"An in-Depth Study on Ayurvedic Management of Vrikka Vikara (Renal Disorders) through Panchkarma Chikitsa with Special Emphasis on Mutravah Srotas Dushti (Disorder of the Urinary System)": A Case-Based Approach

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Abstract

Chronic Kidney Disease (CKD) is a progressive condition often associated with comorbidities such as Type 2 Diabetes Mellitus (T2DM) and hypertension. Conventional management may involve dialysis and lifelong medication, prompting interest in integrative approaches. This case study evaluates the effectiveness of *Ayurvedic* interventions in improving renal function and overall health in a patient with CKD, diabetes, and hypertension. A 49-year-old male patient with complaints of weakness, frothy urine, constipation, and pedal edema underwent an integrative *Ayurvedic* treatment protocol including *Panchkarma* therapies, *Ayurvedic* formulations *Punarnava* (*Boerhavia diffusa*), *Gokshur* (*Tribulus terrestris*), and *Mulethi* (*Glycyrrhiza glabra*). Lifestyle measures such as *yoga*, *pranayama*, and early meals were also incorporated. After the intervention, notable clinical improvements were recorded. Blood urea decreased from 210.50 mg/dl to 150.99 mg/dl and serum creatinine from 10.40 mg/dl to 8.88 mg/dl in 8 days. Hemoglobin levels improved, and electrolyte balance was maintained. Symptomatic relief included reduced fatigue, frothy urine, constipation, and edema. The Disciplined & Intelligent Person's Diet (DIP) & *Ayurvedic* diet helped stabilize metabolic function, while selected herbs demonstrated specific *Rasapanchaka* properties aligned with *Tridosha* balancing. *Ayurvedic* interventions, when integrated with dietary and lifestyle changes, may provide a beneficial adjunct in CKD management. This approach demonstrated improved renal biomarkers and symptomatic relief.

Keywords: Ayurveda, Chronic Kidney Disease, Lifestyle Modifications, Panchkarma Therapy, Vrikka vikara.

Introduction

Chronic kidney disease encompasses a spectrum of pathophysiologic processes that are associated with a progressive decline in glomerular filtration rate (GFR) and abnormal kidney functions ^[1]. It is usually developed over some time. Major risk factors for CKD are childhood obesity, hypertension, diabetes mellitus, a family history of CKD, leading to intestinal kidney diseases, and or glomerular diseases causing proteinuria, CKD etc. evolutionally requiring RRT (renal replacement therapy) ^[2]. It has been estimated

from population data that at least 13% of the adult population in the India has CKD at stages 1 and 2 [3]. The occurrence of 40 to 60% of chronic kidney cases in India is due to hypertension and diabetes [4]. Raised serum urea and serum creatinine levels are usually found accidentally in routine blood tests and also during screening for high-risk patients, such as diabetes and hypertension, which are typical presentations for CKD. Common manifestations include fatigue and shortness of breath, likely stemming from renal anemia and fluid retention [5]. As renal function continues to

decline, additional symptoms such as itching, loss of appetite, weight loss, nausea, vomiting, and hiccups may develop.

There is no direct correlation between CKD mentioned in *Ayurveda*. So, according to clinical presentation, it is considered under *mutravah srotas vikar* (disorders of the urinary system), and its main symptom is *mutrakshaya* (Reduced urine output), which is primarily seen in *mutraghaat* (Urinary retention), so it is treated accordingly. *Acharya Sushrut* mentioned the origin of the term *vrikka* (Kidney) by *meda* (Adipose tissue) and *rakta dhatu* (Blood tissue). So, both the *dhatus* will be involved in CKD. Also, all three *doshas* (functional principles of the body), *mutravah* (Urinary tract pathways), *udakvah* (Water-carrying channels) and *raktavah srotas* (Blood-carrying channels), will be involved [6].

Samprapati Ghatak (Components of Pathogenesis) [7]

Dosha: Tridoshas (three humors: Vata, Pitta and Kapha), with a predominance of Vata dosha.

Agni (Digestive fire): Manda (weak metabolism)

Marga (Pathway): *Madhyama rogamarga* (Intermediate pathways of disease).

