

COMPREHENSIVE AYURVEDIC APPROACH IN THE MANAGEMENT OF CHRONIC  
KIDNEY DISEASE: A CASE REPORTAcharya Manish Ji<sup>1</sup>, Dr. Gitika Chaudhary<sup>2\*</sup>, Dr. Richa<sup>3</sup> and Dr. Anshuma<sup>4</sup><sup>1</sup>Director, Meditation Guru, Jeena Sikho Life Care Limited.<sup>2</sup>Senior Consultant, General Surgeon, BAMS, PGDIP, PGDGS, MS (Ay.), Jeena Sikho Life Care Limited.<sup>3</sup>Research Officer, BAMS, PGDIP, CICR, CAIM Jeena Sikho Life Care Limited.<sup>4</sup>Consultant, BAMS, Jeena Sikho Life Care Limited Hospital Lucknow.

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## ABSTRACT

Chronic Kidney Disease (CKD) encompasses a spectrum of pathophysiological changes characterized by impaired renal function and a progressive decline in glomerular filtration rate, leading to complications such as anaemia and cardiovascular disorders. This study discusses the clinical case of a 49-year-old male recently diagnosed with CKD, following a history of hypertension and Left Hemiplegia since 2019. The patient presented with primary complaints of constipation, gastritis, facial and pedal oedema and pleural effusion, diagnosed 15 days prior to seeking *Ayurvedic* treatment. Based on his clinical manifestations, the condition was correlated with *MutravahasrotasDushtiin Ayurveda*, and therapeutic management was initiated following the principles of *MutraghataChikitsa*. The treatment protocol included *Ayurvedic* medicines, *Panchakarma* procedures, and recommended dietary and lifestyle modifications. Notable clinical improvements were observed, including better kidney function parameters, enhanced haemoglobin levels, normalized appetite and urination, increased physical strength and healthy weight gain. This case highlights the potential of integrative *Ayurvedic* interventions in managing CKD and improving patient outcomes.

**KEYWORDS:** Chronic Kidney Disease, *Ayurveda*, Hypertension, Hemiplegia, Life style Interventions, Renal Function, *Mutraghata*.

## INTRODUCTION

Chronic Kidney Disease (CKD) is characterized by a gradual decline in renal function over an extended period, often spanning months or years. This deterioration can lead to symptoms such as general malaise and reduced appetite. Individuals at heightened risk—including those with hypertension, diabetes or a family history of CKD—are commonly subjected to screening to facilitate early detection. Complications associated with CKD, such as anaemia, pericarditis or cardiovascular disease, may also be identified during this process. A diagnosis of CKD is typically confirmed when impaired kidney function persists for more than three months, distinguishing it from acute renal conditions. Elevated serum creatinine levels, a byproduct of muscle metabolism, indicate a reduced glomerular filtration rate and compromised renal excretory capacity.<sup>[1]</sup> However, creatinine levels may remain within normal ranges during the initial stages of CKD. Urinalysis can reveal the presence of protein or red blood cells, suggesting renal impairment. Further diagnostic evaluations, including blood tests, kidney biopsies, and imaging studies, are employed to ascertain the underlying

aetiology and assess the potential for reversibility of renal dysfunction.

The global burden of CKD is escalating, with prevalence increasing by 33% between 1990 and 2017.<sup>[2]</sup> In India, recent studies estimate that up to 140.2 million adults are living with CKD.<sup>[3]</sup> This rising prevalence underscores the critical need for early detection and intervention strategies. Screening of at-risk populations is essential, as timely therapeutic measures can decelerate CKD progression and mitigate associated complications.

The ancient *Ayurvedic* texts classify urinary system disorders (*Mutravikara*) into various categories, including four types of *Ashmari* (~urinary calculi and lithiasis), 13 types of *Mutraghata* (~obstructive and suppressive uropathies), eight types of *Mutrakrichha* (~dysuria), and 20 types of *Prameha* (~metabolic disorders). Among the 12 subtypes of *Mutraghata* detailed by *Acharya Sushruta*,<sup>[4]</sup> Chronic Kidney Disease (CKD) is considered analogous to conditions such as *Mutrakshaya* and *Mutrasada*.

