogas*. Acharya Vagbhata has categorized the diseases of *Mutravaha Srotasa* into two types i.e. *Mutra Atipravrittijanya* and *Mutra Apravrittijanya Rogas*.^[7] *Mutra vegavarodha* is mentioned as one of the most important causative factor in *Mutraghata*. It is but clear that the *Apana vayu* is responsible for normal voiding of urine, if deranged by voluntary suppression of urge of micturition which results in *Mutraghata*.^[8]

Pathology of *Mutraghata*

The pathogenesis of kidney diseases is not separately mentioned. It can be included in *Prameha*, *Mootra dosha*, *Mootra kriccha*, *vankshana aghata*, *Ashmari* and *Shotha* etc. In *Charaka Samhita*, described that kidney and bladder are the root of the channels carrying urine and fat, *mamsa* and liquid *dhatu*s of the body. The vitiated *doshas* while coming in contact with the opening of these channels obstruct them. This result in the manifestation of kidney disease. While become chronic or incurable due to the affection of all the qualities of *Doshas* and also due to the simultaneous vitiation of *dhatu*s.^[9] The *Basti*, *Hridaya* and *Shiras* are the three

vital points as the *Prana* recedes in them. Any affliction of these leads to vitiation of *Vata prakopa* and may be fatal to life.^[10] The natural action of *Vata* moving from one bodily organ to another are the manifestation of looseness, dislocation, expansion, obstruction, circular movement, piercing pain etc. These are the actions which help the physician to diagnose a disease as predominated by *Vata*.^[11] Acharya Sushruta says that the vitiated *Vata* lodged in the *Basti* and *Guda* leads to severe diseases. Acharya Dalhana, while commenting on the same says action of vitiated *Apana Vayu* being located in the *Medhra Dvara* is emphasized. Thus from all the above references it becomes clear that it is the '*Vata*' which is mainly responsible for the manifestation of *Basti* disorders. This '*Vayu*' may be triggered either by endogenous or exogenous factors.^[12] *Mutra vegavarodha* is one such factor, which leads to vitiation of *Vata*. This act of suppression has to be present over a long period of time in a person to bring about the vitiation *Vata* to the extent that it manifests in *Mutraghata*.

Concept of *Prathama Triphala Rasayana*

As per *Charakacharya*, *Prathama Triphala Rasayana* contains *Survary Haritaki*, *Amalaki*, and *Vibhitaki* in 1:2:4 respectively i.e. one *Survary Haritaki* is given in the morning empty stomach, two *Vibhitaki* is given before meal and four *Amalaki* is given after meal with honey and ghee.^[13] Here *Charakacharya* has mentioned this does in the form of *phala* or fruit, since the size and weight of every fruit of *triphala* differs. Therefore standardization of dose is necessary; so as to standardize, the *phala* portion are converted it into its *churna* form. So that equal dose of this *rasayana churna* can be given to the patients [Table 1].

Table 1: Standardization Dose of *Prathama Triphala Rasayana*.^[14]

Sr. No.	<i>Prathama Triphala Rasayana</i>	Fruit parts in (1:2:4)	Obtained dosage of <i>Churna</i> in gms
1.	<i>Survary Haritaki</i>	1	5 gms
2.	<i>Vibhitaki</i>	2	4.8 gms
3.	<i>Amalaki</i>	4	5.2 gms

Table 2: Pharmacological view of *Prathama Triphala Rasayana*.^[15]

Contents	<i>Haritaki</i>	<i>Vibhitaki</i>	<i>Amalaki</i>
Latin name	<i>Terminalia chebula</i>	<i>Terminalia bellerica</i>	<i>Emblia officinalis</i>
Family	Combretaceae	Combretaceae	Euphorbiaceae
Classical views	<i>Sushruta- Amalakyadi, Parushakadi, Triphala Vagbhata- Parushakadi</i>	<i>Sushruta- Mustadi, Triphala Vagbhata- Mustadi</i>	<i>Sushruta- Amalakyadi, Parushakadi, Triphala Vagbhata- Parushakadi</i>
Vernacular names	Sanskrit- Haritaki, Pathya, Abhaya, Aavyatha, Vayastha, Haimavati, Shiva, Amrta, Kayastha, Vijaya, Jaya Hindi- Harre, Harad English- Chebulic Myrobalan	Sanskrit- Aksha, Kaliphala, Bhutavasa, Kalidruma, Karsaphala Hindi- Bahera English- Belleric Myrobalan	Sanskrit- Amalaki, Dhatri, Vyastha, Abhaya, Amrta, Vayasya, Vrshya, Tisyaphala, Sitaphala. Hindi- Awala, Amla, Aonla English- Indian gooseberry
<i>Swaroopa</i>	Moderate sized/ large deciduous tree	Large deciduous tree	Medium sized tree
<i>Ayurvedic</i>	Rasa- Pancharasa	Rasa- Kashaya	Rasa- Pancharasa (<i>Amlarasa</i>)