Srotas (Body Channels): Medovah, Mutravah (Adipose Tissue & renal system)

Strotodushti (Channel Dysfunction): Srotosanga (obstruction in microchannels of *Mutravah srotas*) and *Vimarg gaman* (abnormal presence of excretory metabolites in blood).

Adhishthan (Location): Basti (urinary tract channels)

Vyadhi swabhav (Nature of the Disease): Chirkari (chronic)

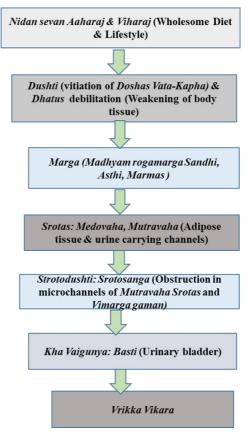


Fig 1: Samprapati of Vrikka vikara

Case Report

A 49-year-old male, known case of CKD for 6 months, Diabetes for 15 years, and Hypertension for 5 years visited on 31/1/2025 at Jeena Sikho Lifecare Limited Hospital, Derabassi, Punjab, India. The patient chief complaints were Weakness, Pain, Frothy urine, Dyspnea, constipation, and Pedal edema. Vitals during the initial examination on 31/1/2025 were as follow:

• **Blood Pressure:** 140/90 mmHg

Pulse Rate: 88/min.Weight: 68 kgBMI: 24.38

Table 1: Allopathic Medicine of Patient

Medicine	Dosage
Atorvastatin (10 mg) + Aspirin (75mg)	HS
Sodium Bicarbonate (500 mg)	OD

Table 2: Asthvidha Pariksha during the initial examination visit on 31/1/2025

Parameters	Findings
Nadi (Pulse)	VataPittaj
Mala (Stool)	Badha (Constipation)
Mutra (Urine)	Safena (Frothy urine)
Jiwha (Tongue)	Saam (Coated)
Shabda (Speech)	Spashta (Clear)
Sparsha (Touch)	Anushna Sheeta (Moderate Temperature)
Drika (Eyesight)	Avikrit (Normal)
Akriti (Body Appearance)	Madhyam (Normal)

Interventions

Ayurvedic Treatment Plan [8]

i). Ahara Krama: The dietary guidelines provided by Jeena Sikho Lifecare Limited Hospital included the following recommendations:

a) Dos and don'ts:

- i). Avoid eating after 8 PM.
- ii). Solid food should be consumed in small bites and chewed at least 32 times to aid proper digestion
- iii). Do not consume wheat, refined food, milk, milk products, coffee, tea and packed food.

b) Water Intake:

- i). Take small sip of water.
- ii). Drink about 250ml of alkaline water 3 to 4 times a day.
- iii). Consume Herbal tea 300ml twice daily. To prepare 300 ml of Herbal tea, combine 2 cloves (*Trifolium pratense*), 2 cardamom pods, 10 black pepper seeds (*Piper nigrum*), 5 gm cinnamon sticks (*Cinnamomum verum*), and a half tea spoon of fennel seeds (*Foeniculum vulgare*) with hot water
- iv). Drink Red juice made up Beetroot, Pomegranate and Carrot (100-150 ml).
- v). Green juice composed of Neem (Azadirachta indica), Tulsi (Ocimum tenuiflorum), Paan (Piper betle), Karela (Momordica charantia), Jamun (Syzygium cumini), Sadabahar (Vinca rosea) taken in quantities of 10 gm each, 200 ml water added, ground in a mixer grinder, filtered, and consumed in a quantity of (100-150 ml).
- vi). Living water: The approach involves a three-tiered filtration system using clay pots, each serving a specific purpose to purify and energize the water: Top Pot: Fill this pot with a mixture of small and large river stones, followed by charcoal made from burning wood. This layer acts as an initial filter, removing larger impurities. Middle Pot: Place a similar mix of stones here. Additionally, add *Moringa* seed powder (also known as drumstick or "Sahjan" powder), a silver vessel, a copper

