

Management of Chronic Kidney Disease through Ayurvedic *Shodhana* and *Shamana Chikitsa*: A Case Report

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ABSTRACT

Chronic Kidney Disease (CKD) has become a major public health issue affecting both younger and older individuals. The prevalence of CKD is on the rise, primarily driven by conditions such as hypertension and type 2 diabetes mellitus. CKD is characterised by progressive and irreversible damage to the kidneys, often presenting asymptotically in its early stages. As the disease advances, patients may experience symptoms such as pedal oedema, decreased appetite, nausea, reduced urine output, frothy urine and fatigue. Laboratory tests typically show increased levels of creatinine and serum urea, indicating poor renal function. Traditional treatments, including dialysis and renal transplantation, remain mainstream approaches for managing CKD. However, these interventions are often financially prohibitive for many individuals in India, underscoring the urgent need for more affordable and accessible alternatives. In response to these challenges, Ayurvedic medicine offers promising alternative treatments. Hereby, the authors present a case of a 30-year-old male suffering from CKD; despite being recommended for dialysis, the patient opted for Ayurvedic treatment. Ayurvedic *Shodhana chikitsa* (purification and rejuvenating therapy) through *Basti* (therapeutic enema) combined with oral herbomineral formulations has demonstrated renoprotective effects and potential benefits in improving haematological parameters in CKD cases. The present case report highlights the importance of traditional Ayurvedic approaches as alternatives to prevent dialysis for CKD patients, particularly in low-income populations.

Keywords: *Basti*, Creatinine, Oedema, Purification, Renoprotective

CASE REPORT

A 30-year-old male clerk approached the Outpatient Department (OPD) with chief complaints of difficulty in breathing while walking, swelling in his face and lower limbs, burning micturition, reduced appetite and fever for the past three months. He had taken allopathic treatment for three months but did not experience significant relief. The patient was further advised to undergo dialysis, which he refused and thus he sought Ayurvedic management. The patient had a history of hypertension and was on medication (Amlodipine 5 mg and Atenolol 50 mg), but he had discontinued it. There was a family history of hypertension and diabetes.

An examination was conducted, revealing the following: Blood Pressure (BP): 140/90 mmHg, Pulse: 85/min, Temperature: 99.4°F, Respiration: 18/min, Jugular venous pressure: not raised. Systemic examination of the Cardiovascular System (CVS) and Central Nervous System (CNS) was within normal limits. Dyspnoea was present and scored 3 [1]. Oedema was noted in the pedal region, eyelids and face [Table/Fig-1].

S. No.	Pariksha	Observation
1.	Nadi	Vata kaphaj
2.	Mala	Samyak (No mucous)
3.	Mutra	Sadaha (Burning Micturition)
4.	Jivha	Niraam (Uncoated)
5.	Shabda	Spashta
6.	Sparsh	Ushna
7.	Drika	Pallor 2+no Icterus
8.	Akriti	Krusha (BMI-21 kg/m ²)

[Table/Fig-1]: Eight fold examination (Ashtavidha Pariksha).

BMI: Body mass index

Haemoglobin percentage (Hb%), Kidney Function Tests (KFT) and urine analysis were performed and a renal biopsy showed glomerulopathy featuring ischaemic changes of varying severity,

along with evidence of secondary segmental tuft sclerosis (focal segmental glomerulosclerosis) in 4 out of 12 (33.3%) glomeruli. Acute injury involving viable cortical tubules, foci of chronic interstitial inflammation and mild to moderate increases in tubulointerstitial chronicity were observed. Severe vascular hypertensive changes with evidence of vessel wall (arteriolar/small arterial) necrosis and luminal occlusion (thrombotic microangiopathy) were noted. Renal biopsy and blood investigations confirmed a case of CKD.

Treatment Plan

Ayurvedic *Shodhana* (purification) in the form of *Basti chikitsa* (therapeutic enema) and *Shamana chikitsa* (oral medication treatment) was planned. The treatment was conducted in two sittings with a 15-day follow-up in between. In the first sitting, *Kala Basti* (therapeutic enema for 16 days) was planned along with oral medication as shown in [Table/Fig-2].

