

CHRONIC KIDNEY DISEASE IN AYURVEDA: CONCEPTUAL UNDERSTANDING AND MANAGEMENT APPROACHES

*¹Dr. Neetu Sharma, ²Dr. Brahmanand Sharma

*¹M.D. (Ayu.), Assistant professor, Department of Kaya Chikitsa, Post Graduate Institute of Ayurveda, DSRRAU, Jodhpur, Rajasthan.

²Ph.D. (Ayu.), Head of Department, Department of Kaya Chikitsa, Post Graduate Institute of Ayurveda, DSRRAU, Jodhpur, Rajasthan.

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*Corresponding Author

Dr. Neetu Sharma

M.D. (Ayu.), Assistant professor,
Department of Kaya Chikitsa, Post
Graduate Institute of Ayurveda,
DSRRAU, Jodhpur, Rajasthan.



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ABSTRACT

Chronic kidney disease (CKD) is characterized by the presence of kidney damage or an estimated glomerular filtration rate (eGFR) of less than 60 mL/min/1.73 m², persisting for 3 months or more. CKD involves a progressive loss of kidney function, often leading to the need for renal replacement therapy, such as dialysis or transplantation. In *Ayurveda*, the kidneys (*Vrukka*) are considered the foundational organs of the *Medovaha Sarotasa*. They primarily develop from the *Rakta* (blood) and *Meda* (fat) *Dhatus*, and are classified as *Matruja* (inherited) *Avayava* (organs). denotes a condition of urinary retention associated with mild dysuria, primarily resulting from obstruction within the urinary tract. This condition results in either a complete lack of urine excretion or minimal, difficult urination. It arises from the vitiation of Basti due to circulating aggravated *Doshas*. Severe or complete obstruction of the

urinary tract may give rise to systemic manifestations such as excessive thirst, delirium, and dyspnea, closely resembling features of uremic syndrome. Ayurveda adopts a holistic and individualized approach in the management of chronic kidney disease (CKD). The foremost therapeutic principle involves the elimination of causative factors (*Nidana Parivarjana*). Correction of systemic derangements through *Bheshaja Chikitsa* like *Gokshura*, *Punarnava*, *Rasayana* etc aims to regulate *Jatharagni*, thereby preventing the formation of *Ama* and relieving *Srotorodha* (obstruction of bodily channels). The therapeutic plan may incorporate

both *Shamana Chikitsa* (palliative management) and *Shodhana Chikitsa* (purificatory therapies).

KEYWORDS: CKD, *Gokshura Mutraghata*.

INTRODUCTION

Chronic kidney disease, also called chronic kidney failure, involves a gradual loss of kidney function. Kidneys filter wastes and excess fluids from blood, which are then removed in urine. Advanced chronic kidney disease can cause dangerous levels of fluid, electrolytes and wastes to build up in body. Chronic kidney disease (CKD) is characterized by the presence of kidney damage or an estimated glomerular filtration rate (eGFR) of less than 60 mL/min/1.73 m², persisting for 3 months or more. CKD involves a progressive loss of kidney function, often leading to the need for renal replacement therapy, such as dialysis or transplantation.^[1]

The 2012 Kidney Disease Improving Global Outcomes (KDIGO) CKD classification recommends specifying the cause of CKD and classifies the condition into 6 categories based on GFR (G1 to G5, with G3 split into 3a and 3b). In addition, it also includes staging based on 3 levels of albuminuria (A1, A2, and A3), with each stage of CKD subcategorized according to the urinary albumin-creatinine ratio (ACR; mg/g or mg/mmol) in an early morning "spot" urine sample.^[2]

The prevalence of kidney failure and its major risk factors (including CKD) are increasing worldwide, and the most rapid growth is observed in low- and middle-income countries (LMICs). Increase in the burden of kidney failure is a major challenge for health systems, especially in LMICs, due to growing demand for expensive kidney replacement therapies such as dialysis.^[3]

The economic and social impacts of CKD are profound, particularly in the context of end-stage renal disease (ESRD). The monthly cost of hemodialysis (HD) in private hospitals averages ₹12,000, with annual expenses reaching approximately ₹140,000. Kidney transplantation, while potentially more cost-effective in the long term, has an upfront cost ranging from ₹50,000 in government facilities to ₹300,000 in private hospitals. Post-transplant, the yearly maintenance for immunosuppressive drugs amounts to ₹120,000 or ₹10,000 per month.^[4]

AIM

To explore the Ayurvedic understanding and management of chronic kidney disease (CKD) through classical texts.