- vessel, and *Rudraksha* (*Elaeocarpus angustifolius*). *Moringa* seeds are known for their natural waterpurifying properties, while silver and copper are believed to enhance the quality of water. Bottom Pot: This pot remains unaltered and serves as the collection chamber for the purified water. Advised to drink as per the need.
- vii). Boil 2 liters of water to reduce it to 1 liter and consume.
- c) Aim to Drink 1 Liter of Alkaline Water Daily (Procedure as Follow):
- Setup the Glass Jug: Fill a clean jug with fresh drinking water.
- ii). Add Copper Vessel: Place a copper vessel or glass inside the jug.
- **iii). Infuse Flavors:** Add slices of carrot, cucumber, and lemon to the water.
- iv). Add Herbs: Include ginger slices, mint leaves, and coriander leaves.
- v). Optional Spice: Add a slice of green chili for added flavor.
- vi). Let it Sit: Allow the mixture to sit for 12 hours.
- vii). Add *Amalaki (Emblica officinalis)* and Basil (*Ocimum tenuiflorum*): After 6 hours, add 3–4 pieces of *Amalaki* and a handful of Basil leaves. Let it infuse for 6 hours.
- viii). Ready to Drink: 3 to 4 times a day in divided portions

d) Shooka Dhanya Sevan:

- i). Incorporate five types of millet into diet: Foxtail (Setaria italica), Barnyard (Echinochloa esculenta), Kodrava (Paspalum scrobiculatum) and Browntop (Urochloa ramose).
- ii). Use only steel cookware for preparing the millets. Cook the millets only using mustard oil.

e) Bhojana Kala (Meal Timing) and Bhojana Vidhi (Method of Eating):

Early Morning 5:45 AM	Breakfast 9:00 —10:00 AM	Morning snacks 11:00 AM	Lunch 12:30-2:00 PM	Evening Snacks 4:00 — 4:20 PM	Dinner
-	fruits (weight x 10 grams), Mugda yusha, fermented	Carrot (Daucus	Steamed salad (weight x 5 grams) Plate 2:	Green juice (100-150 ml), ingredients include Coriander leaves (Coriandrum sativum), Mint leaves (Mentha spicata), Spinach leaves (Spinacia oleracea), Curry leaves (Murraya koenigii), Tulsi leaves (Ocimum tanuiflorum)	(weight x 5 grams),
	Plate 2: Millet Khichdi/Millet Poha.				

e) Fasting: One-day fasting was advised.

f) Special Instructions:

- i). Express gratitude to the divine before consuming food or
- ii). Sit in Vajrasan (a yoga posture) after each meal.
- iii). 10-minute slow walk after every meal.

g) Diet Types:

- i). The diet comprises low salt solid, semi-solid, and smoothie options.
- ii). Suggested foods include herbal tea, red juice, green juice, a variety of steamed fruits, fermented millet shakes, soaked almonds, and steamed salads.

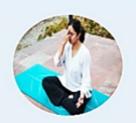
ii). Jeevana Vidhi:



Include meditation for relaxation.



Practice barefoot brisk walking for 30 minutes



Yoga practice (Paranyam) was advised.



Ensure 6-8 hours of quality sleep each night.

Table 3: Diabetic Chart of the patient during Treatment

	-
FBS mg/dl	PPBS mg/dl
200	380
213	251
98	160
108	140
130	140
134	120
128	145
116	200
122	130
136	170
	200 213 98 108 130 134 128 116 122

Panchkarma Therapies

Panchkarma therapies were administered to patients from 31/1/2025 to 9/2/2025.

i). Matra Basti with Punarnava and Gokshur oil[9]

Procedure: Punarnava (Boerhavia diffusa) and Gokshur (Tribulus terrestris) oil were administered rectally in a 90 ml dose, at 40°C.

ii). Shirodhara with Dhanwantram and Brahmi Oil [10]

Procedure: *Brahmi* and *Dhanwantram* oils at 40° celsius were continuously poured on the forehead (*Ajna chakra*) for 45 minutes. The volume of the oils taken was 500ml each, out of which approx 100ml per day was consumed in this *shirodhara* procedure in one seating.

iii). Avagha Swedana [11]

Procedure: The patient was immersed up to the navel in a tub of warm water. Sweating was encouraged by maintaining the water temperature at 42°C. The procedure was recommended to be followed for 40 minutes.

iv). Vrikk Basti with Punarnava Tail [12]