Kala Basti ingredients																
	Ingredients	Quantity														
Niruha basti-Punarnavadi kshirbasti (decoction enema)	1. Punarnavadi kwath	600 mL														
	2. Punarnavadi taila	30 mL														
	3. Saindhav lavana	10 gm														
	4. Honey	20 mL														
	5. Gokshura	20 gm														
	6. Milk	100 mL														
	Total=750 mL															
Anuvasana basti (medicated oil enema)	Punarnavadi taila- (Punarnavadi, Haritaki Takra, Til taila)	60 mL														
Kala Basti-sequence followed																
Days	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Basti	A	N	A	N	A	N	A	N	A	N	A	N	A	N	A	A
A denotes Anuvasana basti (oil enema) and N denotes Niruha Basti (decoction enema)																

Oral medication (Shamana Chikitsa)			
S. No.	Medicine	Dose and frequency	Anupana and duration
1	<i>Gokshuradi Guggul</i>	250 mg 2 tab twice a day after meal	With lukewarm water for 16 days
2	<i>Punarnavadi Mandoor</i>	250 mg 2 tab twice a day after meal	
3	<i>Shiva Gutika</i>	250 mg 2 tab twice a day after meal	
4	<i>Truna Panchmool Kwath</i>	40 mL twice a day after meal	
<i>Pathya</i> (wholesome diet)		Use of high fibre diet, fruits, vegetables, <i>takra</i>	
<i>Apathya</i> (unwholesome diet)		Avoid protein diet, salt, fried, oily, spicy food.	

[Table/Fig-2]: Kala Basti with oral medication.

The patient was discharged after the first sitting with the following medication: Tab *Gokshuradi Guggul*, Tab *Punarnavadi Mandoor* and Tab *Shiva Gutika*, each 500 mg twice a day with lukewarm water and Syrup Neeri KFT, 15 mL twice a day for 30 days.

In the second sitting (after one month), *Punarnavadi Basti* was planned in the form of *Yoga Basti* (therapeutic enema for eight days) with oral medication as shown in [Table/Fig-3].

Yoga Basti -sequence followed								
Days	1	2	3	4	5	6	7	8
Basti	A	N	N	A	N	N	A	A
A denotes <i>Anuvāsana basti</i> (oil enema) and N denotes <i>Niruha Basti</i> (decoction enema)								
Oral medication (Shamana Chikitsa)								
S. No.	Medicine	Dose and frequency	Anupana and duration					
1	<i>Gokshuradi Guggul</i>	250 mg 2 tab twice a day after meal	With lukewarm water for 8 days					
2	<i>Punarnavadi Mandoor</i>	250 mg 2 tab twice a day after meal						
3	<i>Shiva Gutika</i>	250 mg 2 tab twice a day after meal						
4	<i>Asvattha Swarasa (Fresh)</i>	10 mL in morning						
5	Syp. Neeri KFT	15 mL thrice a day						
<i>Pathya</i> (wholesome diet)		Use of high fibre diet, fruits, vegetables, <i>takra</i>						
<i>Apathya</i> (unwholesome diet)		Avoid protein diet, salt, fried, oily, spicy food						

[Table/Fig-3]: Yoga Basti with oral medication.

Patient's discharge: Patient was discharged with the following prescription (after the second sitting): Fresh *Asvattha Swarasa* 10 mL in the morning before meals, Syrup Neeri KFT 15 mL thrice a day after meals and Tab *Shiva Gutika* 500 mg twice a day with lukewarm water for 30 days. After the complete treatment, the patient achieved complete relief from symptoms with significant improvement in both objective and subjective parameters, as shown in [Table/Fig-4] [1,2].

DISCUSSION

The CKD is a degenerative illness characterised by a gradual and progressive loss of kidney function over time. Affecting approximately 10% of the global population, CKD is a serious public health issue linked to high rates of morbidity and mortality [3]. It can result from a variety of underlying conditions, including diabetes, hypertension and glomerulonephritis. Common signs and symptoms include fatigue, swelling in the legs and ankles, shortness of breath and changes in urination patterns [4]. As the disease progresses, it can lead to complications such as cardiovascular disease, anaemia, bone disorders and electrolyte imbalances.

Conventional management of CKD in allopathic medicine focuses on controlling the underlying causes, slowing disease progression and managing symptoms. This typically involves the use of medications to control blood pressure and blood sugar levels, dietary modifications and lifestyle changes [5]. In advanced stages, renal replacement therapies such as dialysis or kidney transplantation are suggested as the only options.

Ayurveda, the ancient Indian system of medicine, offers an alternative treatment approach to managing CKD through natural and holistic means. Ayurvedic management focuses on purification and detoxification, balancing the body's *Doshas* (biological energies) with dietary modifications and the use of *Panchakarma* therapy and herbal remedies [6].

