# AYURVEDIC MANAGEMENT OF VRIKK VIKAR (CHRONIC KIDNEY DISEASE) WITH MUTRAVAH STROTODUSHTI AND HYPERTENSION: A CASE STUDY

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# AYURVEDIC MANAGEMENT OF VRIKK VIKAR (CHRONIC KIDNEY DISEASE) 2

# WITH MUTRAVAH STROTODUSHTI AND HYPERTENSION: A CASE STUDY

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# ABSTRACT

- Chronic Kidney Disease (CKD), understood in Ayurveda as a progressive disorder of the 5
- MutravahaSrotas, primarily arises from the vitiation of Vata and KaphaDoshas, often
- 7 accompanied by AgniDushti and AmaSanchaya. This case study presents the successful
- 8 Ayurvedic management of a 33-year-old male diagnosed with CKD, who exhibited
- 9 significant renal dysfunction. The patient was managed through a comprehensive Ayurvedic
- 10 regimen comprising NidanParivarjan, Ahar-ViharParimarjan, Panchakarma therapies, and
- ShamanChikitsa with Rasayan and hepatoprotective formulations. The treatment aimed to 11
- pacify aggravated Doshas, enhance Agni, eliminate Ama, and restore the function of 12
- MutravahStrotas. Marked clinical improvements were observed in renal parameters, vitality,
- and systemic symptoms over a one-month period. This case highlights the potential of
- 15 classical Ayurvedic interventions in the integrative management of CKD and underscores the
- 16 importance of individualized care, lifestyle modification, and Rasayan therapy in chronic
- 17 systemic disorders.

#### KEYWORDS 18

- Ayurveda, Panchkarma, Mutraghata, Mutrakshaya, Mutravahasrotas, Shaman Chikitsa, 19
- Shodhanand Vrikk rog 20

#### INTRODUCTION 21

- Chronic Kidney Disease (CKD) is a long-term, progressive disorder marked by a sustained 22
- 23 decline in renal function over an extended period. The kidneys are essential for maintaining
- systemic homeostasis through waste excretion, electrolyte regulation, and blood pressure 24
- control. Progressive renal impairment leads to toxin accumulation, fluid-electrolyte
- imbalances, and an elevated risk of cardiovascular complications. [1] The most prevalent
- etiologies include diabetes mellitus, hypertension, and glomerulonephritis. Early stages of 27
- 28 CKD are frequently asymptomatic, complicating early diagnosis. As renal function worsens,
- patients may present with nonspecific symptoms such as fatigue, peripheral oceana, and
- 30 alterations in urinary frequency or volume. If not adequately managed, CKD may progress to
- end-stage renal disease (ESRD), requiring renal replacement therapy in the form of dialysis 31
- or transplantation. [2] The global prevalence of CKD is rising, posing a significant burden on 32
- 33 patients and healthcare infrastructure. Therefore, early identification through routine
- 34 screening, along with targeted intervention to control underlying risk factors, is crucial for
- 35 delaying disease progression and improving patient outcomes. [3]
- Recent research in Chronic Kidney Disease (CKD) has advanced the understanding of its
- 37 pathogenesis, early diagnostic tools, and personalized therapeutic strategies. Studies on novel
- 38 biomarkers and genetic factors, such as APOL1 variants, have enabled risk stratification and
- genotype-guided interventions. [4] Additionally, the gut microbiome has been implicated in 39
- CKD progression via uremic toxin production, with microbiota modulation emerging as a 40
- potential adjunctive therapy. [5] Investigational regenerative approaches, including

42 mesenchymal stem cell therapy, are being explored for their anti-inflammatory and tissue-43 reparative effects in renal injury. [6]

In Ayurvedic perspective, Chronic Kidney Disease (CKD) is understood as a progressive 44 45 disorder primarily resulting from an imbalance in the Tridoshas, with a predominance of Vata 46 and Kapha. It is typically classified under MutravahaSrotasVikar (urinary system disorders) 47 and is closely associated with *Prameh*, particularly in cases linked to diabetic nephropathy. [7] 48 The pathogenesis involves Agni Dushti (impaired digestive fire), leading to the formation and 49 accumulation of Ama (metabolic toxins), which obstruct the normal functioning of 50 MutravahSrotas. Contributing etiological factors include inappropriate dietary habits (Ahar), 51 lack of physical activity (Vihar), mental stress, and excessive consumption of processed or incompatible foods. These factors collectively result in progressive deterioration of renal 52 structures, particularly affecting Rakt, Meda, and MutravahSrotas, manifesting clinically as 53 54 Shoth (oedema), Aruchi (loss of appetite), Klama (fatigue), and Mutravikara (altered urinary 55 output). [8] The Samprapti (pathogenesis) and Samprapti Ghatak (pathogenic components) are 56 illustrated schematically in Figures 1 and 2, respectively. [9]

# Figure 1: Samprapti of this case

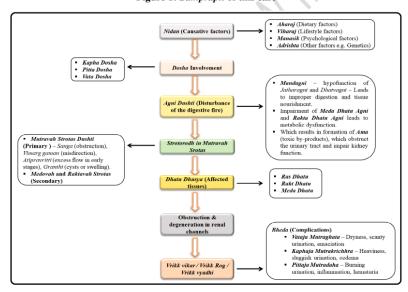
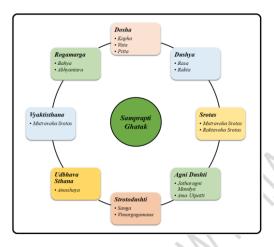


Figure 2: SampraptiGhatakofVrikk rog (CKD)



In the present case of *Vrikk Rog* (chronic kidney disease), the patient was managed using a structured *Ayurvedic* treatment protocol, with regular monitoring of pertinent laboratory parameters. A personalized therapeutic plan was formulated based on comprehensive clinical evaluation, encompassing *Ayurvedic* dietary recommendations, *Ayurvedic* medications, and selected *Panchakarma* therapies. The patient exhibited marked clinical improvement following the implementation of this integrative treatment approach.

# 67 **OBJECTIVE**

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- The objective of this case study is to evaluate the effectiveness of *Ayurvedic* management in a
- 69 patient with Chronic Kidney Disease (CKD) and hypertension, focusing on Doshavitiation,
- 70 StrotasDushti, and Amaformation, with an integrative approach involving NidanParivarjan,
- 71 Panchakarma, and Rasayantherapy to restore MutravahStrotas function.

# 72 CASE REPORT

- 73 A 33-year-old male with a known history of Chronic Kidney Disease (CKD) and
- 74 hypertension (diagnosed in 2022) presented to JeenaSikhoLifecare Limited Hospital,
- 75 Amritsar, Punjab, on June 5, 2025. He reported symptoms such as frothy urine
- 76 (PhenilaMutra), generalized weakness (Daurbalya), cervical stiffness (GreevaStambha),
- 77 head heaviness (ShirahGaurava), increased sleep (Atinidra), proteinuria (Mutra Rog with
- 78 PramehLakshan), and nausea (Hrillasa).
- 79 A renal biopsy dated September 9, 2022, revealed extensive chronic kidney damage
- 80 characterized by diffuse scarring, severe tubulointerstitial chronicity (involving 70-75% of
- 81 the core), and global sclerosis in 21 out of 22 glomeruli. There was no evidence of immune
- 82 complex deposition, and autoimmune markers were either negative or pending. These
- 83 findings suggest advanced structural deterioration of non-immune origin.A Micturating
- 84 Cysto-Urethrogram (MCU) performed on October 1, 2025, showed no vesico-ureteric reflux.