Procedure: It was kept at a steady, pleasant temperature. Deep penetration into the underlying tissues was ensured by

the oil's retention for 20 to 30 minutes. With the removal of *Tail*, the area was gently massaged to improve blood flow and absorption.

v). Kashaya Basti with Punarnava and Gokshur [13]

Procedure: The roots of Gokshur (Tribulus terrestris) and Punarnava (Boerhavia diffusa), were taken in quantity of 50gm each and 20 gms of fennel (Foeniculum vulgare) Kalka boiled with 1600 ml of water, reduced to 400ml, and filtered. Rock salt: 10gm was mixed with Honey: 40 ml, & stirred hard till frothing. 30 ml of Ksheerbala Taila was taken and the mixture of Honey and Rock salt mixed with the decoction of Gokshur and Punarnava, totaling a volume of 480 ml. The patient was positioned on his left side with his right knee flexed to his abdominal wall and the left knee fully extended. The enema apparatus was sterilized, the enema tube was lubricated for easy administration. The lukewarm Gokshur and Punarnava Niruha Basti (480 ml) was gently introduced into the rectum using the enema tube. The patient was asked to retain the liquid as long as comfortably possible.

Medications Administered During Treatment

Table 4: Tapering Schedule of Allopathic Medicine during 9-Day IPD Treatment

Day	Atorvastatin + Aspirin	Sodium Bicarbonate
Day 1	✓	✓
Day 2	✓	✓
Day 3	✓	✓
Day 4	√ (1/2)	✓
Day 5	√ (1/2)	✓
Day 6	✓ (1/2, alt days)	✓I (A)
Day 7	X	✓I (alt days)
Day 8	X	X
Day 9	X	X

Table 5: IPD Medicine's 31/1/25 to 9/2/25

Medicine Name	Ingredients	Dosage	Therapeutic Effects
Prameh Har Powder	Kutaki (Picrorhiza kurroa), Chiraita (Swertia chirata), Neem (Azadirachta indica), Karela (Momordica charantia), Rasonth (Berberis aristata), Imli beej (Tamarindus indica), Giloy (Tinospora cordifolia), Sounth (Zingiber officinale), Babool chhaal (Vachellia nilotica), Sarpgandha (Rauvofia serpentina), Tivang bhasm, Yashad bhasm, Revend chinni (Rheum emodi), Sodhit Guggul (Commiphora wightii), Methi (Trigonella foenumgraecum), Jamun (Extractum berberies), Babool fruit (Syzygium cuminii), Karanj (Vachellia nilotica), Shilajit (Bitumen mineral), Haldi (Curuma longa), Harad (Terminalia Chebula), Inderjaun (Holarrhena pubescens), Vanshlochan (Bambusa arundinacea), Bahera (Terminalia bellirica), Amla (Phyllanthu emblica), White musli (Chlorophytum borivallianum), Gurmar (Gymnema sylvestre)	Half a teaspoon OD (Pragbhakta with koshna jala) (Before meal with lukewarm water)	Promotes Deha Samya (Body Balance), Enhances Agni Deepan (Digestive Fire), Increases Ojasvardhak (Vitality), and Strengthens Balavardhak (Immunity)
Divya Shakti Powder	Trikatu (Piper nigrum (Kali Mirch), Piper longum (Pippali), and dried Zingiber officinale (Saunth), Triphala (Haritaki (Terminalia chebula), Bibhitaki, (Terminalia bellirica) and Amalaki (Phyllanthus niruri), Nagarmotha (Cyperus rotundus), Vay Vidang (Embelia ribes), Chhoti Elaichi (Elettaria cardamomum), Tej Patta (Cinnamomum tamala), Laung (Syzygium aromaticum), Nisoth (Operculina turpethum), Sendha Namak, Dhaniya (Coriandrum sativum), Pipla Mool (Piper longum root), Jeera (Cuminum cyminum), Nagkesar (Mesua ferrea), Amarvati (Achyranthes aspera), Anardana (Punica granatum), Badi Elaichi (Amomum subulatum), Hing (Ferula assafoetida), Kachnar (Bauhinia variegata), Ajmod (Trachyspermum ammi), Sazzikhar, Pushkarmool (Inula racemosa), Mishri (Saccharum officinarum).	Half a teaspoon HS (Nishikala with koshna jala) (Before bed)	It improves digestive function and metabolism of the body through its deepan-pachan properties. Helps in body detoxification via virechan (purgation).
Dr. CKD Tablet	Apamarg (Achyranthes aspera), Gokhru (Tribulus terretris), Punarnava (Boerhavia diffusa), Varun chhaal (Crateva nurvala), Mulethi (Glycyrrhiza glabra), Sheetal chini (Piper cubeba)	1 Tablet TDS (Adhobhakta with koshna jala) (After meal with lukewarm water)	Supports Vrikka Shodhan (Kidney Purification) and enhances Vrikka Poshana (Kidney Nourishment)
Amalpit Nashak Capsule	Mulethi (Glycyrrhiza glabra), Pudina (Mentha spicata), Hing (Ferula asafoetida), Chitrak (Plumbago zeylanica), Jeera (Cuminum cyminum), Vidang (Embelia ribes), Ajwain (Trachyspermum ammi), Marich (Piper nigrum), Pippali (Piper longum), Sounth (Zingiber officinale), Amla (Phyllanthus emblica), Bahera (Terminalia bellirica), Harad (Terminalia chebula), Shankh Bhasma (Turbinella pyrum), Bhawna Dravya, Lavang (Syzygium aromaticum)	1 Cap. BD (Adhobhakta with	Balances Agni, relieves AmlaPitta (Hyperacidity), soothes Udara Shoola (Relieves Abdominal Pain), and alleviates Chhardi (Vomiting)
GFR Powder	Varun (Crateva nurvala), Punarnava (Boerhavia diffusa), Gokshur (Tribulus terrestris), Kaasni (Cichorium intybus), Bhumi Amla (Phyllanthus niruri), Shirish (Albizia lebbeck), Shigru (Moringa oleifera), Apamarg (Achyranthes aspera)	Half a teaspoon BD (Adhobhakta with koshna jala)	Supports <i>Vrikk Karya</i> (works) and acts as <i>Shoth</i> (Inflammation) <i>har</i> , helping alleviate renal symptoms.

