



SCOPE OF BASTI IN THE MANAGEMENT OF CHRONIC KIDNEY DISEASE – A CLINICAL DISCUSSION.

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ABSTRACT:

Ayurvedic literature has vast description of Mutravaha srotovikaras in different contexts. Acharya Vagbhata gave a unique explanation segregating into Mutra atipravritti and Mutra Apravrutti vikaras.

Symptoms of both Mutrakricchra & Mutraghata seems to be overlapping. Acharya Chakrapani, Dalhana, & Vijayarakshita have demarcated both the entities. The difference is based on intensity of Vibhanda or Avarodha which is more pronounced in Mutraghata.

Chronic Kidney Disease is a global threat to health and hence needs cost-effective treatment and Ayurvedic literature emphasized more ways to treat CKD in chronic condition where in Basti is highlighted as main stream of management.

KEYWORDS: MUTRAGHATA, CKD, BASTI

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 population¹. 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 months².

According to Ayurveda it can be correlated with Mutraghata belonging to pathology of Mutravaha srotas. 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, Mutrotsanga 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 urethrum) & 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 Anuria³.

➤ **General Mode of Action of Basti :-**

Sushruta has scientifically described the mode of action of basti where main importance has been given to "Virya" (active principles) of the drugs administered in the form of Basti⁴. The Virya of Basti from Pakwashaya spreads all over in the body in the same manner as the water poured at roots of tree reaches up to the leaves. The Virya of such basti which comes out earlier as in the case of niruha with or without accompanying feces also gets absorbed due to the rapid action of vata particularly of Apana vata. At the same time virya also draws the morbid dosha to the Pakwashaya wherever they are situated in the body, from head to feet.^{5,6}(30. Vrudha Vagbhata, Ashanga Samgraha, with English translation of Prof.K.R Srikanha murthi, published by Chaukhamba orientalia, Kalpashana, chapter 5, sloka 40, page 591 31. Vrudha Vagbhata, Ashanga Samgraha, with English translation of Prof. K. R Srikanha murthi, Chaukhamba orientalia, Kalpashana, chapter 5, sloka 43 , page 591).

It is obvious from the foregoing that basti has two main actions. First Virya of the basti drugs gets absorbed, which will act according to its properties and nature visa drug or nutrient. Its second major action is related with the facilitation of excretion of morbid substances responsible for the disease process into the Pakwashaya. In this way it has two edged function i.e. facilitation of the absorption of the content of basti into general circulation and facilitation of the excretion of the morbid matter into the colon.

➤ According to Current practice of physiology, action of Basti over 'Agni' may be due to:

- 1) Peristaltic stimulation and more secretion of the digestive juices.
- 2) The stimulation of the local nerve endings, which may be set a reflex stimulation, to help the secretary and motor functions of the G.I. tract, for improving the 'Agni'.
- 3) The proper 'Shodhana' of 'Purisha' and there by preventing the faulty injurious digestive products to act upon the body.

Dosha	Basti Course				
For Vata	Anuvasana	Niruha	Anuvasana		
For Pitta	Anuvasana	Niruha	Niruha	Anuvasana	
For Kapha	Anuvasana	Niruha	Niruha	Niruha	Anuvasana

Basti	Dosha	Kala	Bala	Koshtha	Satva
Tikshna	Kaphavata	Vasanta	Uttama	Krura	Pravara
Madhyama	Kaphapitta	Sadharana	Madhyama	Madhyam	Madhyam
Mrudu	Pittarakta	Sharada	Hina	Mrudu	Avara

About Course of Tikshna Basti:

In Caraka Samhita Siddhithana Bastisutriya 3rd Adhyaya, the reason behind first Anuvasana then consecutively three Kshara basti and again one Anuvasana. About this explanation Chakrapani commented that, for severe vata vitiation 'one' basti putaka, because vatasthanana itself pakwashya, for pitta vitiation 'two' bastiputaka consecutive because the Pittashaya or Pachyamanashaya some far from vatasthanana to evacuate morbid dosha, hence two basti required. In Kapha vitiation consecutive 'three' bastiputaka are advised. Because for "Sthanantaragata dosha nirharana" and "Sthanapratyasya Kriya" are required. Also in vatavaraka or vatanubandhi pitta and kapha awastha like this one can follow.

Tikshna basti indicated in two specific conditions:-

- 1) Where there is predominance of Kapha / Ama / Aavarana conditions
- 2) In case of certain therapeutic Vyapat or complications

What is meant by Tikshna / Kshara Basti?

The basti which is predominantly having tikshna, ushna etc. qualities. Drugs like Gomutra and other media like Amlakanji, Sura, Sauveera or directly addition of Kshara e.g. Yavakshara is called Tikshna basti.

