

MANAGEMENT OF CHRONIC KIDNEY DISEASE BY AYURVEDA W.S.R. TO BASTIBhuvnesh Sharma¹, Gyanendra Datta Shukla², Parul Sharma³¹MD Scholar, ²Associate Professor, ³Assistant Professor, Department of Panchakarma Rishikul Campus, Uttarakhand Ayurveda University, Haridwar, Uttarakhand, IndiaCorresponding Author: ayurveda.nature@gmail.com<https://doi.org/10.46607/iamj2008092020>

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**ABSTRACT**

Kidneys plays a vital role in homeostasis by maintaining the body fluid and removing the harmful toxins out of the body through urine formation. Chronic kidney disease is a type of kidney disease which is progressive in nature and there is gradual loss of kidney function over a period of months or years and have complex and different etio-pathologies. With the growing number of cases and keeping in mind the available conventional line of treatment and its financial burden on patient, *Ayurveda* through its holistic line of management, either in the form of *Shamana & Shodhana* or in the form of dietary advices stand distinct and it seems to be effective and safe. And by including proper daily dietary rules and regimens in patients of Chronic kidney disease (CKD) it can be very effectively managed. Here *Trinpanchmool*, *Punarnava*, *Gokshur* used in *Basti*. *Basti* plays a vital role here in CKD, it helps in expelling out the uremic toxins which originates in gut thereby improving the quality of life and reducing the sign and symptoms of disease.

Keywords: Chronic kidney disease, Uremia, *Shodhana*, *Shamana*, *Punarnava***INTRODUCTION**

Chronic kidney disease is myriad of various pathophysiological mechanisms that is taking place in our body because of which there is gradual loss of kidney functions over the period of time. Although diabetes and

hypertension are the leading cause, numerous other causes are there which leads to deterioration of kidney function. The Global Burden Disease 2015 study also estimated that, in 2015, 1.2 million people died from

kidney failure, an increase of 32% since 2005.¹ In 2010, an estimated 2.3–7.1 million people with end-stage kidney disease died without access to chronic dialysis.² Additionally, each year, around 1.7 million people are thought to die from acute kidney injury.³ Overall, therefore, an estimated 5–10 million people die annually from kidney disease. Kidney disease is associated with a tremendous economic burden. High-income countries typically spend more than 2–3% of their annual health-care budget on the treatment of end-stage kidney disease, even though those receiving such treatment represent under 0.03% of the total population.⁴ In 2010, 2.62 million people received dialysis worldwide and the need for dialysis was projected to double by 2030.⁵ Chronic kidney disease progression associated with serious complications like cardiovascular disease, anaemia, metabolic bone disease. Assessment of CKD patient is done for presence of these complications and accordingly line of treatment is decided. Number of CKD patient is on rise due to growing number of cases of Diabetes and hypertension, and considering global burden of disease, a multidisciplinary treatment approach is required.

CKD classification/ staging

CKD is defined as the presence of kidney damage, manifested by abnormal albumin excretion of diseased kidney function, quantified by measured or estimated glomerular filtration rate (GFR), that persist for more than three months.^{6,7} To facilitate assessment of CKD severity, the National kidney foundation developed criteria, as part of its Kidney Disease Outcomes Quality Initiative (NKF DOQI™), stratify CKD patients.⁸

- Stage 1: normal eGFR \geq 90 mL/min per 1.73 m² and persistent albuminuria
- Stage 2: eGFR between 60 to 89 mL/min per 1.73 m²
- Stage 3: eGFR between 30 to 59 mL/min per 1.73 m²
- Stage 4: eGFR between 15 to 29 mL/min per 1.73 m²
- Stage 5: eGFR of $<$ 15 mL/min per 1.73 m² or end-stage renal disease

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 *Matruj Avayava* and it is formed of *Rakta* and *Meda Dhatus*.⁹ In *Ayurveda* CKD, can be considered as a *Mootra Dosh Vikar* which causes oedema. Both Kidney are root of *Medovaha Srotas*.¹⁰ 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.¹¹ 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 (*Shofa*) 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:

Paandu; 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.¹² In *Charak 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*, *Mansa* 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.¹³