The bladder and anterior urethra appeared normal; however, a membranous urethral stricture and mild post-void residual urine were noted, indicating incomplete bladder emptying.

A detailed summary of clinical observations from each consultation is provided in Table 1, while the patient's *AshtasthanaPareeksha* (eight-fold *Ayurvedic* diagnostic evaluation) is presented in Table 2. Based on the comprehensive assessment, the patient was admitted for a 17-day inpatient *Ayurvedic* treatment protocol. This involved individualized classical *Ayurvedic* medications, *Panchakarma* therapies, dietary modifications, and lifestyle adjustments. The patient exhibited significant clinical improvement following completion of the treatment plan. The patient continued allopathic medications throughout the treatment course, as detailed in Table 3.

Table 1: Initial Assessment at each consultations

Date	Blood Pressure	Weight	SpO <sub>2</sub>	Respiration
05-06-2025	140/90 mm Hg	92.75 Kg	99%	80/min
05-07-2025	130/80 mm Hg	90 Kg	99%	71/min

Table 2: AshtasthanaPareeksha findings

Parameter	Findings
Nadi (Pulse)	Pittaj Vataj
Mala (Stool)	Avikrit (Normal)
Mutra (Urine)	Phenila (Frothy)
Jiwha (Tongue)	Malin (Coated)
Shabda (Voice)	Spashta (Clear)
Sparsh (Touch)	Samsheetoshna (Normal)
Akriti (Physique)	Sthoulya (Obese)
Drika (Eyes)	Prakrit (Normal)

Table 3: Allopathic medicines continued during the treatment

		10			
Medicine	Dosage	Day 1 - Day 3	Day 4 - Day 8	Day 9 - Day 11	Day 12 - Day 17
Prednisolone - 40 mg	1 OD	✓	✓	Alternate Days	Alternate Days
Sodium Bicarbonate - 500 mg	1 BD	✓	Alternate Days	Alternate Days	Every 3rd Day
Sevelamer - 400 mg	1 BD	✓	Alternate Days	Alternate Days	Every 3rd Day
Cholecalciferol (Vitamin D3)	Weekly 1	✓	HOLD	HOLD	HOLD
Pantoprazole - 40 mg	1 OD	HOLD	HOLD	HOLD	HOLD

# TREATMENT PLAN

The patient underwent a 17 day inpatient treatment program that included personalized *Ahar-Vihar* (diet and lifestyle modifications), *NidanParivarjan*along with *Shodhan* and *Shaman Chikitsa*. Vital parameters were closely monitored throughout the treatment period, with daily observations summarized in Table 3.

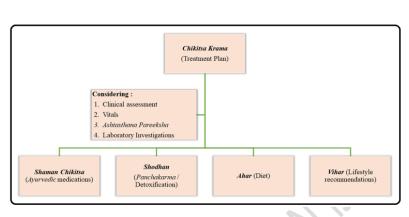


Table 3. The vitals noted during the IPD treatment

			Tempe rature	Blood Pressure	Pulse Rate	Respiration		
Date	Time	Weight (Kg)	(°F)	(mm Hg)	(per min)	(per min)	SpO <sub>2</sub> (%)	
	9:30 AM	91.20 Kg	98.2°F	140/90 mm Hg	104/min	22/min	98%	
	2:00 PM	91.20 Kg	98.4°F	150/90 mm Hg	115/min	22/min	97%	
06-06-2025	5:00 PM	91.20 Kg	98.3°F	150/100 mm Hg	110/min	24/min	98%	
	8:00 PM	91.20 Kg	98.17°F	140/90 mm Hg	110/min	22/min	98%	
	10:00 PM	91.20 Kg	98.37°F	150/90 mm Hg	105/min	24/min	99%	
	7:00 AM   91.20 Kg   98.2 °F   140/90 mm Hg   107/min   29/min							
	9:00 AM	91.70 Kg	98.4 °F	140/90 mm Hg	112/min	20/min	98%	
07.06.2025	2:00 PM	91.70 Kg	98.3 °F	150/90 mm Hg	120/min	24/min	97%	
07-06-2025	5:00 PM	91.70 Kg	98.2 °F	150/100 mm Hg	98/min	22/min	98%	
	8:00 PM	91.70 Kg	98.3 °F	140/90 mm Hg	94/min	19/min	98%	
	10:00 PM	91.70 Kg	98.7 °F	140/90 mm Hg	108/min	24/min	97%	
	7:00 AM	91.70 Kg	98.7 °F	150/90 mm Hg	98/min	22/min	98%	
	9:00 AM	91.50 Kg	98.3 °F	150/90 mm Hg	99/min	20/min	99%	
08-06-2025	2:00 PM	91.50 Kg	98.4 °F	140/90 mm Hg	120/min	22/min	98%	
08-06-2025	5:00 PM	91.50 Kg	98.2 °F	140/80 mm Hg	118/min	24/min	99%	
	8:00 PM	91.50 Kg	98.17 °F	140/90 mm Hg	104/min	24/min	98%	
	10:00 PM	91.50 Kg	98.3 °F	150/90 mm Hg	100/min	19/min	99%	
	7:00 AM	91.50 Kg	98.9 °F	130/80 mm Hg	110/min	24/min	98%	
	9:00 AM	92.25 Kg	98.1 °F	140/90 mm Hg	101/min	22/min	97%	
09-06-2025	2:00 PM	92.25 Kg	98.2 °F	150/90 mm Hg	110/min	20/min	98%	
07-00-2023	5:00 PM	92.25 Kg	98.1 °F	140/90 mm Hg	124/min	24/min	98%	
	8:00 PM	92.25 Kg	98.3 °F	140/90 mm Hg	98/min	22/min	98%	
	10:00 PM	92.25 Kg	98.1 °F	140/90 mm Hg	108/min	24/min	99%	
	7:00 AM	92.25 Kg	98.4 °F	130/80 mm Hg	110/min	19/min	98%	
	9:00 AM	90 Kg	98.2 °F	140/90 mm Hg	104/min	20/min	97%	
10-06-2025	2:00 PM	90 Kg	98.4 °F	140/90 mm Hg	102/min	24/min	99%	
	5:00 PM	90 Kg	98.3 °F	130/90 mm Hg	100/min	22/min	97%	
	8:00 PM	90 Kg	98.1 °F	140/90 mm Hg	108/min	24/min	98%	
	10:00 PM	90 Kg	98.3 °F	130/80 mm Hg	110/min	22/min	99%	
	6:30 AM	90 Kg	98.9 °F	140/90 mm Hg	106/min	24/min	98%	
	9:00 AM	90.10 Kg	98.1 °F	140/90 mm Hg	112/min	20/min	97%	
11-06-2025	2:00 PM	90.10 Kg	98.4 °F	130/90 mm Hg	104/min	22/min	99%	
	5:00 PM	90.10 Kg	98.2 °F	130/90 mm Hg	112/min	24/min	99%	
	8:00 PM	90.10 Kg	98.4 °F	130/80 mm Hg	104/min	22/min	98%	
	10:00 PM	90.10 Kg	98.1 °F	140/90 mm Hg	98/min	24/min	99%	
	7.00 43.5	00.10.17	00.00	140/00 11	100/	21/	000	
	7:00 AM	90.10 Kg	98.9 °F	140/90 mm Hg	100/min	21/min	98% 99%	
	9:00 AM	90.10 Kg	98.3 °F	130/80 mm Hg	81/min	20/min		
12-06-2025	2:00 PM	90.10 Kg 90.10 Kg	98.2 °F 98.4 °F	150/90 mm Hg	98/min 98/min	24/min	99% 99%	
	5:00 PM 8:00 PM		98.4 °F	140/80 mm Hg	98/min 99/min	22/min 24/min	98%	
	10:00 PM	90.10 Kg 90.10 Kg	98.3 °F 98.1 °F	150/90 mm Hg 130/90 mm Hg	99/min 98/min	24/min 24/min	98%	
	10.00 PM	90.10 <b>K</b> g	90.1 T	150/90 IIIII Hg	90/IIIII	24/IIIII	98%	
	7:00 AM	90.10 Kg	98.3 °F	140/90 mm Hg	90/min	24/min	99%	
	9:00 AM	90.10 Kg 90.85 Kg	98.3 °F 98.4 °F	140/90 mm Hg 130/90 mm Hg	90/min 92/min	24/min 20/min	97%	
	2:00 PM	90.85 Kg 90.85 Kg	98.4 °F	130/90 mm Hg 120/90 mm Hg	92/min 95/min	20/min 24/min	98%	
13-06-2025	5:00 PM	90.85 Kg	98.1 F 98.3 °F	140/90 mm Hg	93/min 102/min	24/min 22/min	98%	
	8:00 PM	90.85 Kg	98.4 °F	140/90 mm Hg	110/min	20/min	98%	
	10:00 PM	90.85 Kg	98.3 °F	140/90 mm Hg	104/min	24/min	99%	
	10.00 I WI	70.05 Rg	70.5 1	1 +0/70 mm111g	10-7,11111	2-7/11811	1110	