Various Bastis in Samhitas

SL NO	Name of the Basti	Ingredients			Phalashruti
		Kwatha	Kalka	Prakshepaka	
1	Rasnadi Niruha Basti ⁷	Rasna, Amruta, Eranda, Vidanga, Daruharidra, Saptacchada, Ushira, Suravha, Nimba, Shampaka, Bhunimba, Patola, Patha, Akhuparni, Dashamoola, Tikta, Musta, Trayantika, Shigru, Triphala, pinditaka (madanphala)	Madhuyashti, Krishna (Pippali), Phalini, Shatavha, Rasanjana, Shveta Vacha, Vidanga, Kalinga, Patha, Musta	Gomutra, Madhu, Saindhava, Tila Taila, Goghrit	krimi (intestinal parasites), Kushtha (obstinate skin diseases including leprocy), Meha (obstinate urinary disorders including diabetes), bradhna

					(inguinal swelling), udara (obstinate abdominal diseases including ascites), Ajirna (indigestion)
6u2	Mustadi Yapana Basti ^{8,9,10}	Musta, Ushir, Bala, Aragvadha, Rasna, Manjishtha, Katu-Rohini, Trayamana, Guduchi, Goksura Bibhitaka, Bruhati, Punarnava, Shaliparni, Kantakari = each 1 pala Madanphala= 8 Water=1 Adhaka (256Tolas) boiled till remains 1/4th , then add Godugdha= 2 Prasruta (16 Tolas) boiled again till two prasthas of the liquid remains	Shatapushpa, Madhuka, Fruit of Kutaja, Priyangu Rasanjana,	Mamsa rasa= ½ Prastha (32 tolas) Madhu, Goghrita =Both in equal quantity and Saindhav	1. It promotes semen, muscle tissue and strength, rejuvenates the body. 2. It cures KshataKhina, cough, Gulma, colic pain, irregular fever, Bradhna or Vardhma, Kundala (circular movement of Vayu), Udavarta, pain in the pelvic region, Asrug-rajah (menorrhagia), Visarpa (erysipelas), Pravahika(dysentery) and headache. 3. It cures stiffness of knee joints, thighs, calf region and the region of urinary bladder. 4. It cures Ashmari, insanity, piles, Prameha, flatulence, Vatarakta (gout) , PittaKaphaja Vyad

3	Vidangadi Taila Anuvasana Basti ¹¹	Vidanga, Eranda, Rajani (Haridra), Patol, Triphala, Amruta, Tender leaves of Jati, Nirgundi, Dashmoola, NimbAkhuparni, Patha, Sahachara, Shampaka Karavir;	Madanphala, Bilva, Trivruttha, Krishna, Rasna, Bhu-Nimba, Devdaru, Kalinga, Saptaparna, Vacha, Ushir, Darvi, Kushta, Manjistha, Agni, Haridra, Shati, Choraka Shatavha, Pushkarmoola	Tila Taila	Kushta, Krimi, Meha, Arsha, Grahani (Sprue), Klibata (Impotency), Vishamagni (Irregular Digestion), Mala (Production Of Morbid Matter In Excess) And The Diseases Caused By All The Three Doshas (Viz., Vata, Pitta And Kapha).
4	Panchatikt a panchapras rutik Basti ¹²	Patol, Nimbi, BhuNimba, Rasna Saptacchada- Decoction =1 Prasruta	Sarshapa kalka	Goghrit =1 Prasruta Meha	Abhishyanda (Conjunctivitis) And Kushtha.
5	Panchatikt a Basti ¹³	Patol, Nimba, Karanja, Rasna, Saptachhada Decoction=1 Prasruta	Sarshapa kalka=1 Prasruta	Goghrit =1 Prasruta Meha	Abhishyanda (Conjunctivitis) Kushtha And Krimi.
6	Prameha Nashaka Basti ¹⁴	Soma valka (Vitkhadir)			Prameha
8	Vidangadi Taila Anuvasana Basti ¹⁵	Vidanga, Udichya, Saindhava, Shati, Pushkara, Chitrka, Meda, Madana, Yashtavha, Shyama, Nichula, Nagara, Shatavha, Nilini, Rasna, Kalasi, Vrusha, Renu(Parpata), Bilva Ajmoda, Krishna, Danti, Chavya, Naradhip		Erand taila or Tila Tail	Pliha, Udavarta, Vatarakta, Gulma, Anaha, Diseases Produces By Kapha, Prameha, Sharkara And Arsha.
9	Bhadradi Basti	Bhadra (Katphala), Nimbi, Kulattha, Arka, Koshataki, Amruta, Amara(Devadaru), Sariva, Bruhati, Patha, Murva, Aragvadha And Vatsaka	Vacha, Madana, Sarshapa, Saindhava, Amara, Kushtha, Ela, Pippali, Bilva And Nagara	Gomutra , Amla (Fermented liquids) Katuka Taila (Sarshapa Taila), Madhu (Honey),	Kamala(Jaundice) , Pandu(Anaemia), Prameha, Obesity, AgnimandyaKaph aja Vyadhi, Aversion To Food, Galaganda