OBJECTIVE

To evaluate the efficacy of Ayurvedic therapies, including Samshodhana procedures and nephron-protective medicinal plants, in the management of chronic kidney disease.

MATERIAL AND METHODS

This review utilized classical Ayurvedic texts to analyze kidney-related concepts and management principles. Contemporary research articles from databases like PubMed and AYUSH portals were reviewed for evidence on Ayurvedic therapies in CKD. Key findings were synthesized to correlate classical wisdom with modern applications.

Ayurvedic Review- In Ayurveda, the term "Basti" is often associated with the urinary system, as it is frequently mentioned in the context of processes such as *Mutranirmana* (formation of urine), (obstruction of urine), *Mutrakracchra* (difficult urination), *Mutrashmari* (urinary stones), and the pathogenesis of *Prameha* (diabetes). Chronic kidney disease has no direct link to any of the *Ayurvedic* classics' clinical entities. All disorders cannot be labelled with a name, as stated in *Charaka Samhita* (A key textbook for Ayurveda medicine) *Sutra sthana Trisothiyadyaya*. The physician should never be embarrassed if he or she does not understand the disease's name. In many cases, the same *Dosha* may circulate to other parts of the body, causing other diseases, so the treatment of the disease should be targeted once the location of the disease and its causes are determined. The diseases can be studied as provoked *Dosha*, specific causes, and their sites.^[5] Good knowledge of *Vikara Prakarti*, *Adhishthanantarani* and *SamutthanaVishesha* is important for *Nidana and Chikitsa*.^[6] An Ayurvedic physician can be understood the disease and its process thoroughly.

1. *Vikara Prakriti* (state of vitiated *Dosha*, *Dhatu*, and *Mala* which causing the disease)
2. *Adhishthanantarani* (site of vitiated *Dosha*)
3. *SamutthanaVishesha* (cause of vitiation of *Dosha*) The main cause of all diseases is provoked *Dosha*. We can use the same methodology to study chronic kidney disease.^[7]

Table 1: Vikara Prakriti, Adhishthanantarani and Samutthana Vishesha in Chronic kidney disease (CKD)

S.N.	Lakshana	Dosha	Dushya	Srotasa
1.	Oedema	Kapha	Rasa, Rakta, Udaka	Rasavaha, Udakavaha
2.	General Weakness	Vata	Rasa	Rasavaha
3.	Loss of Appetite	Kapha	Rasa	Rasavaha, Annavaha
4.	Nausea / Vomiting	Kapha	Rasa	Rasavaha, Annavaha
5.	Muscle Cramps	Vata	Rasa, Rakta, Mamsa	Mamsavaha
6.	Breathlessness Pranavaha, Rasavaha	Kapha	Rasa, Rakta	Pranavaha, Rasavaha

In *Ayurveda*, the kidneys (*Vrukka*) are considered the foundational organs of the *Medovaha Sarotasa*. They primarily develop from the *Rakta* (blood) and *Meda* (fat) *Dhatus*, and are classified as *Matruja* (inherited) *Avayava*(organs).

Chronic kidney disease (CKD) is not directly mentioned in *Ayurveda*, but *Ayurvedic* concepts can be applied to it through *Nidana panchaka* (the five-fold diagnostic approach). The signs and symptoms of CKD primarily indicate an imbalance in *Vata* and *Kapha Doshas*, along with disturbances in multiple *Doshas*. Initially, there is vitiation in *Rasa* (plasma), *Rakta* (blood), *Mutra* (urine), and *Udaka* (water), followed by involvement of all *Dhatusand Upadhatus* (tissues and sub-tissues). The aggravated *Doshas* and *Dhatus* circulate through the *Rasa* with *Vyana Vayu*, affecting the *Mutravaha srotasa* (urinary channels), resulting in *Khavaigunya* (dysfunction). The clinical manifestations of *Dosha* disturbance are considered the primary signs of CKD.

– denotes a condition of urinary retention associated with mild dysuria, primarily resulting from obstruction within the urinary tract. This condition results in either a complete lack of urine excretion or minimal, difficult urination. It arises from the vitiation of *Basti* due to circulating aggravated *Doshas*.^[8]

Clinically, it presents as either complete absence of urine output or scanty and painful micturition. According to *Ayurvedic* principles, this condition develops due to the vitiation of *Basti* caused by aggravated and circulating *Doshas*. Habitual suppression of the urge to urinate in disorders such as *Vata Basti*, *Mutratita*, *Mutrajathara*, and *Vata Kundalika* contributes significantly to urinary retention. Structural obstructions, including *Mutragranthi* and *Ashthila*, further impede urine flow.

