



Case Study

AYURVEDIC MANAGEMENT OF CHRONIC KIDNEY DISEASE

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ABSTRACT

Chronic kidney disease (CKD) is characterized with disrupted kidney function for more than 3 months or in other terms, it is defined as the kidney condition with Glomerular Filtration Rate (GFR) <60 ml/min per 1.73 m². **Purpose:** Chronic kidney disease is a spectrum of different pathophysiologic processes associated with abnormal kidney function and a progressive decline in glomerular filtration rate. Hemodialysis and peritoneal dialysis are the most common treatments for chronic kidney failure, followed by kidney transplantation, also carrying many serious adverse effects. The prevalence of chronic kidney disease is increasing day by day. Management of end stage kidney failure which includes renal replacement therapy and renal transplant is not affordable for majority of the patients of India because of poor socio-economic conditions. Hence if disease progress is retarded or slowdown in the initial stage, patients can be prevented to reach to end stage kidney failure for longer time. The study is required to see the effect of *Virechana* as well as *Basti* along with *Shaman chikitsa* in the treatment protocol of the treatment of chronic renal failure patients in initial stage of the disease. **Brief case history:** A 55 year old, Sikh male patient visited SSMD college and Hospital, Moga on 24th May 2025. He had been diagnosed with CKD and high blood pressure for 3 years and received medication for this. He had complained of anorexia, pedal edema associated with breathlessness and weakness. Before he came to us, He took conventional medicine for the same complaints but didn't get any satisfactory result. He was hospitalized and treated with *Basti* and oral Ayurvedic medicines for one month of period. His serum creatinine was significantly decreased after one month of treatment, he is continuing oral medicine at OPD. Now he has no breathlessness, weakness and swelling. **Result:** He got an excellent result with satisfactory relief from all symptoms in one and improvement in laboratory parameters.

INTRODUCTION

Chronic kidney disease (CKD) is characterized with disrupted kidney function for more than 3 months or in other terms, it is defined as the kidney condition with Glomerular Filtration Rate (GFR) <60ml/min per 1.73m²[1]. Chronic kidney disease (CKD) refers an irreversible deterioration in renal function. Reduced kidney function initially manifest as biochemical abnormality but, eventually, it causes loss of excretory, metabolic and endocrine functions of the

kidney leads to the clinical symptoms and signs of renal failure[2]. Chronic Kidney Disease can also cause other health problems like breathlessness, nausea, anorexia etc[3]. when kidney function declines below a certain point, over a period of weeks, months or years, leading to end-stage renal disease (ESRD), it is called kidney failure[4].

In southern and eastern states of India, the rate of renal deaths was highest in 2010-2013. The most prominent age group was 45-69. The other diseases associated which significantly increased the rate of renal failure deaths were hypertension, diabetes (strongest cause of renal failure) and cardiovascular disorders. A significant rise in the mortality rate from the year 2000 to 2019 has been noticed i.e. 813,000 to 1.3 million.[5] As per WHO, chronic kidney disorder is

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rated as the 10th leading cause of death in 2020. In the forthcoming years, it is estimated that CKD will be the fifth leading cause of death by 2040.^[6] It was reported that, nearly 2.5 million people are taking renal replacement therapy and is predicted to exceeds up to 5.4 million by 2030.^[7]

The most common form of treatment in conventional medicine is haemodialysis which replaces some functions of kidney but does not replace its endocrine and metabolic functions. Another option is renal transplant, which may offer the endurance of some years in patients with end stage renal failure. Though both these treatments are effective, they are not affordable and approachable, and hence not well acceptable by Indian population.

In Ayurveda chronic renal failure cannot be correlated directly to any disease. According to the principles and nearly correlation, CRF is a disease of *Mutravahasrotasa*. In *Bhaisajya Ratnavali* chapter no. 93 *Vrikka Roga Chikitsa Prakrana*, author has described *Nidana*, *Poorvarupa*, *Rupa*, *Samprapti*, *Upadrava* and management of *Vrikka Roga*.^[8] Though all the three *Doshas* as well as all the *Dushyas* are involved in the pathogenesis of the disease, vitiated *Kapha Dosha* is responsible in blocking micro vessels and developing microangiopathy, vitiated *Pitta Dosha* is responsible for inflammatory processes in the kidney whereas vitiated *Vata Dosha* is responsible for degeneration of the structure of the kidney.