Kala Basti and *Yoga Basti* therapy are utilised for detoxification. *Punarnavadi Kshir Basti* is mentioned as a pacifier for all vitiated *doshas* (*Sarvadoshnashana*). *Punarnavadi* has renoprotective, antipyretic, anti-inflammatory, antioxidant, fibrinolytic and smooth muscle-relaxing activities, thus helping to control high blood pressure. It inhibits lipid peroxidation and improves the glomerular filtration rate, aiding in the removal of waste from the body that can damage the kidneys [7].

Punarnavadi Mandoor increases haemoglobin by interfering with the hematopoietic system, either directly or indirectly and supplies adequate nutrients up to the level of *Saptadhatus* [1].

Objective parameters						
Investigation	Before	After 1 st sitting	Follow-up after 15 days	After 2 nd sitting	Follow-up after 15 days	
KFT	S.Creatinine (normal-0.74-1.35 mg/dL for men)	7.38 mg/dL	6.12 mg/dL	4.86 mg/dL	3.2 mg/dL	2.73 mg/dL
	Blood urea (normal-7-25 mg/dL)	97.85 mg/dL	90 mg/dL	68.84 mg/dL	43 mg/dL	37 mg/dL
	Sodium (normal-135-145 mEq/L)	136.30 meq/L	138 meq/L	136.80 meq/L	140 meq/L	138 meq/L
	S.Potassium (normal-3.7-5.2 mEq/L)	3.27 meq/L	3.89 meq/L	4.01 meq/L	4.7 meq/L	5.65 meq/L
	S.Calcium (normal-8.8-10.6 mg/dL)	9.01 mg/dL	9.05 mg/dL	10.07 mg/dL	9.4 mg/dL	9.3 mg/dL
	S.Phosphorus (normal-2.8-4.5 mg/dL for adults)	3.99 mg/dL	4.01 mg/dL	4.58 mg/dL	4.1 mg/dL	4.4 mg/dL
	S.Uric Acid (normal- male-4.0-8.5 mg/dL)	8.87 mg/dL	8.8 mg/dL	7.89 mg/dL	6.1 mg/dL	6.2 mg/dL
Urine exam	Albumin	++++	+++	+	+	+
	Sugar	nil	nil		nil	nil
	RBC (<4 RBC/HPF)	10-13/HPF	2-3/HPF		nil	nil
	Pus cells (normal- 0-5/HPF)	5-7/HPF	3-5/HPF		2-3/HPF	3-5/HPF
	Epithelial cells (less than 15-20/HPF)	3-5 /HPF	2-3/H		2-3/HPF	2-3/HPF
	Casts (normal-0-2)	Granule 0-1 /hpf	nil		nil	nil
Hb% (14-18 g/dL)	9.1	10.2		11.8	12	
Subjective parameters						
S. No.	Symptoms	Before	After 1 st sitting	Follow-up after 15 days	After 2 nd sitting	Follow-up after 15 days
1.	Dyspnoea [1]	3	2	1	0	0

2.	Loss of appetite [2]	2	1	0	-	-
3.	Burning micturition	present	absent	absent	absent	absent
4.	Oedema	present	absent	absent	absent	absent
5.	Fever	present	absent	absent	absent	absent

[Table/Fig-4]: Outcome and follow-up [1,2].

HPP: High-power field, RBC: Red blood cell

Gokshuradi Guggul, a prominent ingredient, contains *Gokshura*, which has diuretic and rejuvenating actions. It helps to maintain and cure burning micturition and repairs tissue damage in the urinary tract (*Mutravahasrotas*) through its antioxidant properties, which are beneficial in kidney disorders [8]. *Guggul* possesses anti-inflammatory and scrapping properties that help remove blockages in the urinary tract, cure swelling and prevent oliguria.

Shiva Gutika's chief ingredients, *Shilajit*, *Shunthi* and *Pippali*, are useful in pacifying *Tridosha*. The rejuvenating actions of *Shilajit* and *Pippali* promote renal tissue repair. *Shilajit*, having synergistic action (*Yogavahi*), enhances the effects of other drugs, showing significant anti-inflammatory, analgesic and antioxidant activity [9].

Fresh *Asvattha Swarasa* has nephroprotective, strong antioxidant, anti-inflammatory, antimicrobial, analgesic and immunomodulatory properties that reduce nitrogenous waste products and oedema and protect nephrons from further damage [10]. *Trinapanchmool Kwath* is a decoction made from five roots that is used to treat urinary tract issues. It removes excess water and impurities from the body without disrupting the electrolyte balance, which helps the renal system function well and also strengthens the heart [11]. Neeri KFT is a traditional Indian sugar-free herbal combination. Syrup Neeri KFT exhibits multiple therapeutic and preventative effects on kidney dysfunction. It repairs damaged renal architecture and boosts kidney function [12]. Thus, the properties of drugs used in *Shodhana* and *Shamana* therapy help break the pathogenesis and prevent further progression, thereby reducing the symptoms. [Table/Fig-5] [13-16] shows a few similar cases and their outcomes.