In *Ushnavata*, inflammatory changes arising from urinary tract infections lead to both retention and dysuria. *Mutrakshaya*, characterized by reduced urine output due to inadequate hydration, may progressively compromise renal perfusion, ultimately resulting in renal cellular damage. *Vidvighata* involves contamination of urine with fecal matter due to rectovesical fistula formation; when such contamination ascends to the upper urinary tract, it predisposes the individual to infections and renal injury. *Bastikundala* resembles an atonic bladder, leading to urinary retention. In cases of complete obstruction of the urinary tract, symptoms like thirst, delirium, and breathlessness may emerge, resembling uremic syndrome.^[9]

Severe or complete obstruction of the urinary tract may give rise to systemic manifestations such as excessive thirst, delirium, and dyspnea, closely resembling features of uremic syndrome. Persistent urinary retention from these underlying causes leads to urinary stasis, thereby increasing susceptibility to infections and the formation of urinary calculi, which progressively impair renal function.

Samprapti of Chronic kidney disease – Complex urinary tract pathologies and certain systemic diseases contribute to the disturbance of the physiological balance of the three *Doshas (Tridosha)*. Acharya Sushruta describes the process of urine formation as a pitcher immersed in water, where the *Doshas* enter the Basti(kidneys) in a similar manner, filling it from all sides.^[10] These doshas impair the function of the kidneys. After digestion, the kidneys separate and differentiate urine as a metabolic by-product for elimination.^[11] However, when the kidneys are diseased, they cannot properly differentiate and separate urine, leading to the retention of harmful metabolic waste products in the body, which then circulate and cause systemic harm.

Staging

✚ The 6 CKD categories, known as stages 1 through 5, are described below (stage 3 is separated into 3a and 3b):

- Grade 1: GFR 90 mL/min/1.73 m² and above with evidence of kidney disease, such as hematuria or proteinuria
- Grade 2: GFR 60 to 89 mL/min/1.73 m²
- Grade 3a: GFR 45 to 59 mL/min/1.73 m²
- Grade 3b: GFR 30 to 44 mL/min/1.73 m²
- Grade 4: GFR 15 to 29 mL/min/1.73 m²

- Grade 5: GFR less than 15 mL/min/1.73 m² or treatment by dialysis

✚ The 3 levels of albuminuria include an ACR (albumin-creatinine ratio), Albuminuria categories in CKD

Category	AER (mg/24 hours)	ACR (approximate equivalent)		Terms
		(mg/mmol)	(mg/g)	
A1	<30	<3	<30	Normal to mildly increased
A2	30-300	3-30	30-300	Moderately increased*
A3	>300	>30	>300	Severely increased

Management - The contemporary approach to chronic kidney disease (CKD) management focuses on recognizing and managing the root causes of the disorder. Proper regulation of factors known to worsen disease progression, such as hypertension, proteinuria, metabolic acidosis, and hyperlipidemia, is vital for preserving kidney function and delaying disease advancement. Hypertension should be managed according to recommended blood pressure targets, and efforts should be made to reduce proteinuria to below 1 g/day when possible.^[12]

1. **Nidanaparivarjana:** Avoidance of causative factors related to diet (Ahara) and lifestyle (Vihara).
2. **Rasayana:** Useful for repairing and enhancing the function of the affected organ.
3. **Shodhana Karma:** Supporting the body's excretory functions through detoxification processes.

The primary objective of Ayurveda is the preservation and promotion of health in healthy individuals, while the management of disease is considered a secondary goal. Ayurveda adopts a holistic and individualized approach in the management of chronic kidney disease (CKD). The foremost therapeutic principle involves the elimination of causative factors (*Nidana Parivarjana*). Correction of systemic derangements through *Bheshaja Chikitsa* aims to regulate *Jatharagni*, thereby preventing the formation of *Ama* and relieving *Srotorodha* (obstruction of bodily channels). The therapeutic plan may incorporate both *Shamana Chikitsa* (palliative management) and *Shodhana Chikitsa* (purificatory therapies).