According to Ayurvedic principles of management of the disease, tissue damage can be prevented and repaired by *Rasayana* drugs because they have the capability to improve qualities of tissue and hence increase resistance of the tissue. *Srotorodha* can be removed by *Lekhana* drugs because they have

scraping effect. If vitiated *Doshas* are pacified in the initial stage, the progress of the disease can be stopped or slowed down in the patients of chronic kidney failure.

Brief Patient History

A 55 year old, Sikh male patient visited SSMD college and Hospital, Moga on 24th May 2025. He had been diagnosed with CKD and high blood pressure for 3 years and received medication for this. Patient initially developed with generalised weakness and loss of appetite for which he was conventionally treated in an allopathic hospital mean while he was detected to have high blood pressure levels and was treated for this as well. He noticed gradual mild swelling in the feet associated with breathlessness and weakness for which he consulted concerned allopathic doctor and after doing necessary investigations. he was diagnosed as a case of chronic kidney disease and was advised for haemo-dialysis if it will progress further. Moreover, his weight decreased in the last few years. There is no any difficulty in urination.

The patient was suffering from these symptoms from the past 5 years and also had a maternal family history of hypertension. The patient was on allopathic medication for the same conditions but didn't get any relief, SSMD college and Hospital, Moga, so he approached for its Ayurvedic management.

Pradhana Vedana

Patient complains of weakness, breathlessness, anorexia, both feet swelling, on and off fever, since 3 years.

Purva Vedana Vrutanta: No any relevant history found

Kula Vyadhi Vrutanta: Mother had hypertension.

Table 1: Vyakthika Vrutanta

Ahara	Vihara	Mansika
Vegetarian	Sleep disturbed	Chintya
Madhura, Singhdha	Bowel – 1 time / day	
Irregular meal time	Mituration – 4-5 times in a day and 1-2 time in a night	

Relevant past interventions and their outcomes

This was no any previous surgical history of the patient

Clinical Finding

Table 2: Astavidh Pariksha

Ashtavidha Pariksha	
Nadi	70 / min, Pittadhi vata
Mutra	Samyak, 6-7 time /day
Mala	2-3 times / 2day (hard stool defecation)
Jihva	Sama
Sabdha	Parakrut
Saprsha	Prakrut

<i>Dak</i>	<i>Pitabhvarna</i>
<i>Akruti</i>	<i>Madhyam</i>

Personal History

- Diet: Vegetarian
- Addiction: Tea, tobacco
- Job: Labour
- Past History: HTN
- Family history: Not any
- Surgical history: Not any

Table 3: Dashavidha Pariksha

Dashavidha Pareeksha	
<i>Prakriti: Pitta Vata</i>	<i>Samhanan: Madhyam</i>
<i>Aharaj Hetu: Madya Sevana</i> • <i>Viharaja Hetu: Atichinta</i> • <i>Mansika Hetu: Krodha, Dukhah</i>	<i>Pramana: Madhyam</i>
<i>Dosha: Vata, Pitta, kapha</i>	<i>Satmhya: Madhyam</i>
<i>Dushya: Rasa, Rakta and Mutra, Udaka</i>	<i>Ahara shakti</i> • <i>Abhyavrana Shakti: Avara</i> • <i>Jaran Shakti: Avara</i>
<i>Swabhav: Chirakari</i>	<i>Vyayam Shakti</i> • <i>Porvakaleen: Prvara</i> • <i>Adhyatanatakaleen: Avra</i>
<i>Desha: Anoopa</i>	<i>Vaya: Madhyama 55 yrs</i>
<i>Kala: Varsharutu</i>	<i>Bala: Avara</i>
<i>Sara: Madhyam</i>	

General Examination

- Blood pressure (BP): 130/80 mmHg
- Pulse: 82/minutes
- Weight: 42kg

Systemic Examination

- CVS- S1 S2 heard. No added sounds.
- Respiratory system: Lungs clear, no any abnormal sound heard.
- CNS- Patient is fully Conscious and well oriented to time & place, irritation and anger was present, memory was intact.
- Reflexes: normal gastrointestinal tract examination
- Lower GI Tract: Per abdominal examination on inspection, it was normal, there was mild tenderness over the right hypochondriac region and lower abdomen, percussion and auscultation could not elicit anything.