This article discusses the case of a 49-year-old male with a medical history of hypertension and left hemiplegia secondary to a stroke, recently diagnosed with Chronic Kidney Disease. The case demonstrates the effectiveness of *Ayurvedic* interventions as an integrative approach for managing the complex challenges of CKD, highlighting its potential as a complementary therapeutic modality.

## CASE REPORT

A 49-year-old male with a five-year history of hypertension and left hemiplegia secondary to a stroke was recently diagnosed with Chronic Kidney Disease (CKD). He presented to JeenaSikhoLifecare Ltd. Hospital, Lucknow, on February 20, 2024, with complaints of constipation, gastritis, backache, facial puffiness, bilateral pedal oedema, pleural effusion persisting from 15 days, and generalized pruritus. The patient underwent a DTPA Scan Renogram on February 20, 2024, which revealed severely impaired parenchymal function in both kidneys, with a total GFR of 6.57 ml/min. The patient also reported a family history of CKD, as his father was previously diagnosed with the condition.

Table 1 provides an overview of the patient's initial assessment conducted on the first day.

**Table 1: Examination Findings.**

Parameter	Findings
Blood Pressure	150/100 mm of Hg
Pulse Rate	100/min
Respiratory System	Chest clear
Per Abdomen (P/A)	Soft, Non-Tender
Weight	75 kg
Nadi	VatajPittaj
Mala	Malavashtambha(constipation)
Mutra	Safena(frothy)
Jivha	Saam(coated)
Shabda	Spashta
Sparsha	AnushnaSheeta
Akruti	Madhyam
Drik	Avikruta
Kshudha	Alpa
Agni	Manda
Nidra	Khandita

The patient underwent a series of diagnostic tests, including a Complete Blood Count (CBC), urine analysis, Renal Function Test (RFT), serum electrolytes, and estimated Glomerular Filtration Rate (eGFR). The diagnostic test results obtained on the day of admission are summarized in Table 2.

**Table 2: Diagnostic Test Results on Admission.**

Laboratory Test	Observed Value
Hemoglobin	13.0 g/dl
Total Leucocyte Count	8800 /cumm
RBC	4.76 mill/cumm
Platelet Count	1.75 lacs /cumm

Renal Function Test	
Blood Urea	68.00 mg/dl
Serum Creatinine	4.00 mg/dl
Serum Uric Acid	5.60 mg/dl
Electrolytes	
Sodium Na <sup>+</sup>	136.9 mEq/L
Potassium K <sup>+</sup>	4.52 mEq/L
Chloride Cl <sup>-</sup>	104.5 mEq/L
Urine Protein	
Egfr	17mL/min/1.73 m2
Inorganic Phosphorus	5.00 mg/dl
Lipid Profile	
Total Cholesterol	117 mg/dl
HDL Cholesterol	31 mg/dl
Triglycerides	99.0 mg/dl

The patient underwent a holistic *Panchakarma* treatment protocol, which included *Snehana* using *Ksheerbala oil*, *AwagahaSwedana*, *Shiropichu* with *Brahmi oil*, and *MatraBasti* administered with *Gokshura* and *Punarnava Siddha Sneh*. The regimen was further complemented by the integration of **head-down tilt (HDT) therapy**. The patient was on allopathic medications, including Sevelamer Carbonate, Sodium Bicarbonate, and Atorvastatin, which were continued during the treatment. The treatment protocol was supplemented with *Ayurvedic* medications, tailored dietary guidance, and personalized lifestyle modifications, all aimed at enhancing overall well-being and facilitating the restoration of kidney function.

The patient presented with the aforementioned complaints and underwent a comprehensive evaluation, including all relevant laboratory investigations. The management plan comprised *Ayurvedic* medications, *Panchakarma* therapies, and additional therapeutic interventions. Upon discharge on February 27, 2024, the patient demonstrated significant clinical improvements, including improved appetite, increased urine output, and an overall enhancement in well-being.