The IPD medicine was continued after discharge, but the GFR powder was excluded.

Results

A 49-year-old male with CKD, Hypertension and Diabetes showed significant improvement in his general health following the *Ayurvedic* treatment plan. At first, he had symptoms including Weakness, pain (3/10 to 0/10), Frothy urine, Disturbed sleep, Dyspnea, constipation and Pedal edema (II to 0) problems. The patient reported a significant decrease in the frequency and intensity of these symptoms over time after implementing dietary and lifestyle modifications and *Panchkarma* therapy.

- Pedal Edema Scale [14]
 - i). (1°: 2mm depression, barely detectable Immediate rebound)
 - ii). (2°: 4mm deep pit A few seconds to rebound)
 - iii). (3°: 6mm deep pit 10 to 12 sec to rebound)
 - iv). (4°: 8mm very deep pit >20 sec to rebound)
- Pain Scoring Scale [27]: (0 No pain & 10 Unimaginable pain)

- Dyspnea Scoring Scale ^[28]: (0 No Shortness of Breath & 10 Max Shortness of Breath)
- **Disturbed Sleep** ^[29]: (0-2) very bad sleep, (3-4) bad sleep, (5-6) disturbed sleep, (7-8) good sleep, (9-10) very good sleep

Table 6: Comparison of symptoms before and after the treatment

Before Treatment	After Treatment
Generalized weakness	Relief
Dyspnoea on Exertion (3/10)	Relief
Bilateral Pedal oedema (2°)	Relief (05
Constipation	Relief
Pain (3/10)	Relief (0/10)
Disturbed Sleep (4/10)	Relief (9.10)
Frothy Urine	Relief

Table 7: Pre- and Post-Lab Assessment of the Patient

Parameter	Findings		
Date	1/2/2025	7/2/2025	
Hemoglobin	10.4 g/dI	11 g/dI	
Blood Urea	210.50mg/dI	150.99mg/dI	
Creatinine	10.40mg/dI	8.88mg/dI	

Table 7 presents the comparative assessment of key biochemical parameters before and after the intervention. The patient's urea levels showed a significant reduction from 210.50 mg/dl to 150.99 mg/dl within a week, indicating improved renal function and enhanced nitrogenous waste excretion. Similarly, creatinine levels decreased from 10.40 mg/dl to 8.88 mg/dl, suggesting better kidney filtration efficiency and reduced metabolic stress. These improvements reflect the positive impact of the intervention in managing renal dysfunction and promoting overall kidney health.