Table 4: Samprapti Ghatak

<i>Dosha</i>	<i>Vata, Pitta, Kapha</i>
<i>Dushya</i>	<i>Rakta, Rasa, Anna, Uadka, Mutra</i>
<i>Agni</i>	<i>Agnimandhya and Jatharagnimandhya</i>
<i>Udbhavsthan sthana</i>	<i>Amashyottha</i>
<i>Strotas</i>	<i>Rasavaha srotas, Raktavaha srotas</i>
<i>Strotodushti</i>	<i>Sangha, Vimargagaman</i>
<i>Adhisthana</i>	<i>Pakvashya, Mutra</i>

<i>Swabhava</i>	<i>Chirkari</i>
<i>Sadhyasaasadhyata</i>	<i>Kruchra Sadhya</i>

Table 5: Time Line

S.No	Duration	Symptoms	Interventions
1	02/07/2022	B/ L feet swelling, nausea and weakness	He consulted allopathy doctor, advised for USG and lab investigation
2	03/07/2022	Breathlessness, weakness, vomiting, B/ L feet swelling	He was diagnosed with chronic kidney disease and hypertension advised medication
3	15/07/2022 to 5/5/2025	Breathlessness, weakness, vomiting, B/ L feet swelling, weight loss	Not much significant relief in condition. There was up and downs during this time period in his condition
4	24/05/2025	Breathlessness, weakness, vomiting, B/L feet swelling	Patient admitted to SSMD Ayurvedic College and Hospital
5	25/05/2025 to 03/07/2025	Breathlessness, weakness, vomiting, B/L feet swelling	Treatment was done according to treatment schedule
6	End of treatment 04/07/25	Decreased weakness, improvement in sleep. B/L feet swelling decreased, nausea/vomiting stopped	Discharged on 04/07/2025

Treatment Schedule

He had been admitted and treated with *Punarnavadi Kwath*, *Niruha basti* and oral Ayurvedic medicines for one month. After one month of treatment, he is continuing oral medicines only and he regularly comes for following up in OPD. Now on the second follow up patient had much improvement in above symptoms.

Table 6: Treatment Schedule

No	Procedures	Drugs and Dose	Duration
1.	<i>Snehapana</i>	According to the <i>Kostha & Agni</i> of the patient with <i>Gokshuradi Ghrita</i> . ^[12]	24/5/25 – 28/5/2025
2.	<i>Sarvanga Abhyanga</i> <i>Sarvanga Svedana</i>	<i>Bala Taila Abhyanga</i> <i>Nirgundi Patra Bashpa Svedana</i>	29/5/2025- 30/5/2025
3.	<i>Virechana karma</i> i. <i>Sarvanga Abhyanga</i> ii. <i>Svedana</i> i) <i>Virechana Karma</i>	<i>Bala Tail</i> <i>Nirgundi Patra Bashpa Svedana</i> <i>Virechana</i> will be performed in the patients with the help of <i>Dinadayala Churna</i> [<i>Haritaki</i> , <i>Svarnapatri</i> , <i>Ajamoda</i> , <i>Saindhav</i>] 5-7gm and <i>Eranda sneha</i> 40-50 ml depending on <i>Kostha</i> of the patient.	31/5/2026
4.	<i>Samsarjana Krama</i>	Diet (as per <i>Shuddhi</i>)	As per <i>Shuddhi</i>
5.	<i>Shaman chikitsa</i>	1. <i>Goksuradi-Guggulu</i> ^[13] Orally – 3 tab thrice in a day after meal with warm water. 2. <i>Varunadi-Kvatha</i> ^[14] Orally – 40 ml twice in a day empty stomach. 3. <i>Rasayana-Churna</i> ^[15] Orally – 3 gm, thrice in a day with warmwater.	2/6/25 to 4/7/2025
6.	<i>Punarnavadi Niruha basti</i> (everyday)	1. <i>Nadi Svedana</i> – <i>Kati Pradeshe</i> 2. <i>Punarnavadi Niruha Basti</i> ^[16,17] 320ml – in morning, before lunch.	