	7:00 AM	90.85 Kg	98.1 °F	120/80 mm Hg	92/min	22/min	97%
	9:00 AM	90 Kg	98.2 °F	120/80 mm Hg	90/min	20/min	98%
14-06-2025	2:00 PM	90 Kg	98.3 °F	120/90 mm Hg	92/min	24/min	99%
14-00-2023	5:00 PM	90 Kg	98.4 °F	130/80 mm Hg	95/min	22/min	98%
	8:00 PM	90 Kg	98.9 °F	140/90 mm Hg	88/min	24/min	98%
	10:00 PM	90 Kg	98.1 °F	130/80 mm Hg	99/min	22/min	99%
	7:00 AM	80 Kg	98.3 °F	130/80 mm Hg	95/min	24/min	98%
	9:00 AM	80 Kg	98.1 °F	140/90 mm Hg	100/min	20/min	99%
15-06-2025	2:00 PM	88.10 Kg	98.5 °F	140/80 mm Hg	92/min	24/min	98%
10 00 2020	5:00 PM	88.10 Kg	98.4 °F	140/90 mm Hg	88/min	22/min	99%
	8:00 PM	88.40 Kg	98.9 °F	150/90 mm Hg	70/min	24/min	98%
	10:00 PM	88.40 Kg	98.4 °F	130/80 mm Hg	78/min	22/min	99%
	7:00 AM	88.40 Kg	98.14 °F	130/80 mm Hg	82/min	24/min	98%
	9:00 AM	88.49 Kg	98.2 °F	140/100 mm Hg	90/min	20/min	97%
16-06-2025	2:00 PM	88.40 Kg	98.3 °F	140/90 mm Hg	88/min	24/min	99%
	5:00 PM	88.40 Kg	98.1 °F	140/80 mm Hg	86/min	22/min	98%
	8:00 PM	88.40 Kg	98.4 °F	130/80 mm Hg	90/min	24/min	98%
	10:00 PM	88.40 Kg	98.1 °F	130/80 mm Hg	89/min	24/min	99%
	7:00 AM	88.40 Kg	98.3 °F	140/90 mm Hg	70/min	24/min	98%
	9:00 AM	89 Kg	98.1 °F	140/90 mm Hg	88/min	20/min	97%
17-06-2025	2:00 PM	89 Kg	98.2 °F	130/90 mm Hg	64/min	22/min	98%
	5:00 PM	89 Kg	98.4 °F	140/80 mm Hg	72/min	24/min	99%
	8:00 PM	89 Kg	98.1 °F	140/90 mm Hg	64/min	20/min	98%
	10:00 PM	89 Kg	98.2 °F	130/80 mm Hg	70/min	22/min	99%
	7:00 AM	89 Kg	98.3 °F	140/80 mm Hg	86/min	24/min	97%
	9:00 AM	89.10 Kg	98.1 °F	140/90 mm Hg	89/min	20/min	98%
18-06-2025	2:00 PM	89.10 Kg	98.4 °F	120/80 mm Hg	88/min	24/min	99%
	5:00 PM	89.10 Kg	98.3 °F	120/80 mm Hg	72/min	20/min	98%
	8:00 PM	89.10 Kg	98.3 °F	130/80 mm Hg	90/min	24/min	99%
	10:00 PM	89.10 Kg	98 °F	190/80 mm Hg	80/min	24/min	98%
		00.10.77		100.000 **			
	7:00 AM	89.10 Kg	98.9 °F	130/80 mm Hg	94/min	20/min	98%
	9:00 AM	89.30 Kg	98.4 °F	140/80 mm Hg	89/min	24/min	99%
19-06-2025	2:00 PM	89.30 Kg	98.1 °F	130/90 mm Hg	88/min	22/min	99%
	5:00 PM	89.30 Kg	98.3 °F	120/80 mm Hg	72/min 78/min	24/min	98%
	8:00 PM 10:00 PM	89.30 Kg	98.4 °F 98.1 °F	130/80 mm Hg	78/min 84/min	24/min 20/min	98% 99%
	10:00 PM	89.30 Kg	98.1 F	120/80 mm Hg	84/min	20/min	99%
	7:00 AM	90 20 IZ -	98.2 °F	130/80 mm Hg	90/min	20/min	98%
	9:00 AM	89.30 Kg 90 Kg	98.2 °F	130/80 mm Hg	90/min 91/min	20/min 20/min	98%
	2:00 PM	90 Kg	98.1 °F	120/80 mm Hg	91/min 92/min	20/min 22/min	98%
20-06-2025	5:00 PM	90 Kg	98.2 °F	120/80 mm Hg	92/min 88/min	24/min	98%
	8:00 PM	90 Kg	98.1 °F	120/80 mm Hg	70/min	24/min	98%
	10:00 PM	90 Kg	98.1 °F	130/80 mm Hg	88/min	24/min 24/min	98%
	10300 PM	90 Kg	98.3 T	130/80 IIIII Hg	88/11111	24/IIIII	99%
	7.00 434	00 V -	00 4 0E	120/90 17	00/	24/	000
21-06-2025	7:00 AM	90 Kg	98.4 °F 98.1 °F	120/80 mm Hg	89/min	24/min	98% 99%
41-00-2025	9:00 AM	86.65 Kg		120/80 mm Hg 120/80 mm Hg	84/min	22/min	
	2:00 PM	86.65 Kg	98.2 °F	120/80 mm Hg	68/min	20/min	98%

# I. Shaman Chikitsa

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Based on the clinical evaluation, a detailed and patient-specific medication protocol was
 devised, as outlined in Table 4.