BEF	ORE				Α	FTER	}		
Age / Sex : 49 years / Male UID No : 22965	Org ID : WELLCARE F	PATH LAB	Collected On : FEB 01, 2025, 09:12 A.M. Reported On : FEB 01, 2025, 09:28 A.M.	Age / Sex : 49 years / Male UIO No : 22955	Org ID	: WELLCARE PA	TH LAB		FEB 07, 2025, 10:25 A.M. FEB 07, 2025, 10:52 A.M.
				Test Description	•	Value(s)	Reference Ran	ge	
Investigations		Result(s)	4013	Complete Blood Count(CBC)					
AST (SGOT)	51.66	< 40.0		Hemoglobin (HB) Method: Cynneth Photometric Measurement		11.0	13.0 - 17.0		8 _A r
Method: IFCC* Without Pyridoxal Phosphate Activation		< 40.0	IUL	Sotal Leucocytes Count (TLC) Method : Electrical Impedance		11000	4000 - 11000		Jomm
ALT (SGPT) Method: FCC* Without Pyridoxal Phosphata Activato	66.93	<41.0	NL.	DIFFERENTIAL COUNT Neutrophils		75	40 - 75		
kaline Phosphatase (ALP)	170.90	0.00 - 150.0	uL	Method : VCSn Technology Lymphocytes		20	20 - 45	- 1	
Method : Modified IFCC Total Protein	6.92	6.4 - 8.2		Method : VCSn Technology Monocytes Method : VCSn Technology		03	2-10	-	
Method : Buret Method	V ===	0.4-0.2	ga.	Eosinophils Method: VCSn Technology		02	1 - 6		
Albumin Method : Albumin Bog1	3.48	3.4 - 5.0	gldL	Basophils Total RBC Count		3.92	0 - 1 3.50 - 6.50		% MiliCumm
Globulin Method: Derived	3.44	18-38	gidL	Method: Dectrical Impedance Platelet Count Method: VCSn Technology		2.53	1.50 - 4.50	000	Lacs/Cumm
AG Ratio.	1.01	09-18	100	PCVHCT Method : Calculated		34.4	35.0 - 47.0	-/	
Interpretation:				Red cell distribution width (RDW) Method : Dectrical Impedance		13.6	13.0 - 18.0	/	*
Erhanced liver forosis (ELF) test is used to evaludisease and Non alcoholic fatty liver disease	ate liver fibrosis in patients wit	h suspected chronic liv	er disease due to Viral Hepatitis B & C, Alcoholic live	Mean corpuscular volume (MCV) Method : Electrical Impedance Mean Corpuscular Hemoglobin (MCH) Method : Calculated		87.9 28.8	27.0 - 32.0	/	P9
RENAL FUNCTION TEST (RFT)	100		21	RENAL FUNCTION TEST (RFT)					
BLOCO UREA Method : Urease/ UV	210.50	15.0 - 46.0	mg/d	BLOOD UREA		150.99	15.0	-46.0	mg/c
BLOOD UREA NITROGEN (BUN) Method : Kriefic UV Assay	98.24	7.0 - 25.0	mgid	Method : Urease/ UV BLOOD UREA NTROGEN (BUN)		62.25	7.0	25.0	mg/c
REATININE - SERUM Method : Modified jaffe method	10.40	0.70 - 1.40	mgld	Method : Kinetic UV Assay CREATININE - SERUM		8.88	0.70	- 1.40	mg/c
LOOD UREA NITROGEN / CREATININE RATIO Method : Derived	9.45	9.1 - 23.1	Ratio	Method : Modified jaffe method		SHEET			
RICACID	7.68	30-72	mid						

Discussion

The intervention led to a noticeable improvement in the patient's overall health, particularly in kidney function and general well-being. The increase in hemoglobin suggests better blood health, which is essential for CKD patients who often suffer from anemia due to reduced erythropoietin production.