According to Acharya Sushruta, the kidneys (*Vrukka*) are formed from the Rakta and Meda Dhatu. Ahara (food) is converted into Rasa Dhatu, which then transforms into the other Dhatus, including Rakta. Therefore, the treatment should focus on correcting *Jathragni*, which strengthens the *Dhatwagni* (digestive fires), leading to the formation of high-quality Rasadi Dhatu. The use of herbal drugs that specifically act on Rakta and Meda Dhatus is also

crucial to nourish the kidneys. After the palliative treatment (*Shamana Chikitsa*) reduces signs of weakness (*Daurbalya*) and tissue depletion (*Dhatu Kshaya*), the patient can be administered gentle purgation (*Mrudu Virechana*) and *Basti*(medicated enemas).

Shamana Chikitsa : *Gokshura* possesses *Madhura Rasa* and *Madhura Vipaka* and is known for its *Deepana*, *Balya*, *Basti Vishodhaka*, *Vrushya*, and *Ashmarihara* properties, along with *Sheeta Veerya*. Owing to its *Madhura Vipaka*, *Gokshura* facilitates the smooth elimination of metabolic wastes through both feces and urine. Its pharmacodynamic actions enhance *Snigdha Guna* and promote an increase in *Kleda* (fluid metabolic components) within the body. In response to this physiological increase in *Kleda*, a regulatory feedback mechanism is initiated, encouraging enhanced urinary excretion, thereby contributing to the maintenance of internal fluid balance and homeostasis. The cooling potency (*Sheeta Veerya*) of *Gokshura* supports blood purification (*Rakta Prasadana*). Since the primary function of the kidneys is to maintain homeostasis by filtering blood and regulating electrolyte balance, administering *Gokshura* with its *Sheeta Veerya* helps enhance kidney function. Additionally, as a natural diuretic, it increases urine output, making it beneficial for managing fluid retention-related disorders.^[13]

Punarnava, *Guduchi*, *Gokshura*, *Shatavari*, and *Shilajeet* are classified as *Rasayana* drugs in Ayurveda. Among these, *Punarnava*, *Gokshura*, and *Shilajeet* are particularly indicated for disorders of the *Mutravaha Samsthana* (urinary system). These formulations may be considered *Naimittika Rasayana* for the kidneys and other components of the *Mutravaha Srotasa*. Clinical observations have demonstrated the beneficial effects of their *Rasayana* properties, with patients reporting improvement in *Jatharagni*, enhanced quality and duration of sleep, overall improvement in well-being, increased functional capacity, and a marked reduction in disease-related symptoms. Contemporary scientific studies further substantiate these findings by revealing the strong antioxidant and free radical–scavenging potential of *Rasayana* drugs. Their *Rasayana* properties have been demonstrated in clinical studies, where patients reported improvements in digestive fire (*Jatharagni*), better sleep quality and quantity, enhanced well-being, increased functional capacity and a noticeable reduction in disease symptoms. Modern research supports these claims, highlighting the potent antioxidant and free radical scavenging activities of *Rasayana* drugs. Extensive studies in phytochemistry have further confirmed the significant antioxidant properties and free radical neutralization effects of these herbs.^[14]

Shodhana Chikitsa: In the management of CKD, the elimination of circulating vitiated Dasha can be effectively achieved through *Virechana* therapy.^[15] Furthermore, *Basti* therapy, when administered along with suitable medications tailored to manage the complexities of *Sannipata* conditions, is strongly advocated. This therapeutic approach provides multifaceted benefits, including purification of the system, normalization of aggravated *Doshas*, and promotion of overall vitality and longevity. Specific *Basti* formulations such as *Sarakashaadi Niruha Basti*, *Gokshuradi Niruha Basti*, *Pitadaru Siddha Taila Anuvasana*, and *Bala rishabhakadi Anuvasana Basti* are particularly prescribed for conditions affecting the *Basti*(urinary system).^[16]

CONCLUSION

Chronic kidney disease (CKD) is characterized by a progressive and irreversible decline in renal function occurring over months to years. From an Ayurvedic perspective, CKD is understood as an *Upadrava* (complication) arising from disorders of the urinary system such as, or from systemic conditions like *Prameha* (diabetes mellitus). The vitiation of *Doshas* affects the *Basti*, impairing normal urine formation and filtration, which results in the accumulation of toxic metabolic by-products and subsequent systemic involvement. In the initial stages, the condition is considered *Krucchrasadhya* (difficult to treat), whereas in advanced stages it is categorized as *Yapya* (manageable) or incurable.