## TREATMENT PLAN

### I. Diet Plan Overview

At JeenaSikhoLifecare Ltd. Hospital, Lucknow, a customized diet plan<sup>[5]</sup> was implemented to promote kidney health and aid recovery, incorporating the following key components.

- Foods to Avoid:** Elimination of wheat, processed foods, dairy products, animal-based foods, coffee, tea, and late-night meals (post-8 PM).
- Hydration Strategy:** Daily intake of 1.5 Liters of fluids, including alkaline water, herbal tea, and turmeric-infused water, to support hydration and detoxification.
- Inclusion of Millets:** Use of five millet varieties—foxtail, barnyard, little, kodo, and browntop—prepared in stainless steel cookware for optimal nutrition.

#### 4. Structured Meal Plan (Disciplined & Intelligent Person's Diet<sup>[5]</sup> - D.I.P. diet)

- **Early Morning:** Consumption of curry leaves, herbal tea, raw ginger, and turmeric.
  - **Breakfast:** Seasonal Steamed fruits, sprouts, fermented millet shakes, and red juices.
  - **Lunch:** Balanced meals consisting of millet-based dishes with steamed vegetables or sprouts. Plate 1 included a steamed vegetable salad or sprouts, while Plate 2 featured millet-based preparations, accompanied by alkaline water.
  - **Snacks:** Fresh green or red juices and soaked almonds.
  - **Dinner:** Similar to lunch, with millet khichdi, soups, chutneys, steamed salads.
5. **Periodic Fasting:** Regular fasting every 3–4 days to facilitate detoxification and rejuvenation.
6. **Special Practices:** Incorporation of mindfulness practices, including expressing gratitude before meals and sitting in *Vajrasana* post-meal to aid digestion.
7. **Dietary Emphasis:** Focus on natural, whole foods such as herbal tea, fresh juices, steamed fruits, sprouts, and salads, all was prepared without added salt for maximum health benefits.

#### Lifestyle Recommendations<sup>[5]</sup>

1. **Sunlight Exposure:** Spend 30 minutes in the morning sunlight to enhance vitamin D levels and support overall health.
2. **Yoga Practice:** Dedicate one hour daily to yoga (*Sukhasana*) to improve both physical and mental well-being.
3. **Meditation:** Engage in mindfulness meditation (*Suksham Pranayama*) regularly to reduce stress and foster emotional balance.
4. **Grounding:** Walk barefoot on natural surfaces for 30 minutes to promote circulation and reconnect with nature.
5. **Sleep Hygiene:** Aim for 6–8 hours of restful sleep each night to ensure optimal recovery and health.
6. **Structured Routine:** Follow a consistent daily routine to maintain a balanced and healthy lifestyle.

#### Panchakarma Therapies Administered to the Patient

i. **Snehan:** *Snehan* is a pre-panchakarma therapy (preparatory) procedure in *Panchakarma* that aids in loosening morbid *doshas* and liquefying toxins, preparing the body for the main detoxification process. It involves a full-body massage using medicated oils; in this case, *Ksheerbala Oil* was utilized. In *Snehan* procedure, 100 ml of oil is applied over a duration of 40 minutes. This therapy facilitates the movement of *doshas* (*Ama*) from deeper tissues into the *koshta* (alimentary canal), making it easier for them to be eliminated during the subsequent *Shodhan* therapy.<sup>[6]</sup>

*Snehan* therapy is particularly effective in alleviating *Vata* disorders, enhancing skin complexion, relieving dryness, and providing a calming effect. It works by

opening the microchannels (*srotas*), liquefying accumulated *Sleshma* (*Kapha*) in the *shakhas* (peripheral tissues) and directing it towards the *koshta* (alimentary canal). This process aids in the elimination of waste and helps to clear obstructions within the body.