Nidana of Vrikka Vikara: In Ayurveda, Vrikka Vikara (renal disorders) primarily arises from the vitiation of Vata and Kapha doshas, leading to Mutravaha Srotas Dushti (disorder of the urinary system). Contributing factors include improper diet (Mithya Ahara), sedentary lifestyle, excessive intake of salty or processed foods, and chronic systemic diseases such as diabetes and hypertension. These factors cause impaired urine formation, retention, or excessive passage, leading to urinary abnormalities, edema, and toxin accumulation [30].

Samprapti of Chronic Kidney Disease (CKD): Chronic Kidney Disease (CKD) in Ayurveda can be understood under the spectrum of Mutravaha Srotas Dushti with progressive involvement of Vata, Pitta, and Kapha doshas. The initial stage involves Agnimandya (weakened digestive fire) leading to the formation of Ama (toxic metabolites), which circulates in the body and accumulates in Rakta, Meda, and Mamsa dhatus, gradually impairing the function of Mutravaha Srotas. Prolonged Ama and Dosha vitiation block the minute srotas (sroto-avarodha), particularly at the level of the nephrons (mutravaha sira), resulting in disturbed urine formation. Kapha contributes to srotorodha (obstruction) by increasing

kleda and causing proteinuria and edema. Pitta leads to inflammatory changes and burning micturition, while Vata predominates in later stages, manifesting as degeneration, weakness, and oliguria. The Rogamarga here is Madhyama due to involvement of deeper srotas. Nidanas such as excessive intake of lavana, amla, kshara, alcohol, chronic hypertension, diabetes, and irregular lifestyle further aggravate doshas.

Panchkarma Chikitsa and Mode of Action: The reduction in urea and creatinine levels indicates improved kidney filtration and detoxification. Ayurvedic treatments such as Matra Basti, Kashaya Basti and Vrikk Basti, along with formulations like Punarnava and Gokshur, likely played a role in enhancing renal circulation and function. The Punarnava (Boerhavia diffusa) and Gokshur (Tribulus terrestris) penetrate the rectal mucosa, lubricating the intestines to aid digestion and promote bowel movements. This Matra Basti balances Vata dosha, facilitating the elimination of stool, and urine. The oil, after entering the large intestine (Pakwashaya), spreads systemically to pacify Vata dosha. Shirodhara with Brahmi and Dhanwantram oil works on the central nervous system, inducing relaxation, reducing stress, and enhancing cognitive function [16].

Brahmi oil acts as a nootropic, while Dhanwantram oil improves neuromuscular coordination. Avagah Swedan also induces the elimination of body toxins such as urea, creatinine, ammonia and uric acid through the skin because of the increase in body temperature and sweating This Kashaya

Basti with *Punarnava* and *Gokshur* targets and controls *Vata* dosha at its root site in the large intestine (*Pakwashaya*), helping to regulate *Vata* throughout the body, thus addressing all *Vata* disorders [17].

Ahara and Vihara: The DIP and Ayurvedic diet is a comprehensive, plant-based nutritional approach that excludes oil, salt, and sugar, aiming to manage and potentially reverse chronic conditions such as Chronic Kidney Disease (CKD), Type 2 Diabetes Mellitus (T2DM), and hypertension. This regimen emphasizes natural detoxification, immune system strengthening, and maintaining pH balance by focusing on whole, unprocessed foods. Raw fruits, vegetables, and sprouts make up approximately 50–70% of the daily intake in the DIP Diet [18, 19]. In the case this diet is effective due to high contents of complex carbohydrates and being kashya ras predominant Kashya Ras, Being very active against Aam

predominant disease as CKD, DM, HTN etc. of diabetes, it encourages the consumption of low-glycemic index millets and bitter-tasting vegetables. [20] Supportive lifestyle practices include daily yoga and *pranayama* (such as *Anulom-Vilom*: A controlled alternate nostril breathing technique that balances the flow of *prana*, calms the mind, and improves respiratory function, *Kapalabhati*: A forceful exhalation breathing exercise that detoxifies the lungs, energizes the body, and enhances mental clarity, early and light evening meals, adequate sleep, and walking after meals. [21]

Ayurvedic detox techniques such as weekly fruit fasting and exposure to sunlight are also incorporated. This integrated method combines DIP dietary guidelines with classical Ayurvedic principles to promote metabolic harmony, purify the body, and encourage self-healing, all under proper medical guidance.