# Table 4: Ayurvedic medicines prescribed

Visit	Date	Medicines 1	Dosage with Anupana (Medium)
		Renal Stone Removing Powder	Half Teaspoon BD (Adhobhakta with Koshna Jala)*
		CKD Ta <mark>lle</mark> ts	2 Tab BD (Adhobhakta with Koshna Jala)
	06-06-2025	Yakrit Shoth Har Vati	2 Tab BD (Adhobhakta with Koshna Jala)
		Chandraprabha Vati	2 Tab BD (Adhobhakta with Koshna Jala)
		Rakt Chap Vati	1 Tab BD (Adhobhakta with Koshna Jala)
IPD		1	
II D		Renal Stone Removing Powder	Half Teaspoon BD (Adhobhakta with Koshna Jala)
		CKD Tablets	2 Tab BD (Adhobhakta with Koshna Jala)
	07-06-2025	Yakrit Shoth Har Vati	Tab BD (Adhobhakta with Koshna Jala)
		Chandraprabha Vati	2 Tab BD (Adhobhakta with Koshna Jala)
		Rakt Chap Vati	1 Tab BD (Adhobhakta with Koshna Jala)
		Kidney Care	20 ml BD (Adhobhakta with Sama Matra Koshna Jala )**
		Dhatu Poshak	1 Tab BD (Adhobhakta with Koshna Jala)
		Dr. BP Care	11 ab BD (Adhobhakta with Koshna Jala)
Follow up	05-07-2025	CKD Tablets	1 [ab BD (Adhobhakta with Koshna Jala)
ronow up	03-07-2023	Yakrit Shoth Har Vati	2 Tab BD (Adhobhakta with Koshna Jala)
		Chandraprabha Vati	2 Tab BD (Adhobhakta with Koshna Jala)
		Kidney Care	15 ml BD (Adhobhakta with Sama Matra Koshna Jala)
		* Adhobhakta with Koshna Jale	7 - After Meal with Lukewarm Water
	** Adhobhak	cta with Sama Matra Koshna Jala	- After Meal with Equal Amount of Lukewarm Water

# 117 II. Shodhan

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Following a thorough clinical evaluation, a customized *Panchakarma* treatment plan was developed for the patient. The regimen included therapies such as *AwegahSwedan*, *Shirodhara*, *MatraBasti*, *Kashaya Basti*, *Abhyang*, *VrikkBasti* and *Kansya* therapy specifically tailored to address the underlying condition effectively.

# $1. \ \textit{AwagahSweden}^{[10]}$

Pre - Procedure (Purv karma)	The patient was assessed for suitability, and a warm ayurvedic decoction was prepared at 39 - 42°C and poured into a tub to immerse the lower back and pelvic region.		
Main Procedure (Pradhan karma)	The patient sat comfortably in the tub with the pelvic region immersed in warm decoction for 15–20 minutes, and the temperature was maintained throughout.		
Post Procedure The body was gently dried with a clean towel, and the patient was advis			
(Paschat Karma)	rest and consume light food with warm water.		

2. Shirodhara with Brahmi  $\mathrm{Oil}^{[11]}$ 

	The Brahmi oil was gently warmed using a water bath to approximately body
Preparation	temperature (39–40°C).
	temperature (39–40°C).
	The patient was positioned supine on the Shirodhara table and the eyes and
Pre-Procedure	ears were protected using cotton.
(Purv Karma)	A 5-10-minute gentle massage of the scalp, forehead, and shoulders was
	performed using a Brahmi oil to facilitate relaxation.
	The Shirodhara vessel was positioned approximately 5 inches above the
Main Procedure	forehead, allowing a continuous stream of lukewarm Brahmi oil end to flow
(Pradhan Karma)	steadily over the Ajna Chakra (forehead region).
(Fraanan Karma)	The oil was rhythmically poured from temple to temple for 45 minutes at a
	consistent temperature.
De et December	The patient was rested for 15 minutes post-procedure, excess oil was
Post-Procedure	removed with warm towels, followed by a warm herbal bath, and advised
(Paschat Karma)	light diet and rest for the day.
	[12]

# 3. MatraBasti with Gokshur<sup>[12]</sup>

Pre-Procedure (Purv Karma)  The patient was assessed for suitability, given light and warm food previous night, ensured to have an empty bladder and bowel, and posin the left lateral position with the right knee flexed prior to administra		
Main Procedure (Pradhan Karma)	The <i>Gokshura</i> oil was warmed to body temperature and approximately 60 ml was drawn into peterile <i>Basti</i> syringe.  The <i>Basti Netra</i> was lubricated and gently inserted into the rectum, following which the oil was administered slowly, and the patient was advised to remain in the same position for 20 minutes.	
Post-Procedure (Paschat Karma)	Post-procedure, the patient was advised to rest, provided light warm food after a few hours, and monitored for natural evacuation of the administered oil.	

# 4. KashayaBasti with $Trinpanchmool^{[13]}$

Pre-Procedure	The patient was clinically evaluated and found suitable for Kashaya Basti, following which preparatory measures including light diet and bowel and bladde
(Purv Karma )	evacuation were completed before positioning in the left lateral position for administration.
	Trinpanchamoola Kashaya was prepared with Madhu, Saindhava
Main Procedure	Lavana, Sneha Dravya, and Kalka as per classical protocol and warmed t body temperature.
(Pradhan Karma )	It was then administered rectally using a sterile <i>Basti Netra</i> with the patient in the left lateral position.
	Following administration, the patient remained in the same position until the urg
Post-Procedure	to evacuate occurred, was monitored for signs of proper evacuation, and was
(Paschat Karma)	subsequently advised rest with a light, warm diet and avoidance of physical exertion.
	5. Abhyang with BalaAshwagandha Oil <sup>[14]</sup>
Pre-Procedure	The patient was assessed for Abhyanga suitability, positioned comfortably in
(Purv Karma)	a warm, well-ventilated room, and the Bala-Ashwagandha oil was gently
	warmed to body temperature before initiating the procedure.
	Warm Bala-Ashwagandha oil was applied uniformly over the patient's
	body, and massage was performed using moderate pressure in the direction of
Main Procedure	hair growth.
(Pradhan Karma)	Circular motions were used over joints and long strokes along muscles, with
	focused attention on areas of stiffness, following standard <i>Abhyang</i> protocol for 45 minutes.
	101 +3 Himutes.
Post-Procedure	Following Abhyang, the patient was allowed to rest, and was subsequently
(Paschat Karma)	advised a warm water bath, adequate hydration, and a light, warm diet.
	6. VrikkBasti with Gokshur <sup>[15]</sup>
	T
Pre-Procedure	The patient was assessed for <i>Vrikk Basti</i> , positioned in the prone posture, and a leak-proof dough ring made of black gram flour was placed over the