Table 7: Patient's Laboratory Results

Date	HB (%)	Urine Albumin	eGFR	Serum Creat.	Blood Urea	NA ⁺	K ⁺
24/5/2025	11.6	1+	35	2.30	53	147	4.6
4/7/2025	11.4	NILL	63	1.30	42	144	4.7

Table 8: Clinical Outcome

S.No	Clinical outcomes	Before Treatment	End of treatment
1	Oedema	present	Absent
2	Breathlessness	Present	Absent
3	Nausea	Present	Absent
4	Weakness	Present	Absent
5	Loss of appetite	Present	Absent

Diagnosis

Based on the clinical presentation, examination and laboratory tests; the patient was diagnosed with chronic kidney disease (CKD).

Pathya

- Breakfast: *Bramharasayana Avaleha*- 10gm with 100ml milk (boiled cow milk).
- Lunch: Boiled *Moong*, *Moong* bean soup, beet root soup, cooked vegetables and rice.
- Dinner: *Moong* bean soup, rice or *Khichadi*, cooked vegetables.
- Other: Patients can take fruits (only papaya and sweet apple), puffed rice, pomegranate, dates. Patients advised to take 150ml cow milk in a day, but not to take milk with any above food items.

Apathya

- Excessive salty food, deep fried food articles, spicy food, packet food articles which are heavy to digest, cheese, paneer, Cold drinks, fermented food, food having sour taste will be restricted.
- All other flour items (i.e. wheat, millet, com)
- Tomato, all leaf vegetables, slimy and heavy to digest.
- All chilies and other sour tasty material i.e. lemon, yogurt, unripe fruits and its dry powder.
- All oils except sesame
- Fermented items
- Chilie
- Milk products
- Excessive physical and mental stress
- Day sleep and night sleep.

DISCUSSION

Chronic kidney disease cannot be correlated directly with any clinical entity mentioned in Ayurvedic classics. According to Ayurveda, *Vrkkau* are mentioned as *Mulsthana* of *Medovaha Srotasa* it formed from *Rakta* and *Meda Dhatu* mainly. *Vrkkau* are *Matruja Avayava*.^[9] In chronic renal failure, *Mutra* (one of the mala according to Ayurveda) accumulates in the

body. Hence, the causes which vitiate the *Mutravaha Srotasa* as well as *Medovaha Srotasa* can be considered as a causes or risk factors.

Ayurveda does not individually suggest the causes and treatment for CRF, so we can compare the disease with Ayurvedic concepts only on the basis of *Nidanapancaka*. The signs and symptoms of CRF suggests aggravation mainly of *Vata* and *Kapha Dosa* along with vitiation of multiple *Dushya* (i.e. initially *Rasa*, *Rakta*, *Mutra*, *Udaka* and later on all the *Dhatu* and *Upadhatu*). The provoked *Dosa* and *Dhatu* circulated through *Rasa* with *Vyamavya* throughout body leading to *Kha-Vaigunya* in *Mutravahasrotasa*. The *Vyakta Avastha* of *Dosha Dusti* is observed as *Pradhana laksana* of CKD.

Multiple *Srotasa* (mainly *Rasavaha*, *Udakavaha*, *Mutravaha* and *Medovaha*) involved in CKD. Though all the three *Dosa* as well as all the *Dushya* are involved in the disease, *Kapha* is responsible in blocking micro-vessels and developing micro-angiopathy because of its guru and *Picchila Guna*. *Vata* is responsible for degeneration of the structure of the kidney because of its *Ruksha Guna*.

Ayurvedic management of CKD mainly focusses on 2 principles:

Tissue damage: It can be prevented or repair by *Rasayana Aushadhi*, it having qualities of regeneration.

Blockage: it can prevent or repair by *Lekhana Aushadhi*, the scraping effect of medicine helps to remove blockage of channels.

Chronic renal failure cannot correlate directly with any clinical entity mentioned in Ayurvedic classics. Though all the three *Dosa* as well as all the *Dushya* are involved in the disease, *Kapha* is responsible in blocking micro-vessels and developing micro angiopathy. *Vata* is responsible for degeneration of the structure of the kidney and deterioration in all body components.

Gokshuradi guggulu: It is a compound medicine indicated in the treatment of the diseases of *Mutravaha Srotas* including *Prameha*, *Mutrakricchra*, *Mutraghata* and *Ashmari*.^[10] Majority of the ingredients of *Gokshuradi Guggulu* are having *Rasayana* effect for *Mutravaha Srotas* which helps to reduce the degeneration of tissues and improve the strength of damaged tissues in the kidney which can prevent further deterioration of kidney functions and improves its functional capacity. *Guggulu*, one of the ingredients of *Gokshuradi Guggulu* is also having the *Lekhana* action in addition to *Rasayana* which helps to remove the blockage of the micro channels in the kidney and can improve the excretory function of the kidney.