Approach of Management: *Ayurveda* offers a comprehensive approach in the treatment of CKD. Abstinence from the causative factor (*Nidan Parivarjan*) is

the first and foremost advice given to the patients in *Ayurveda*. Management of Systemic Derangements (*Bheshaja Chikitsa*), aims at treating *Amotpatti* by *Jathragni* 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 *Jathargani* 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 *Dhatu* 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.¹⁴ *Gokshur* is *Sheet Veerya*, *Balya*, *Basti Vishodhaka*, *Madhur Vipaki*, *Deepana*, *Vrushya*, *Pushtikara* and *Ashmarihara*. *Pramehahara*, *Shvasahara*, *Kasahara*, *Arshahara*, also useful in *Hidroga* and *Vatahara* in nature.¹⁵ *Punarnava* is *Shophahara* in nature.¹⁶ *Gokshur* is one among the drug of *Mutravirechaniya Gana*¹⁷, 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 tissues¹⁸. 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.¹⁹ As the symptoms of CKD resembles *Rasavaha Srotas Dushti*. *Agnimandya* and *Aamotpatti* are two closely associated features in the pathogenesis of disease. *Trinpanchmool*, *Gokshur* and *Punarnava* not only help in correcting *Agnimandya* but also removal of morbid *Doshas*.

Samshodhana Chikitsa: *Sanshodhana Chikitsa* is helpful in removal of morbid *Doshas*, it also helps in preventing recurrence and progression of disease. Various *Samshodhana Chikitsa* like *Basti*, *Mridu Virechan*

can 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.²⁰ It is not only effective in treating *Vaataja Rogas* but is also effective in *Pittaja*, *Kaphaja*, *Sansargaja*, *Sannipataja* and *Raktaja Rogas*.²¹ *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.

DISCUSSION

In chronic kidney disease, there is gradual loss of nephrons which further proceed to end stage renal disease. So, there is definite involvement of *Vaat Dosh* which are leading to degenerative changes in kidney. So *Basti* being the best modality in treatment of *Vaat Viakras* may play an excellent role here in controlling the further progression of disease. *Basti* helps in removal of morbid *Doshas* which thereby helps in achieving equilibrium of *Doshas* in body. Progression of CKD leads to CRF where uremic toxins start developing and showing effect on body. The researches have shown that uremic toxins originate in gut. Microbes in colon produces compounds, normally excreted by the kidneys, which are potential uremic toxins.²² Solutes made by colon microbes may contribute to uremic illness.^{23,24} Such putrefaction products were originally detected in urine and subsequently shown to accumulate in plasma when the kidneys failed.²⁵ Probable mode of action of *Basti* can be understand (1) by absorption mechanism, (2) by system biology concept, (3) by neural stimulation mechanism, (4) by excretory mechanism. Pharmacodynamics outcome of *Basti Karma* may be due to functioning of the one or combined effect of all the four mechanisms.²⁶ Here *Trinpanchmool* along with *Gokshur* and *Punarnava* used in *Kwath Dravya* and *Sneha Dravya* for preparation of *Niruha*. Kidney (*Vrukka*) is *Matruj Avayava* and it is *Rakta Meda*

Pradhan, so we need drugs which not only helps in *Basti Shodhan* and *Rakta Prasadan* but also not *Teekshna* in nature. Combination of *Trinpanchmool Gokshur Punarnava* are not only *Bastishodhak*, but also *Sheet Veerya* in nature. *Punarnava* have proven effect of regeneration of tissue. So, this combination of drugs in *Niruha Basti* preparation can be helpful in patients of CKD to stop its progression. *Niruha Basti* is hyper osmotic solution which causes movement of solvent from cells of colon to the lumen containing *Basti Dravya* facilitates the absorption of endotoxin and produce detoxification during elimination.²⁷ This is probably how *Basti* expels toxins from the body and cleanses colon. Intestines being highly innervated, *Basti Dravya* stimulates the nerve ending of rectum and colon thereby activating autonomic nervous system and thus helps in excretion of vitiated *Doshas* and *Malas*.

CONCLUSION

With the growing number of cases of CKD and keeping in mind the available conventional line of treatment and its financial burden on patient, *Ayurveda* through its holistic line of management, either in the form of *Shaman* and *Shodhan* or in the form of dietary advices stand distinct and it seems to be effective and safe. *Basti Chikitsa* given with the help of herbal drugs help in improving the quality of life and eliminating the uremic toxins from the body and put a positive impact on body as whole.

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