Table 8: Rasapanchaka of Common Herbs in Prameh Har Powder, GFR Powder & Amalpit Nashak

(Botanical Name)	Rasa (Taste)	Guna (Qualities)	Virya (Potency)	Vipaka (Post-digestive effect)	Prabhava (Specific action)
Amlaki (Phyllanthus emblica) ^[22]	Madhura (Sweet), Amla (Sour), Kashaya (Astringent)	Laghu (Light), Ruksha (Dry)	Shita (Cold)	Madhura (Sweet)	Rasayana (Rejuvenative), Pitta-shamaka, promotes tissue regeneration
Gokshura (Tribulus terrestris) ^[23]	Madhura (Sweet)	Guru (Heavy), Snigdha (Unctuous)	Shita (Cold)	Madhura (Sweet)	Mutrala (Diuretic), <i>Balya</i> (Strengthening), beneficial in CKD & UTI
Mulethi (Glycyrrhiza glabra) ^[24]	Madhura (Sweet)	Guru (Heavy), Snigdha (Unctuous)	Shita (Cold)	Madhura (Sweet)	Pittashamaka, Vranashodhana (heals ulcers), supports gastric & adrenal health
Sonth (Zingiber officinale – Dry Ginger)	Katu (Pungent)	Laghu (Light), Snigdha (Unctuous)	Ushna (Hot)	Madhura (Sweet)	Deepana (stimulates Agni), Pachana (digestion), relieves bloating & metabolic imbalance

Need For Further Study [26, 27]

- i). Role of Ayurvedic Formulations: Investigating specific Ayurvedic formulations such as Punarnava, Gokshur, Chandraprabha Vati and Varunadi Kwath in improving renal health.
- ii). Clinical Trials and Evidence-Based Approach: Conducting controlled clinical trials to validate the effectiveness of *Ayurvedic* interventions in CKD, nephrotic syndrome and urinary tract disorders.
- iii). Comparative Study with Modern Medicine: Evaluating how *Ayurvedic* treatments can complement or serve as an alternative to allopathic management, reducing dependency on dialysis and synthetic drugs.
- **iv). Long-Term Impact on CKD Patients:** Assessing the potential of *Ayurveda* in slowing the progression of chronic kidney disease and improving quality of life.
- v). **Dietary and Lifestyle Modifications:** Understanding the impact of *Ayurvedic Aahar-Vihar* (diet and lifestyle) on renal function, focusing on personalized dietary recommendations for kidney patients.

Conclusion

This case study highlights the positive impact of an integrative Ayurvedic approach in the management of Chronic Kidney Disease (CKD) in a 49-year-old male patient with associated Type 2 Diabetes Mellitus and Hypertension. The patient presented with symptoms such as weakness, frothy urine, constipation, and pedal edema. Alongside ongoing allopathic medications, the patient underwent a tailored Ayurvedic treatment regimen comprising Panchkarma therapies (Matra Basti, Kashaya Basti, and Vrikka Basti), herbal formulations including Punarnava, Gokshur, and

Mulethi, and lifestyle interventions like yoga, pranayama, and an Ayurvedic DIP diet.

Within just 8 days, notable clinical improvements were observed. Serum urea decreased from 210.50 mg/dl to 150.99 mg/dl, & serum creatinine reduced from 10.40 mg/dl to 8.88 mg/dl, reflecting improved kidney filtration. Hemoglobin levels increased, & electrolyte balance was maintained, preventing further complications. Symptomatic relief included Weakness, pain (3/10 to 0/10), Frothy urine, Disturbed sleep, Dyspnea, constipation and Pedal edema (II to 0) problems. The use of herbs selected based on *Rasapanchaka* principles supported *Tridosha* balance and renal detoxification. The combination of *Ayurveda* and modern medicine contributed synergistically to the patient's recovery, suggesting that integrative approaches can enhance outcomes in CKD care.

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