				Yavakshara, Tila Taila	(Goiter), Garavisha (Homicidal Poison), Glani (Exhaustion), Shleepada (Filariasis) And Udara (Ascites)
10	Madhutaiki Basti ^{16,17}	Decoction of Eranda Moola= 8 Pala	Shatapushpa =1/2pala	Madhu & Tila Taila= each 4 Pala, Saindhava= 1 Tola	Medoroga (Obesity), Gulma, Krimi, Pliha, Udavarta And Prameha. It Is Best For Strength And Complexion, Aphrodisiac, Deepana And Brihana.
11	Rasnadi Asthapana Basti ¹⁸	Rasna, Aragvadh, Varshabhu(Punarnava), Katuka, Ushira, Musta, Trayamana, Amruta, Manjishtha, Brihata Panchamoola, Bibhitaka And Bala-Each One Pala (40gms)	Madanaphala, Yashtavha, Yas htim adhu, Saindhava, Phalini(Priyan gu),I ndrajava, Rasanjan	Mamsa-rasa Madhu, Draksha Sauvir	Increases the growth of muscles, semen, strength, ojas, life span and digestive power, Gulma, Asrugdara, Visarpa, Mutrakruccha (Dysuria), KshatKshaya (Injury To Lung), Visham-Jvara (Intermittent Fever), Arsha, Grahani, Vatakundali, Vatarakta, Sharkara, Ashthila (Enlarged Prostate), Kukshi Shool (Pain In Epigasrium),

					Udara, Aruchi (Anorexia), Raktapitta (Bleeding Disorders), Kaphonmad (Insanity Of Kapha Origin), Prameha (Diabetes), Adhmana (Flatulence) And Hridgrahana (Catching Pain Of The Heart).
12	Saindhavadi thaila Anuvasana Basti ¹⁹		Saindhava (Rock Salt), Madana, Kushta, Shatavha, Nichula, Vacha, Hribera, Rasna Madhuka, Bilva, Bharangi, Dev daru, Katphala, Nagara, Pushkara, Meda, Chavyaka, Shati, Chitraka, Vidanga, Ativisha, Shyama, Harenu, Nilini, Sthira, Ajmoda, Krishna, Danti,	Erand Taila or Tila Taila	Kaphaja Diseases, Bradhna, Udavarta (Upward Movement Of Vayu In The Abdomen), Gulma (Phantom Tumour), Arsha (Piles), Pliha (Splenic Disorders), Meha, Adhyavata (A Joint Disease), Anaha (Tympanites) And Ashmari (Calculus).

Discussion:**Ayurvedic Review**

Chronic kidney disease (CKD) is not clearly mentioned in Ayurveda classical texts, but dispersed fragment of disease can be traced in various chapters, under different heading. While mentioning the genesis of Vrukka (kidney) Sushrut in Sharir Sthan told that it is a Matruij Avayava and it is formed of Rakta and Meda Dhatus.

In Ayurveda CKD, can be considered as a Mootra Dosh Vikar which causes oedema. Both Kidney are root of Medovaha Srotas. According to Acharya Charak the causes of Mootra dosha vikar are intake of drinks and food, sexual intercourse while having the urge for micturition, and suppression of the urge of micturition, disorders of wasting or malnutrition and severe traumatic injury. The pathogenesis of kidney disease is not separately mentioned. It can be included in Prameha, Mutra dosha, Mutra krichchra, injury of Vankshana, Ashmari (renal stones) and oedema (Shopha) etc. Chronic kidney disease is a very complex Vyadhi Sankara.

Depending upon causative factors stage etc. it shows different signs and symptoms. Etiological factors of CKD ranges between Roopavasthaa, upadrava and Vyadhi sankara of following diseases: Pandu; Shotha; Parmeha Upadrava; Udaavarta; Ashmaree Upadrava, Kshatksheen; Vaatvyadhi; Mutrakrichchra; Upadrava Most of sign and symptoms present in CKD matched with signs and symptoms of Rasapradoshaj Vyaadhi. Sign and symptoms of Rasapradoshaj Vyaadhi are loss of desire of food, anorexia, distaste in mouth, loss of taste sensation, nausea, heaviness, drowsiness, body ache, fever, feeling of darkness, paleness, obstruction in channels, impotency, malaise, leanness, loss of digestive power, untimely wrinkles and grey hairs.

In Charaka Samhita it is said that Kidney and bladder are the root of the channels carrying urine and fat, the opening of these channels get affected by Meda, Mamsa and Jala Dhatus of the body. The vitiated Doshas while coming in contact with the opening of these channels obstructs them. This result in the manifestation of kidney disease.