Pre-Procedure (Purv Karma)	The patient was assessed for Vrikk Basti, positioned in the prone posture, and a leak-proof dough ring made of black gram flour was placed over the cleaned and gently massaged lumbar region.
Main Procedure (Pradhan Karma)	Gokshur oil was gently warmed to body temperature and poured into the dough ring placed over the lumbar (Vrikk) region until the cavity was adequately filled.  The oil was retained for approximately 30–40 minutes, with temperature maintained by reheating or replacing the oil as required during the procedure.
Post-Procedure (Paschat Karma)	After the retention period, the oil was carefully removed, the area was cleansed with warm water and a sterile cloth, and the patient was advised to rest, avoid cold exposure, and consume a light, warm diet.

7. Kansya Therapy<sup>[16]</sup>

Pre-Procedure (Purv Karma)	The patient was evaluated for therapy suitability, positioned comfortably in a warm environment, and the targeted area was cleansed and pre-lubricated with warm <i>Bala</i> oil to facilitate effective application and absorption during the procedure.	
Main Procedure (Pradhan Karma)	A gently warmed Kansya (copper alloy) plate was moved in circular and linear motions over the oiled area using moderate, consistent pressure.  The technique was performed for 20–30 minutes to stimulate Marma points, improve local circulation, reduce muscular tension, and support Vata balancing.	
Post-Procedure (Paschat Karma)	Post-therapy, excess oil was removed with a warm damp cloth, the area was dried, and the patient was advised to rest, stay hydrated, and avoid cold exposure or physical exertion.	

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# III. Ahar

A targeted dietary strategy, particularly the adoption of a renal-specific nutritional plan, is essential in managing and decelerating the progression of Chronic Kidney Disease (CKD). In this case, a meticulously tailored diet was formulated to meet the patient's individual clinical requirements and support overall therapeutic outcomes.

- a) Pathya (allowed) [18]
  - Fresh and homemade food
  - Millet diet
- b) Apathya (Avoid): [18]
  - Wheat, Packed food, Refined food, Diary food/ Animal food, Coffee and Tea
  - Never eat after 8 PM
  - In solid take small bite and chew 32 times
  - In liquid take sip and drink slowly
- c) Hydration [19]
  - poil 2 litres of water, reduce it to half (1 litre) and consume
  - Alkaline water 3-4 times a day (1 litre)
  - Herbal tea (32 herbs tea)
  - Living water
  - Turmeric water
- d) Millet Meal [20]
  - Foxtail (Setariaitalica)
  - Barnyard (Echinochloaesculenta)
  - Little (Panicumsumatrense)
  - Kodo (Paspalumscrobiculatum)
  - Browntop (*Urochloa ramose*)
  - MotaAnaj Sorghum (Sorghum bicolor)
- e) Special Instructions<sup>[19]</sup>
  - · Brisk walking 30 min with barefoot
  - Sit in sunlight for 1 hour

- 10 min slow walk after every meal
- One day fasting is recommended
- 167 Get quality sleep (8 hours)
  - Cook millets in a steel cookware using only mustard oil.
  - Sit in Vajrasana after every meal
  - f) Meal Structure [19]

Early Morning (5:45 AM)	Breakfast (09:00 - 10:00 AM)	Morning Snacks (11:00 AM)	Lunch (12:30 -02:00 PM)	Evening Snacks (04:00 - 04:20 PM)	Dinner (06:15 - 07:30 PM)
4 Crushed tulsi leaves +1 gm ginger +2 spoons of honey + hot water = on empty stomach / Herbal Tea	Plate 1: Seasonal fruits (4-5 types) + turmeric water + Mugda yusha Plate 2: Millet Khichdi / Millet Poha / Millet Upma	Red Juice (Beetroot, Carrot, Tomato & Pomegranate)     150 ml      Soaked Almonds (4-5)	Plate 1: Steamed Salad Plate 2: Fermented Millet Meal  Millet Meal	Green Juice (Spinach, Fenugreek, Bathua, Amaranth, Mint, Coriander, Curry leaves & betel leaves) – 100 – 150 ml      Soaked Almonds (4-5)	Plate 1: Steamed Salad     Plate 2: Green Vegetable Soup

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- Green Vegetable Soup:
   Spinach, Peas, Carrots, Cabbage, Capsicum, Ghee, Zucchini, Cucumber, Green Gram, etc. (10 grams each) Add Ginger, Garlic and Black Salt
- Grind & boil for a minute
- Add lemon as per taste & serve

Plate 1:

Patient Weight X 10

Plate 2:

Patient Weight X 5

Herbal Iea 10-1;
Gauzaban (Borago officinalis), Kulanjan (Alpinia galanga), Badi Elaichi (Anomum subulatum), Laung (Syzygtum aromaticum), Baddiyan Khtayi (Illichum verum), Bangsha (Yolo odorata), Jafa (Hyssopus officinalis), Ashwagandha (Withania somnifera), Mulethi (Ghyerrhiza glabra), Punarawa (Boerhavia diffisa), Brahmi (Bacopa momiteri), Chiraka (Phumbago zeylamica), Marich (Piper nigrum), Adoosa (Insticia adhatoda / Adhatoda vasica), Saunf (Fooniculum vulgare), Shankh Pashpi (Comvolvulus pluricaulis), Arjun (Terminalia arjuna), Tulsi (Ocimum sanctum), Motha (Cyperus rotundus), Senaye (Cassia angustifolia), Sounth (Zingiber officinale dried ginger), Majeeth (Rubia cordfolia), Sarfoka (Tephrosia purpurea), Dalchini (Cimamomum zeylanicum), Gulda (Rosa damascena), Green Tea (Camellia sinensis), Giloy (Tinospora cordifolia), Tej Patta (Cinnamomum tamala), Lal Chandan (Pterocarpus santalimus), White Chandan (Santalum album) and Padina (Mentha piperita)

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# IV. Vihar<sup>[19]</sup>

- a) Meditation: The patient was advised to practise Meditation daily for 30 minutes
- b) Yoga: Perform SukshmPranayam and Sukhasan for 40 minutes daily 176
  - c) Sleep: Ensure 6-8 hours of uninterrupted and deep sleep.
  - d) Walking: Brisk walk for 30 minutes in barefoot.
    - e) DailyRoutine: The patient was also advised to follow a structured routine.