Pharmacodynamics	(<i>Kashayarasa pradhana, Lavana rahita</i>) Guna- Laghu, Ruksha Virya- Ushna Vipaka- Madhura Prabhava- Tridosahara	Guna- Laghu, Ruksha Virya- Ushna Vipaka- Madhura Prabhava- Tridoshaghna	<i>pradhana, Lavana rahita</i>) Guna- Laghu, Ruksha, Sheeta Virya- Sheeta Vipaka- Madhura Prabhava- Rasayana
Doshagnta	<i>Kapha-Pittashamaka</i>	<i>Kaphahara</i>	<i>Tridosahara, Pittashamaka</i> (mainly)
Chemical Constituents	Fruits- anthraquinone glycoside, chebulinic acid, tannic acid, terchebin, Vit. C. Fruit kernel- arachidic, behenic, lindeic, oleic, palmitic & stearic acids. Flowers- Chebulin	Fruits- fructose, galactose, glucose, mannitol, rhamnase, beta- sitosterol Seed- edible oil Seed-coat- gallic acid Bark & heartwood- chebulagic acid, ellagic acid	Fruits- Vit. C, phyllembin, linoleic acid, indole acetic acid, ayxubsm trigaloyglucose, terchebin, corilagin, ellagic acid, phyllembic acid & salts. Roots- ellagic acid, lupeol, oleanolic aldehyde. Bark- leucodelphinidin, procyanidin, tannin etc.
Karmukta	Charaka- Jwaraghna, Arshoghna, Kasaghna, Kushtaghna, Prajasthapana	Charaka- Jwarahara, Kasahara, Virechanopaga	Charaka- Jwaraghna, Kasaghna, Virechanopaga, Kushtaghna, Vayasthapana

Aim and Objective- 1) To study the pathogenesis and Ayurvedic treatment of *Mutraghata* w.s.r.t. Chronic Kidney Disease (CKD).

2) To study the role of *Prathama Triphala Rasayana* in the management of *Mutraghata* w.s.r.t. Chronic Kidney Disease (CKD).

Materials- In this review article, Data are collected from various classical *Samhitas* like *Charka samhita, Sushruta samhita, Ashtanga hrudayam, Ashtanga Sangraha, Sharangadhara, Bhavaprakasha nighantu Samhita* etc., Modern medicine books, Published research articles, google scholar etc. were referred.

Methods- Conceptual, Literary review study.

DISCUSSION

According to *Acharya Sushurta*, the *moola* of *Mutravaha Srotasa* are *Vasti* and *Medhra*.^[16] While *Acharya Charka* has considered *Mutravaha Srotasa* as *Vasti* and *Vankshana*. *Vasti*, centrals to urinary bladder which is reservoir of urine, collecting urinary fluid through *Mutravaha Nadis*. *Medhra* leads the penile part of urethra in male and in females which takes part to expel out *Mutra* only. *Acharya Sushurta* has explained the example of earthen pitcher possibly just to define the permeability of the glomerular membrane. *Sravana kriya* and oozing of the substances occur in Glomerulas and term '*Ayanamukha*' is similar to *Srotamsi*. So, *Mutravaha Srotasa* can be very well coined with Glomerulas with special reference to *Ayanamukha*.^[17] *Mutravaha Srotasa* is very essential *srotasa* for excretion of waste product as *Mutra*. *Mutra* is a *Dravrupi Kitta* produced as result of *Aharapaka* and the function of *Mutra* is to clear the *Kleda* out of the body. *Mutravaha Dhamani*, are the arteries which are concerned to tuft of Bowman's capsule and are only related to urine filtration. Regarding *Mutravaha Nadis*, they are the

channels through which water is carried to blood circulation from large gut under osmolarity pressure gradient.^[18] In case of *Mutraghata*, there's a hamper in the function of *Mutravahasrotasa, Mutravaha Dhamanis* and *Mutravaha Nadis* causing difficult in excretion of urine, causing improper filtration of urine due to which there is a retention of harmful toxins, which accumulates throughout the body affecting Kidneys to function in proper way and leads to aggravation of *Vata* predominant *Tridoshas* at *Vasti pradesha* and thus manifest Chronic Kidney Disease (CKD). *Prathama Triphala Rasayana* constitutes of *Haritaki, Vibhitaki* and *Amalaki*. Both *Haritaki* and *Vibhitaki* comprises of *Kashaya rasa* which pacifies vitiated *Kapha* and *Pitta Doshas*, due to which it acts as *Kledanashaka*. Owing *Amla rasa* in *Amalaki*, it pacifies *prabala vata dosha* in *Vasti*. As *Prathama Triphala Rasayana* is having *Madhura vipaka*, it constitutes the properties of *Mutrala* due to its *Snigdha, Sheeta* and *Guru* properties in nature. Overall *Prathama Triphala Rasayana* acts as *Sarvadhaturvardhana, Balya*, acts as rejuvenating, *Kledanashaka* and *Tridosahara* [Fig: 1]. It can be proposed that *Triphala* inhibited the free radical generation and resultant damage to maintain the normal functions of renal cellular membrane.^[19]

Triphala represents an essential foundational formula as it promotes efficient digestion, absorption, elimination, and rejuvenation. *Triphala* is classified as a *tridoshic rasayana*, meaning that the energetics are appropriate for *Vata, Pitta*, and *Kapha*. Thus it act as *anulomaka, dhatu vardhaka* acts on *pakwashaya*, and regulates *Apana vayu*. *Triphala* is a powerful polyherbal formula with myriad efficacious therapeutic uses for maintaining homeostasis as well as the prevention and treatment of disease. Moreover, studies have validated a number of potential uses of *Triphala*, which include free radical scavenging, antioxidant, anti-inflammatory, immunomodulating, appetite stimulation, gastric hyperacidity reduction, dental caries prevention,

antipyretic, analgesic, antibacterial, antimutagenic, wound healing, anticariogenic, antistress, adaptogenic, hypoglycemic, anticancer, hepatoprotective, chemoprotective, radioprotective, and chemopreventive effects.^[20]

CONCLUSION

Prathama Triphala Rasayana is a gift from ancient *Ayurveda*, which offers an inexpensive solutions to more expensive modes of treatment for everyday concerns with minimum or no undesirable side-effects. It is a natural, renewable, earth-friendly agricultural product, less costly and more potent. Moreover it is *anulomaka*, *dhatu vardhaka* acts on *pakwashaya*, and regulates *Apana vayu*, and can be advised to patients of *Mutraghata* i.e. Chronic Kidney Disease.

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