Varunadi Kwatha: It is also one of the commonly used medicaments in the diseases of *Mutravaha Srotas*. The majority of the ingredients of *Varunadi* are having *Shothahara* and *Mutranjana* actions. Majority of the ingredients are also having the *Ushna Guna* and *Kapha-Vatahara* action which can reduce the blockages of micro channels in kidney. Thus, *Varunadi Kwatha* helps to improve the kidney function by increasing urine flow and it reduces the swelling in the patients of chronic kidney disease.

Rasayana Churna: It is a combination of equal part *Gokshura*, *Amalaki* and *Guduchi*. All of these three medicaments are well known for their *Rasayana* and *Tridosha* actions by which they are helpful to pacify all the three vitiated *Doshas*.^[11] They also help to reduce the degeneration in *Dhatu*s and improve their functional capacities. *Gokshura* is well known for its *Rasayana* action especially on *Mutravaha Srotas*.^[12]

Gokshuradi Ghrita: It was used for *Abhyantara Snehana* prior to perform *Virecana Karma*. *Gokshuradi Ghrita* was prepared by the combination of the medicaments acting on *Mutravaha Srotas*.

Virechana Karma

All the three aggravated *Doshas* are responsible for the pathogenesis of kidney disease. According to Ayurvedic treatment principle of the treatment, the diseases caused by all the three vitiated *Doshas* should be treated with *Shodhana* procedures which eliminate the aggravated *Doshas* out of the body so that they cannot get the vitiation again easily. *Virechana Karma* is one of the main *Shodhana* therapy. *Virecana Karma* is less strain full in comparison to *Vamana Karma* hence it is preferable to perform it in the patients of chronic kidney failure whose body strength is reduced because of the degeneration of body tissues as explained earlier.

Basti Karma

Asthapana or *Niruha Basti* is another important *Shodhana* therapy which eliminates the vitiated *Doshas* and *Malas* out of the body.^[13] It can be administered everyday as per the need and hence it can help to eliminate the wastes accumulated in the body because

of the inability of the kidneys to excrete them in the patients of chronic kidney disease. The *Basti* with *Punarnavadi Kwatha* can also help to remove the blockage of the micro channels of the kidneys by its *Lekhana* action and can help to improve the kidney function. *Asthapana Basti* is also having *Rasayana* action which is helpful as explained above in context to oral medicaments.^[14]

On discharge; the condition of the patient was good. Appetite and general health were improved. His serum creatinine level and blood urea were also reduced and eGFR improved significantly. Along with patient was advised to do regular *Pranayam*, dietary regulation during and after treatment. Now on the second follow up patient had much improvement in above symptoms.

On discharge, Patient was prescribed with *Varunadi Kwatha* (40ml 2 times/day), *Rasayana Churna*- 3gm (3 times/day), 3) *Gokshuradi Guggulu*- 3tab (3 times/day) all medicines are advised to take with lukewarm water. He has advised to avoid all precipitating etiological factors and follow dietary restrictions at least for six months. On the next follow-up visit, he was free from any of the complaints.

Patient's Comment

The patient- "When I came to this hospital, I had weakness, nausea, loss of appetite, disturbed sleep, bilateral pedal oedema. Now, after the treatment, I have much relief from all symptoms and Hemodialysis was stopped which was twice in week. I was told by the doctors that I will have to go for regular dialysis and continue allopathic medication for life time. But, since I was admitted at this hospital, I had stopped my all-allopathic medication. Hise after *Basti Karma*, and this Ayurveda treatment I got relief in symptoms.

CONCLUSION

Based on above case study, it can be concluded that Ayurvedic medicines are effective in management of chronic renal failure and with Ayurveda medicines this condition was well managed and significant improvement was observed in this case, but such cases require frequent follow ups and regular medication until the serum creatinine levels comes under normal range. Long follow up and a greater number of patients are required to reach up to any conclusion but, in this case, it can be stated that this treatment is a hope for the patients with CKD resistance to conventional medicine.

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