Therapeutic management in Ayurveda encompasses *Shodhana* (purificatory procedures), *Shamana* (palliative measures), and *Rasayana* (rejuvenative therapy). The incorporation of *Rasayana* therapy, along with mental well-being and adherence to a lifelong dietary and lifestyle regimen, may help slow disease progression, preserve remaining renal function, and improve overall quality of life, even in advanced stages of the disease.

REFERENCES

1. Satyanarayana R. Vaidya R. Satyanarayan, Aeddula R. Narothama, <https://www.ncbi.nlm.nih.gov/books/NBK535404/>
2. Inker LA, Astor BC, Fox CH, Isakova T, Lash JP, Peralta CA, Kurella Tamura M, Feldman HI. KDOQI US commentary on the 2012 KDIGO clinical practice guideline for the evaluation and management of CKD. *Am J Kidney Dis.*, 2014 May; 63(5): 713-35. [[PubMed](#)].

3. Marcello Tonelli, Victoria Nkunu et al., ISN public affairs, Framework for establishing integrated kidney care programs in low- and middle-income countries, *Kidney International Supplements*, 2020; 10: e19–e23.
4. Solanki K. Akshay, Katara Ramakant et al, *Ayushdhara, An International Journal of Research in AYUSH and Allied Systems, Ayurvedic Perspectives on Chronic Kidney Disease: A Review of Classical Wisdom and Contemporary Applications*, November-December 2024; 11(6): ISSN: 2393-9583 (P)/ 2393-9591 (O).
5. Vagbhatta. R. Vidyanath, *Astanga hr̥daya. Sutrasthana Ch. 12, Sloka 65*. 1st ed. Varanasi: Chaukhamba Surbharati Prakashan, 2013; 210.
6. Vagbhatta. R. Vidyanath, *Astanga hr̥daya. Sutrasthana Ch. 12, Sloka 66*. 1st ed. Varanasi: Chaukhamba Surbharati Prakashan, 2013; 210.
7. Vagbhatta. R. Vidyanath, *Astanga hr̥daya. Sutrasthana Ch. 12, Sloka 32*. 1st ed. Varanasi: Chaukhamba Surbharati Prakashan, 2013; 204.
8. Vagbhatta. Paradakar Shastri (ed.), *Astanga hr̥daya. Nidana sthana Ch. 9, Shloka 3*. 9th ed. Varanasi: Chaukhamba Surbharati Prakashan, 2011; 498.
9. Agnivesha. TrikamjiAcarya(ed.) *Caraka samhita. Siddhi sthana Ch. 9, Shloka 48*. Varanasi: Chaukhamba Surbharati Prakashan, 2005; re-print, 719.
10. Sushruta. TrikamjiAcarya(ed.)*Sushruta samhita. Nidana sthana Ch. 3, Shloka 23, 24.7th ed. Varanasi: Chaukhamba Orientalia, 2003, p. 279, 280.*
11. Agnivesha. Trikamji Acarya (ed.) *Caraka samhita. Dipika commentary by Cakrapannidutta. Cikitsasthana. Ch. 25, Shloka 17*. Varanasi: Chaukhamba Surbharati Prakashan; 2005 re-print, p. 515.
12. Solanki K. Akshay, Katara Ramakant et al, *Ayushdhara, An International Journal of Research in AYUSH and Allied Systems, Ayurvedic Perspectives on Chronic Kidney Disease: A Review of Classical Wisdom and Contemporary Applications*, November-December 2024; Vol 11(6): ISSN: 2393-9583 (P)/ 2393-9591 (O).
13. Sudheendran, A., Shajahan, M. A., & Premlal, S.(2021). A comparative diuretic evaluation of fruit and root of Gokshura (*Tribulus terrestris* Linn.) in albino rats. *Ayu*, 42(1): 52–56. https://doi.org/10.4103/ayu.AYU_154_17
14. Prashanth, G. S., Baghel, M. S., Ravishankar, B., Gupta, S. N., & Mehta, M. P. (2010). A clinical comparative study of the management of chronic renal failure with Punarnavadi compound. *Ayu*, 31(2): 185–192. <https://doi.org/10.4103/0974-8520.72388>
15. Sushruta. Trikamji Acarya (ed.)*Sushruta samhita. Cikitsasthana Ch.33, Shloka 3,32. 7th ed. Varanasi: Chaukhamba Orientalia, 2003; 515: 519.*

16. Agnivesha. Trikamji Acarya (ed.)Caraka samhita. Dipika commentary by Cakrapanidutta. Siddhi sthana. Ch.9, Shloka 8. Varanasi: Chaukhamba Surbharati Prakashan, 2005; reprint, 717: 718.