ii. **AwagahaSwedana:** In this therapy, the patient is immersed in a tub of hot water at 42°C, which raises the body temperature, promoting vasodilation and stimulating sympathetic activity. This process activates the release of epinephrine, norepinephrine and thyroid hormones, increasing metabolic rate and lipolysis.<sup>[7]</sup> As a result, the demand for oxygen rises, facilitating the elimination of metabolic wastes such as urea, creatinine, ammonia and uric acid through sweat. *AwagahaSweda*, a type of *SagniSweda* therapy, helps to liquefy *doshas* within the body's microchannels, alleviates pain, reduces joint stiffness and improves function, particularly in conditions involving *Vata* and *Kapha* imbalances.<sup>[8]</sup> It is also beneficial for clearing *Vata* obstructions and aiding the removal of toxins, especially in cases of *Ama* (toxins).

iii. **Shiropichu with Brahmi Oil:** *Shiropichu*, a therapeutic head treatment using *Brahmi oil*, a cotton pad soaked in warm *Brahmi* oil is applied to the forehead. In the *Shiropichu* procedure, 40 ml of oil is applied for 20 minutes. It promotes relaxation and enhances local circulation. This therapy helps in calming the mind by stimulating the central nervous system and increasing the levels of neurochemicals like serotonin and dopamine. These chemicals aid in improving mood, reducing stress and enhancing cognitive function. *Shiropichu* with *Brahmi* oil is particularly effective in relieving anxiety, improving mental clarity, and supporting restful sleep, while also contributing to overall mental well-being and rejuvenation.<sup>[9]</sup>

#### iv. Gokshura and Punarnava Siddha Sneha Matra Basti (90 ml)

##### Procedure

Medicated oil *siddha* with *Gokshura* and *Punarnava* is warmed and administered rectally while the patient is in a comfortable position. The oil is kept retained for a 20 minutes duration.

##### Physiology

The oil penetrates the rectal mucosa, enhancing absorption, lubricating the intestines and promoting bowel movements.<sup>[10]</sup>

##### Mode of Action

*Matra Basti* helps to balance *Vata Dosha*, facilitating the elimination of flatus, feces, and urine, with systemic effects via the rectal vascular network. *Gokshura* acts as a diuretic, balancing *Tridosha* and improving vitality, while *Punarnava* offers diuretic, anti-inflammatory and antioxidant properties, making it beneficial in managing kidney disorders.<sup>[11]</sup>

#### IV. Head Down Tilt

As part of the Gravitational Resistance and Diet System, the patient was recommended Head Down Tilt (HDT) therapy. During this procedure, the patient is positioned at a 10-degree incline with the head lowered. This posture helps to reduce plasma aldosterone and renin levels, leading to a decrease in overall plasma volume. It also promotes natriuresis, aiding in the excretion of sodium from the body.<sup>[12]</sup>

#### V. Medicinal Intervention

The *Ayurvedic* treatment plan for this case incorporated a range of specialized ayurvedic formulations, including **YakritShothHarVati**, **Mutravardhakvati**, **Nephron Plus Cap.**, **Vat HarRasVati**, **Syp. Kidney Care**, and **ChanderVati**, in conjunction with *Panchakarma* therapies. A detailed summary of these *Ayurvedic* medicines, highlighting their composition, duration, and specific therapeutic indications, is presented in **Table 3**.