# **OBSERVATION & RESULT**

- 181 During the course of treatment, the patient demonstrated consistent clinical improvement.
- 182 Quality of life assessments indicated significant enhancement in both physical and emotional
- domains. Substantial symptomatic relief was observed after 17 days of inpatient care, 183
- 184 including reduction in symptoms like frothy urine, general weakness, cervical region stiffness 185
  - and head heaviness. Notable improvements were also seen in appetite, sleep and nausea. The
- character of the urine normalized, transitioning from frothy to clear. These clinical outcomes 186

were corroborated by laboratory investigations, which revealed a significant reduction in Creatinine and Blood Urea Nitrogen (BUN) whereas, a notable improvement in Haemoglobin and e-GFR value. A comparative summary of pre- and post-treatment laboratory values is presented in Table 5, while Table 6 outlines the changes in clinical symptoms.

Table 5: Pre and Post - treatment laboratory evaluations

Tests	Values				
Tests	10-06-2025	15406-2025	21-06-2025	04-07-2025	
Hae 16 globin (Hb)	10.2 gm/dl	11.4 gm/dl	11.5 gm/dl	-	
Creatinine	6.79 m/dL	6.86 mg/dL	6.08 mg/dL	4.99 mg/dL	
Blood Urea Nitrogen (BUN)	36.26 mg/dL	32 mg/dL	32 mg/dL	25 mg/dL	
Estimated Glomerular Filtration	4	10.00 1 1 1 70 2	10 7/1/170 2	17 1/1/172 2	
Rate (eGFR)	10.05 mL/min/1.73 m <sup>2</sup>	10.00 mL/min/1.73 m <sup>2</sup>	12 mL/min/1.73 m <sup>-</sup>	15 mL/min/1.73 m <sup>2</sup>	

Table 6: Comparative Analysis of Symptoms Pre- and Post-Treatment

Symptoms before treatment	Symptoms after treatment
Frothy urine (Phenila Mutra)	Improved
Generalized weakness (Daurbalya)	Improved
Cervical stiffness (Greeva Stambha)	Relieved
Increased sleep (Atinidra)	Normalized
Proteinuria (Mutra Rog with Prameh Lakshana)	Improved
Nausea (Hrillasa)	Relieved

# DISCUSSION

This case study describes a 33-year-old male patient diagnosed with Chronic Kidney Disease (CKD) and Hypertension (HTN), who sought treatment at JeenaSikhoLifecare Limited Hospital. He presented with symptoms of frothy urine, generalized weakness, cervical stiffness, increased sleep, proteinuria and nausea.

A thorough assessment was conducted, encompassing vital signs, *AshtasthanaPareeksha* findings, and laboratory investigations, to develop an individualized treatment approach. The integrative management plan included *NidanParivarjan*, along with tailored interventions in *Ahar, Vihar, Shaman Chikitsa* and *Shodhan*.

# 1. NidanParivarjan

As part of the therapeutic plan, the patient was advised to eliminate heavy, oily, fermented, and overly spicy foods from the diet. Emphasis was placed on strict regulation of blood glucose and blood pressure, avoidance of nephrotoxic agents, and adherence to a renal-appropriate diet with controlled intake of salt, protein, and potassium. The patient was also instructed to maintain optimal hydration, avoid strenuous physical exertion, abstain from alcohol and tobacco, and follow a regular daily regimen. This integrated approach aligns with the *Ayurvedic* principle of *NidanParivarjan*, aiming to eliminate contributing factors, preserve renal function, and support improved clinical outcomes.<sup>[17]</sup>

# 2. Samprapti

- 214 The Samprapti (pathogenesis) of the condition is depicted in Figure 1, outlining the etiopathological progression of VrikkRog (chronic kidney disorder). The disease is attributed 215 216 to multiple causative factors (Nidan) including improper dietary habits (Ahar), sedentary or 217 irregular lifestyle practices (Vihar), psychological stress (Manasik), and genetic predisposition (Adrishta). These factors primarily lead to vitiation of Tridoshas, with Kapha 218 219 and Vata being predominantly involved. The disturbed Doshas contribute to AgniDushti (metabolic dysfunction), resulting in the formation and accumulation of Ama (toxic metabolic 220 by-products). The presence of Ama causes Strotorodha (obstruction) within the 221 MutravahSrotas (urinary system), either directly or through the dysfunction of associated 222 223 Dhatus such as Meda, Rakta, and Rasa. This sequential pathophysiology progressively 224 impairs renal structure and function, manifesting as VrikkRog (CKD). If left unaddressed, the
- condition advances into Bhedavastha (complicated stages), presenting with various forms of 225 226 Mutrakrichchhra (urinary disturbances), classified according to the dominant Dosha -
- Vataja, Kaphaja, or Pittaja. [9] 227

#### 3. Ahar 228

- It dietary regimen focuses on light, easily digestible, and nutritionally balanced meals spread 229 230 across six intervals throughout the day. The routine begins with tulsi-ginger water or herbal
- 231 tea in the early morning, followed by seasonal fruits and millet-based preparations for
- breakfast. Midday and evening snacks include fresh vegetable juices (such as beetroot or 232
- leafy greens) and soaked almonds. Lunch and dinner consist of steamed salads, fermented
- millet dishes, and green vegetable soups made with low-potassium ingredients like spinach, 234 235
- zucchini, and carrots. This approach enhances digestion, aids detoxification, and aligns with
- 236 Ayurvedic principles to balance the Doshas and support renal function. Meals were to be
- consumed before 8 PM, with an emphasis on including health promoting beverages such as 237
- herbal tea, turmeric water, and naturally energized water. [18,19] 238

#### 239 4. Vihar

- 240 The patient was guided to adopt targeted lifestyle modifications to support overall well-being.
- This included practicing daily meditation to alleviate stress and improve mental focus, 241
- alongside a tailored yoga regimen to enhance physical flexibility, relaxation, and emotional 242
- 243 balance. Emphasis was also placed on ensuring 6-8 hours of quality, uninterrupted sleep and
- maintaining a structured, consistent daily routine to promote holistic health and 244
- equilibrium.[19] 245

#### 5. Chikitsa 246

- A comprehensive therapeutic plan was formulated by the physician, encompassing both 247
- Shodhan and ShamanChikitsa. Based on a detailed clinical evaluation, a personalized 248
- Panchkarma protocol was designed, including interventions such as Awagah Swedan, 249
- 250 Shirodhara, MatraBasti, Kashaya Basti, Abhyang, VrikkBasti and Kansya therapy with the
- objective of targeting the underlying pathology and restoring systemic homeostasis. 251
- 252 In AvagahSwedan, the patient underwent immersion therapy in warm water maintained
- 253 at 42°C, up to the level of the umbilicus, for approximately 40 minutes to induce
- 254 therapeutic sweating. This procedure facilitates peripheral vasodilation, enhancing blood
- circulation and providing relief from musculoskeletal discomfort. The induced 255

perspiration aids in the elimination of metabolic waste and toxins, thereby supporting
 systemic detoxification and promoting overall therapeutic benefit. [10]