According to Acharya Sushurta, the moola of Mutravaha Srotasa are Vasti and Medhra¹⁶. 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 also 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 'Ayanamukha²⁰' is similar to Srotamsi. So, Mutravaha Srotasa can be very well coined with Glomerulas with special reference to Ayanamukha. 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 gradient²¹. 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).

Punarnavashtaka kashaya predominantly has tikta, kashaya and madhura rasa, laghu guna and ushna veerya. These drugs act as shothahara. By the diuretic action, it flushes out the toxin and reduces excess fluid retention. Beta sitosterol is one of the active principles present in this which helps in easy metabolism of cholesterol and has anti-inflammatory effect. Thus helps in reducing pedal edema, burning micturition and improves urine output. Gokshura is a widely used mutrala dravya in the clinical practice. It has madhura rasa, guru-snigdha guna and sheeta veerya.

The studies suggest diuretic properties of gokshura are due to large quantities of nitrates and potassium salts. Haritaki, shunti with gomutra – it has predominantly agni and vayu mahabhuta, ushna teekshna and laghu guna. This acts as medohara and as sramsaka and also helps in alleviating vata and kapha.

Mustadiyapana basti with ajapakvashayamamsa rasa, ksheera and mustadiyapana kashaya was given for 8 days. Ajamamsa is one among the nityasevaniya dravya. Most of the ingredients are tikta pradhana and madhura rasa dravya which does shothahara, Rakta prasadena and medodhatu poshana. It acts both as shodhana and rasayana. The rectal wall has neuro-receptors and pressure receptors which are stimulated by basti dravya

Conclusion:

Approach of Management: Ayurveda offers a comprehensive approach in the treatment of CKD. Abstinence from the causative factor (Nidan Parivarjan) the first and foremost advice given to the patients in Ayurveda.

Management of Systemic Derangements (Bheshaja Chikitsa), aims at treating Amotpatti by Jathragani improvement thereby removing Srotorodha. Management in form of Shaman Chikitsa and Shodhan Chikitsa can be done. While explaining the genesis of Kidney (Vrukka).

Acharya Sushrut has said that it is formed from Rakta and Meda Dhatu. Ahaara is converted to Rasa Dhatu and it is further converted to Raktadi remaining Dhatus. So, line of treatment should be focusing on Jathragani correction, which in turns gives strength to Dhatwagnis leading to formation of fine quality of Rasadi Dhatus, also the selection of herbal drugs which specifically act on Rakta and Meda Dhatu, leading to formation of Saara Bhaaga of the both the Dhatus leading to proper nourishment of Vrukka (kidney). After Shamana Chikitsa when Laxana of Daurbalya and Dhatu Kshaya is reduced in patient then he can be given Mrudu Virechana and Basti.

Shamana Chikitsa: In Shamana Chikitsa drugs like Trinpanchmool, Gokshur, Punarnava can be used. Trinpanchmool is having Basti Shodhaka property. Gokshur is Sheet Veerya, Balya, Basti Vishodhaka, Madhur Vipaki, Deepana, Vrushya, Pushtikara and Ashmarihara. Pramehahara, Shvasahara, Kasahara, Arshahara, also useful in Hridroga and Vatahara in nature. Punarnava is Shophahara in nature. Gokshur is one among the drug of Mutravirechaniya Gana, and it act as Anulomaka of Apaana Vayu. Punarnava has Ushna Veerya property which corrects Srotosang in Vrukka. It is anti-inflammatory and helps in regeneration of

kidney tissues . Study was carried out to find the efficacy of Gokshur Punarnava Basti in the management of microalbuminuria in diabetes mellitus, it is found to be very effective and safe. As the symptoms of CKD resembles Rasavaha Srotas Dushti. Agnimandya and Aamotpatti are two closely associated features in the pathogenesis of disease. Trinpancmool, Gokshur and Punarnava not only help in correcting Agnimandya but also removal of morbid Doshas.

Samshodhana Chikitsa: Samshodhana Chikitsa is helpful in removal of morbid Doshas, it also helps in preventing recurrence and progression of disease. Various Samshodhana Chikitsa like Basti, Mridu Virechana be given to patient.

Before carrying out Sanshodhan Chikitsa Deepana Pachana is done. Basti is the treatment mostly effective on Pakvashaya in which urine formation carried out. It is not only effective in treating Vaataja Rogas but is also effective in Pittaja, Kaphaja, Sansargaja, Sannipataja and Raktaja Rogas.

Ayurveda emphasizes the importance of Trimarma (Sira, Hrudaya and Basti) which are to be protected, if not it may lead to death. Basti Marma although structurally similar to bladder but here the entire renal functioning is to be considered among which kidneys plays a major and vital role. So, considering Basti Marma is affected in CKD and keeping in mind importance of Marma Paripalana, Basti Karma can be considered as treatment of choice.

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