**Table 3: Ayurvedic Medications, Ingredients, Duration, and Therapeutic Benefits in the Management of CKD.**

Medicine Name	Ingredients	Duration	Therapeutic Effects
YakritShothHarVati	Punarnava( <i>Trianthemaportulacastrum</i> ), Kalimirsch ( <i>Pipernigrum</i> ), Pippali ( <i>Piperlongum</i> ), Vayavidanga ( <i>Embeliaribes</i> ), Devdaru ( <i>Cedrusdeodara</i> ), Kutha( <i>Saussurealappa</i> ) Haldi ( <i>Curcumalonga</i> ), Chitrak ( <i>Plumbagozeylanica</i> ), Haritaki ( <i>Terminalia chebula</i> ), Vibhitak ( <i>Terminaliabelerica</i> ), Amlaki ( <i>Emblicaoofficinalis</i> ), Danti ( <i>Baliaspermummantanum</i> ), Chavya( <i>Piper rectofractum</i> ), Indra Jon ( <i>Holarrhenaantidyentrica</i> ), PipplaMool ( <i>Piper longum</i> ), Motha ( <i>Cyperusrotundus</i> ), Kalajira ( <i>Carumcarvi</i> ), Kayphal ( <i>Myricaesculenta</i> ), Kutki ( <i>Picrorhizakurroa</i> ), Nisoth ( <i>Operculinaturpethum</i> ), sonth ( <i>Zingiberofficinale</i> ), Kakdsinghi ( <i>Pistaciaintegerrima</i> ), Ajwain ( <i>Trachyspermumammi</i> ), Mandurbhasam ( <i>Carumcopticum</i> )	21/02/2024 to 27/02/2024	beneficial in managing liver dysfunction, spleen disorders, inflammation, renal dysfunction, jaundice, liver failure, oedema, and anaemia.
MutravardhakVati	Gokhru ( <i>Tribulusterrestris</i> ), Guggul ( <i>Commiphorawightii</i> ), Sonth ( <i>Zingiberofficinale</i> ), Kalimirsch ( <i>Piperlongum</i> ), Pippal ( <i>Piperlongum</i> )Bahera ( <i>Terntinaliabelerica</i> ) Harad ( <i>Terminaliachebula</i> ), Amla ( <i>Emblicaoofficinalis</i> )Motha ( <i>Cyperusrotundus</i> )	21/02/2024 to 27/02/2024	supports diuresis, reduces inflammation, alleviates urinary obstruction, manage water retention
Nefron plus Capsules	Hazroolyahoodbhasma powder Chandraprabha powder, Pashanbheda ( <i>Bergenaligulata</i> ), MulakKshar ( <i>Raphanussativus</i> ), YavaKshar ( <i>Hordeumvulgare</i> ), AmalakiRasayan, Trivikrum Rasa, Navasara, Nimbu, Stava powder ( <i>Citruslemon</i> ), Gokshur ( <i>Tribulusterrestris</i> ), Durbhamool ( <i>Desmostachyabipinnata</i> ), Shilapushpa ( <i>Didymocarpuspedicillata</i> )Black Salt, Hing powder ( <i>Ferulafoetida</i> )	21/02/2024 to 27/02/2024	helpful in managing kidney disease, burning micturition, urinary tract infections (UTI).
Vat HarRasVati	RasSindoor ( <i>Bixaorellana</i> )SudhGandhak ( <i>Sulphur</i> ), Kant LohBhasam ( <i>Magnetiteferricoxide</i> ), VangBhasam ( <i>Tin</i> ) NaagBhasam ( <i>Detoxifiedlead</i> )AbhrakBhasam ( <i>Alkalinemica</i> ) TambraBhasam ( <i>Elementalcopper</i> )Shunti ( <i>Zingiberoddcinale</i> )Marich ( <i>Pipernigrum</i> ) Pippli ( <i>Piperlongum</i> )	21/02/2024 to 27/02/2024	effective in managing arthritis, joint pain, low bone density, joint disorders, Vata imbalances
Shirshoolvati	Shuddh Para ( <i>Mercury</i> ), ShuddhGandhak	21/02/2024 to	beneficial for managing