- *Shirodhara* was performed using lukewarm *Brahmi* oil, with the patient comfortably positioned in a supine posture and the forehead aligned beneath a vessel delivering a continuous stream of oil over the *Ajna Chakra* from a height of approximately four finger-breadths. This classical *Ayurvedic* therapy is known to enhance cerebral circulation, thereby facilitating improved oxygenation and nutrient supply to brain tissues. [10] In individuals with Chronic Kidney Disease (CKD), who frequently experience anxiety, cognitive disturbances, and sleep irregularities due to toxin build up, the bacoside rich *Brahmi* oil may help regulate the stress response, reduce cortisol levels, activate the parasympathetic nervous system, and promote restful sleep. [21]
  - MatraBasti was administered using Gokshur Tail. Gokshur acts as a natural diuretic
    in the patient, promoting urine output to reduce fluid retention, facilitate toxin
    elimination, and support blood pressure management commonly associated with
    CKD.<sup>[22]</sup>
  - Kashaya Basti was administered using Trinpanchamoola Kashaya. Trinpanchamoola
    Kashaya is used to pacify aggravated Vata and reduce Kapha induced obstruction in
    the MutravahaSrotas, thereby improving urinary flow and alleviating Srotorodha in
    CKD.<sup>[23]</sup>
  - Abhyangimproves peripheral blood flow through massage, improving overall oxygen
    and nutrient delivery. Bala-Ashwagandha Taila, when used in Abhyanga, was used to
    nourish depleted Mamsa, Meda, and Majja Dhatus, thereby improving physical
    strength and reducing fatigue and general debility associated with CKD. [24]
  - VrikkBastiwas performed with Gokshur oil. Gokshur supports urinary tract and renal
    detoxification by preventing further accumulation of Ama (metabolic toxins) and
    minimizing the burden on compromised nephrons. Studies suggest it offers
    nephroprotective effects by reducing oxidative stress, inflammation, and potentially
    mitigating glomerular sclerosis and tubulointerstitial damage. [15,22,25]
  - Kansya(copper plate) therapy was employed to improve peripheral circulation, reduce
    muscular stiffness and fatigue, and support Vata pacification, thereby enhancing
    overall vitality and aiding in symptomatic relief in the supportive management of
    Chronic Kidney Disease. [16, 26]

A carefully structured *ShamanChikitsa* (palliative treatment) protocol was recommended by the physician A comprehensive overview of the *Ayurvedic* formulations used in this case is provided in Table 7. *Gokshur* (*Tribulusterrestris*), *Punarnava* (*Boerhaviadiffusa*) and *Giloy* (*Tinosporacordifolia*) are the principal herbs commonly incorporated in *Ayurvedic* formulations. Their therapulatic efficacy is determined by their *RasPanchak* – a comprehensive analysis of taste (*Rasa*), qualities (*Guna*), potency (*Virya*), post-digestive effect (*Vipaka*), and specific action (*Prabhava*) – as follows. [27]

- Gokshur (Tribulusterrestris) has MadhurRas (sweet taste), Guru (heavy) and SnigdhaGuna (unctuous quality), ShitaVirya (cold potency), and MadhurVipaka (sweet post-digestive effect), with Mutrala (diuretic) and VrishyaPrabhava (aphrodisiac-specific action), making it effective in urinary and reproductive disorders.
- Punarnava (Boerhaviadiffusa) possesses Tikta-Kashaya Ras(bitter and astringent taste),
   Laghu-RukshaGuna(light and dry qualities), UshnaVirya(hot potency), and

304 305 306 307	KatuVipaka(pungent post-digestive effect), with Shothahara(anti-inflammatory) and MutralaPrabhava(diuretic action), useful in managing edema and kidney dysfunction.  Giloy (Tinosporacordifolia) exhibits Tikta-Kashaya Ras (bitter and astringent taste), Laghu-SnigdhaGuna (light and unctuous qualities), UshnaVirya (hot potency), MadhurVipaka (sweet post-digestive effect), and Rasayana (rejuvenative) and TridoshaghnaPrabhava (pacifies all three doshas), supporting immunity, detoxification, and chronic disease management.
308	Table 7: Detailed description of medicines prescribed
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Renal Stone Removing Powder  Renal Stone Removing Renal Stone (Potassium intrate, Alum, and California Relations), Shouth Red Shaman (balancing fluids), and Shotha Har (reducing inflammation). Renal Stone Removing Renal Stone Removing Renal Stone Removing Renal Stone Removing Relation Relation Relation Relation Relations, Showed Relations, R
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Powder  Parpati (A compound preparation of Potassium nitrate, Alum, and Annnonium (E) ide)  Pashanbhed (Bergenia ciliata), Varun (Crataeva nurvala), Punarnava (Boerhavia diffusa), Gokshur (Tribulus terrestris), Apamarg (Achyvanthes aspera), Haridra (Curcuma longa), Charila (Embelia ribes), Kulthi (Dolichos biflorus), Haritaki (Terminalia chebula), Bhumiamlaki (Pyrrosia piloselloides), Guduchi (Tinospora cordifolia), Shitalchimi (Vernonia cinerea), Anantmool (Hemidesmus indicus), Khas (Vetiveria zizanoides), Yava kshar (Alkaline substance, botanical origin unclear), Muli Kshar (Raphanus sativus), Kalmi Shora (Sodium bicarbonate), Saji kshar (Traditional alkaline substance, botanical origin unclear), Shitajeet (Asphaltum), Hazrool Yahood (Silicon dioxide), Shwet Parpati (Mercuy-based preparation in Ayurvedic medicine).  Punarnava (Boerhavia diffusa), Krishna Marich (Piper nigrum), Pippali (Piper longum), Vaya vidanga (Embelia)
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dioxide), Shwet Parpati (Mercury-based preparation in Ayurvedic medicine).  Punarnava (Boerhavia diffusa), Krishna Marich (Piper nigrum), Pippali (Piper longum), Vaya vidanga (Embelia
medicine).  Punarnava (Boerhavia diffusa), Krishna Marich (Piper nigrum), Pippali (Piper longum), Vaya vidanga (Embelia
Punarnava (Boerhavia diffusa), Krishna Marich (Piper nigrum), Pippali (Piper longum), Vaya vidanga (Embelia
nigrum), Pippali (Piper longum), Vaya vidanga (Embelia
ribes) Devdary (Cedrus deodara) Kutha (Saussurea costus)
Haridra (Curcuma longa), Motha (Cyperus rotundus), Yakrit Shodhan (Liver a
Kalajira Tuminum cyminum), Chitrak (Plumbago zeylanica), bile detoxifier), (Agni Haritaki (Terminalia chebula), Vibhitaki (Terminalia bellirica),
Yakrit Shoth Har Amlaki (Emblica officinalis), Danti (Baliospermum Deepan) digestive and
Vati montanum) Chayva (Piper chaha) Indra Ibn (Tarayacum (Pachan) metabolic enhance
officinale) Pinnali-Moel (Piner longum) Kayahal (Myrica) nourishes plasma tissue, a
esculenta), Kutaki (Picrorhiza kurroa), Nishoth (Operculina) balances Vata-Pitta dosh
turpethum), Shunthi (Zingiber officinale), Kakad Singhi
(Cucumis sativus), Ajwain (Trachyspermum ammi), Mandoor
Bhasam (Ferrum).
Camphor (Cinnamomum camphora), Vacha (Acorus calamus),
Nagarmotha (Cyperus rotundus), Bhumiamlaki (Phyllanthus
niruri), Guduchi (Tinospora cordifolia), Hari 11 (Curcuma Mutrakrichra Har (reliev
longa), Daru Haridra (Berberis aristata), Dhanyaka (Coriandrum sativum), Haritaki (Terminalia chebula),
Vibbitaki (Terminalia bellerica) Amlaki (Phyllanthus (diuretic), Krimigina (ar
wati amblica) Vidanga (Embelia ribes) Shunthi (Zingiber parasitic), strength promot
officinale), Krishna Marich (Piper nigrum), Himalayan Salt, and enhances immunity (Oja
Nishoth (Operculina turpethum), Tejpatta (Cinnamomum
tamala), Dalchini (Cinnamomum cassia), Cardamom
(Elettaria cardamomum), Shilajeet
Sarpagandha – (Rauv olfia serpentina), Ajwain Khurasani – (Hyoscyamus niger), Jatamansi – (Nardostachys jatamansi),
Rhang = (Cannahis sativa) Pinnali-moal = (Piner longum = (Supports healthy blood
Pakt Chan Vati root part) Mati Picti (Paarl calcium pranaration derived from pressure), Hridya (hear
Pinctada margaritifera or similar pearl oyster species), Mukta (circulation, immunity, and
Sukti Pisti – (Prepared from pearl oyster shell – Ostrea edulis or kidney detoxification
related species)
Shodhan (Aids in
Kidney Care    Punarnavarishtha, Chandanasava, Ushirasava, and detoxification) and Vrikk
function), Shothahar
Chuna Shuddh (Calcium carbonate), Shankh Bhasam Rasayan (Rejuvenative)
Dhatu Poshak (Turbinella pyrum), Mukta Shukti (Pinctada margaritifera), Ojovardhaka, enhance
Praval Pishti (Corallium rubrum), Kapardika (Cypraea disease resistance, and
moneta) and Loh (Ferrum or Iron oxide). nourishes body tissues
Shankh-Pushpi (Convolvulus pluricaulis), Shatavari
(Asparagus racemosus), Ashwagandha (Withania somnifera), Mind-calming action (Man  Brahwi (Racona monniari) Vacha (Acorus calamus Linn) Shanan) blood prassus
Brahmi (Bacopa monnieri), Vacha (Acorus calamus Linn),   Shaman), blood pressur   Dr. BP Care   Sarpagandha (Rauv olfia serpentina), Jeerak (Cuminum stabilizing effect (Raktacha
cyminum), Guduchi (Tinosporacordifolia), Malabar nut Shaman ), and sleep-induc
(Adhatoda vasica), <b>Jatamansi</b> (Nardostachys jatamansi), and property (Nidrajanan)
Muktha Pishti (Pearl powder)