S. No.	Author's name and year	Case presentation	Treatment	Outcome
1.	Rachana MS et al., Karnataka, 2019 [13]	A 60-year female, complaining of generalised weakness, loss of appetite, shivering of extremities, burning micturition, reduced frequency of micturition, burning sensation in palm and sole, lower back pain, pedal oedema for the past two months	<i>Mustadi yapana basti</i> , <i>kati lepa</i> , <i>kati upanaha</i> , oral Ayurvedic medication with specific diet plan including <i>gokshur</i> and <i>laja siddha jala</i>	Significant improvement in generalised weakness, appetite and low back pain. Clinically, also significant improvement was observed in pedal oedema and urine output
2.	Shrivastava AK et al., Haridwar, 2024 [14]	A male patient of 55 years has a chief complaint of weakness for two months, vomiting and decreased appetite for the past 1 month with swelling in B/L lower limb for 15 days	Treatment included only Oral Ayurvedic formulation, <i>Sarvakalpkwath</i> , <i>Vrikkdoshar kwath</i> , Renogrit <i>Mukta vati</i> , <i>Gokshuradi guggulu</i> , <i>Vrikkdoshar vati</i> , <i>Chandraprabha Vati Punarnavadi mandoor</i> for 1 month.	Significant improvements was noted in serum creatinine, uric acid and Blood Urea Nitrogen (BUN) levels, that were previously elevated. Moreover, the patient experienced considerable alleviation of symptoms.

3.	Kapoor A and Dang PG, New Delhi, 2020 [15]	A 37-year-old female patient, complaining of headache, restlessness, fatigue, low haemoglobin levels, swelling in feet and shortness of breath on exertion for 18 months	Treatment was done with oral Ayurvedic formulations mainly <i>Trina panchamoola kwatha churna</i> , <i>Punarnavadi mandoor</i> , Syrup Neeri KFT, <i>Kamadudha Rasa</i> , <i>Punarnavadi arka</i> , <i>varunadi kwath</i> . The total duration of treatment was 7 months.	Significant increase in haemoglobin levels and decrease in serum creatinine, blood urea and uric acid levels were seen with mild alleviation of symptoms.
4.	Shah MP et al., Kirtipur, 2022 [16]	81-year-old male having chief complains; B/L swelling of the lower limbs since 5 years and Nausea since 3 years. Associated complains; itching all over the body, indigestion and generalised weakness	Treatment included, Oral Ayurvedic formulation; <i>Trinapanchmool kwath</i> , <i>varunadi kwath</i> , <i>sheeta Prabha vati</i> , Tab <i>Gokshuradi guggulu</i> , Tab <i>Chandraprabha vati</i> , Syrup <i>harit Punarnavadi</i> , Tab <i>kaisore guggulu</i> for 1 month	Decreased swelling of limbs and increased appetite of the patient. Itching and nausea were also reduced. Blood sugar, blood urea and creatinine levels also decreased significantly
5.	Present study, Wardha, Maharashtra	A 30-year-male, complaining of restlessness, difficulty in breathing while walking, Swelling over face and lower limb, Burning micturition, reduced appetite and fever for 3 months	Treatment included both <i>shodhana</i> (Ayurvedic purification) and <i>shamana chikitsa</i> (oral drug therapy) with <i>Punarnavadi kshir basti</i> in <i>kala</i> and <i>yoga basti</i> pattern with oral Ayurvedic medication.	Complete alleviation of symptoms like restlessness, fatigue, pedal oedema, burning micturition, dyspnoea on exertion and appetite. There was a gradual increase in haemoglobin levels, while a decrease was observed in creatinine level, uric acid level and blood urea level. RBC count and pus cells in urine became normal.

[Table/Fig-5]: Previous similar studies [13-16].

CONCLUSION(S)

The present case study explores the efficacy of Ayurvedic *Shodhana* and *Shamana* therapy in the management of CKD, highlighting the potential benefits and outcomes associated with the Ayurvedic treatment protocol in alleviating disease symptoms. Therefore, further research can aim at integrating Ayurvedic practices with conventional treatments to offer a more holistic approach to CKD management.

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