# FUTURE RESEARCH ASPECTS

- 311 A key area for future research in the Ayurvedic management of Chronic Kidney Disease
- 312 (CKD) lies in exploring the molecular mechanisms through which Ayurvedic formulations
- 313 exert renoprotective effects. Although herbs like Punarnava, Gokshur, Haritaki, Shilajeet,
- and Vibhitaki are traditionally recognized for their role in kidney care, there is a need for
- 315 robust scientific studies to clarify their interactions with critical biochemical pathways
- 316 involved in CKD pathophysiology. [28]
- 317 Future studies could include:

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- Pharmacokinetic and pharmacodynamics investigations: This research would focus
   on examining the absorption, distribution, metabolism, and excretion of *Ayurvedic* herbs
   used in CKD treatment. Gaining insight into how the body processes these herbs could
   facilitate optimizing their application in contemporary clinical practice.
- 2. Clinical trials: Conducting well-designed randomized controlled trials (RCTs) to evaluate the safety and effectiveness of *Ayurvedic* treatments in patients with CKD, especially in stages 3 to 5, would offer robust evidence of their advantages relative to conventional therapies. [30]
- 32. Biomarker discovery and validation: Research could aim to identify biomarkers that
   327 reflect the effectiveness of Ayurvedic treatments, enabling improved monitoring of
   328 disease progression and therapeutic outcomes in CKD patients. [31]
- Combination therapies: Investigating the potential synergistic effects of Ayurvedic treatments combined with modern pharmaceutical interventions could pave the way for more holistic, integrated treatment approaches for CKD management. [32]
- 5. **Gut microbiome studies**: *Ayurveda* places significant importance on digestion and metabolic balance. Future studies could investigate the impact of *Ayurvedic* treatments on the gut microbiome and their potential role in supporting kidney health, especially since microbiome imbalances are increasingly associated with the progression of CKD. (33)

# 337 CONCLUSION

- 338 This case study demonstrates the successful Ayurvedic management of Chronic Kidney
- 339 Disease (CKD) with coexisting hypertension in a patient presented with significantly
- 340 impaired renal function. The patient's medical history revealed advanced chronic kidney
- damage, including diffuse glomerulosclerosis and severe tubulointerstitial chronicity, with no
- 342 evidence of immune complex deposition and negative or pending autoimmune markers—
- 343 indicating structural deterioration of non-immune etiology.
- 344 A comprehensive Ayurvedic treatment protocol was initiated following detailed clinical
- assessment, including laboratory parameters and symptomatology. The management strategy
- 346 focused on *NidanParivarjan* (elimination of causative factors), *Ahar-ViharParivarjan*
- 347 (dietary and lifestyle modifications), Panchakarma therapies for systemic detoxification, and
- 348 ShamanChikitsa incorporating hepatoprotective and Rasayan (rejuvenative) formulations.
- 349 Over the course of one month, the patient showed notable clinical and laboratory
- 350 improvement in renal function, systemic vitality, and associated symptoms.
- 351 Clinical:

- The patient demonstrated marked symptomatic improvement over the course of treatment.
- Notable clinical changes included the gradual resolution of frothy urine, alleviation of generalized weakness, and relief from cervical stiffness.
- The patient initially experienced increased sleep duration, which subsequently reduced
   to a normal range.
- Additionally, the patient's proteinuriashowed progressive improvement, and episodes
   of nausea resolved completely.

### 360 Laboratory:

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- Laboratory findings corroborated the clinical progress. Serum creatinine levels decreased from 6.79 mg/dL to 4.99 mg/dL, while blood urea nitrogen (BUN) levels decreased from 36.26 mg/dL to 25 mg/dL.
  - Estinated glomerular filtration rate (eGFR) improved from 10.05 mL/min/1.73 m<sup>2</sup> to 15 mL/min/1.73 m<sup>2</sup>, indigating partial renal function recovery.
  - Hemoglobin levels also increased from 10.2 g/dL to 11.5 g/dL, suggesting an improvement in the patient's overall hematologic status.

These improvements correlate with the effective pacification of aggravated *Vata-Kaphadoshas*, enhancement of *Agni* (digestive fire), clearance of *Ama* (metabolic toxins), and restoration of *MutravahStrotas* (urinary channels). This case underscores the therapeutic potential of integrative *Ayurvedic* protocols in managing chronic systemic disorders like CKD, especially in cases with coexisting conditions. Continued *Rasayan* therapy and regular clinical monitoring are recommended to maintain and enhance long-term outcomes.

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