	(Sulphur), LohBhasam ( <i>Pureironparticles</i> ), Shuddhguggul ( <i>Commiphoramukul</i> ) Amalki ( <i>Emblicaofficinalis</i> ), Haritki ( <i>Terminaliachebula</i> ), Vibhitki ( <i>Terminaliabeberica</i> )	22/02/2024	headaches, promoting sound sleep, and calming the nervous system.
Syp. Kidney Care	Punarnavarishta (Boerhaaviadiffusalinn), Chandanasava ( <i>Santalum album</i> ), Ushirasava ( <i>Vetiveriazizanioides</i> ) GokshuradiKadha ( <i>Tribulusterrestris</i> )	21/02/2024 to 27/02/2024	supports by managing kidney disorders, improving kidney function and aiding in urinary tract infections (UTI)
Chander Vati	Kapoor Kachri ( <i>Hedychium spicatum</i> ), Vacha ( <i>Acoruscalamus</i> ), Motha ( <i>Cyperusrotundus</i> ), Kalmegh ( <i>Andrographispaniculata</i> ), Giloy ( <i>Tinosporacordifolia</i> ), Devdaru ( <i>Cedrusdeodara</i> ), Desi Haldi ( <i>Curcuma longa</i> ), Atees ( <i>Aconitum heterophyllum</i> ), Daru Haldi ( <i>Berberisaristata</i> ), PiplaMool ( <i>Piper longum</i> root), Chitraka ( <i>Plumbagozeylanica</i> ), Dhaniya ( <i>Coriandrumsativum</i> ), Haritaki ( <i>Terminalia chebula</i> ), Bahera ( <i>Terminalia bellirica</i> ), Amla ( <i>Phyllanthusemblica</i> ), Chavya ( <i>Piper chaba</i> ), Vayavidang ( <i>Embeliaribes</i> ), Pippal ( <i>Piper longum</i> ), Kalimirch ( <i>Piper nigrum</i> ), Pipal ( <i>Scindapsusofficinalis</i> ), SwarnMakshikSonth ( <i>Zingiberofficinale</i> dried ginger), GajBhasma, SujjiKshar, SendaNamak, Kala Namak, ChotiLlayachi ( <i>Elettariacardamomum</i> ), Dalchini ( <i>Cinnamomumverum</i> ), Tejpatra ( <i>Cinnamomumtamala</i> ), Danti ( <i>Baliospermummontanum</i> ), Nishothra ( <i>Operculinaturpethum</i> ), Banslochan (Bamboo silica), LohBhasam, Shilajit ( <i>Asphaltumpunjabinum</i> ), Guggal ( <i>Commiphorawightii</i> ).	22/02/2024 to 24/02/2024	Alleviates urinary tract symptoms and promotes healthy urine flow.
DR Shuddhi Powder	Trikatu, Triphala, Nagarmotha ( <i>Cyperusrotundus</i> ), VayVidang ( <i>Embeliaribes</i> ), ChhotiElaichi ( <i>Elettariacardamomum</i> ), TejPatta ( <i>Cinnamomumtamala</i> ), Laung ( <i>Syzygiumaromaticum</i> ), Nishoth ( <i>Operculinaturpethum</i> ), SendhaNamak, Dhaniya ( <i>Coriandrumsativum</i> ), PiplaMool ( <i>Piper longum</i> root), Jeera ( <i>Cuminumcuminum</i> ), Nagkesar ( <i>Mesuaferrea</i> ), Amarvati ( <i>Achyranthesaspera</i> ), Anardana ( <i>Punicagranatum</i> ), BadiElaichi ( <i>Amomumsubulatum</i> ), Hing ( <i>Ferula assafoetida</i> ), Kachnar ( <i>Bauhinia variegata</i> ), Ajmod ( <i>Trachyspermumammi</i> ), Sazzikhar, Pushkarmool ( <i>Inularacemoso</i> ), Mishri ( <i>Saccharumofficinarum</i> ).	21/02/2024 to 27/02/2024	effective in relieving constipation and managing conditions such as piles, fistula, and fissure
Go Flexi Cap.	Paneer Dodi powder ( <i>WithaniacoagulansDunal</i> ) Ashwagandha powder( <i>Withaniasomnifera</i> ), Amalkirasayan( <i>Phyllanthusemblica</i> )Yograjuggl u powder ( <i>commiphorawightii</i> ), ( <i>Trigonellafoenumgraecum</i> ), Shankhabhasma powder ( <i>Ostreaedulis</i> ), Gokshura powder ( <i>tribulusterrestris</i> ), Punarnava powder ( <i>Boerhaviadiffusa</i> ), Nirgundi powder ( <i>Vitexneugonda</i> ), Haldi powder ( <i>Curcumalonga</i> ), Neem powder ( <i>Azadirachtaindica</i> ) Inactive ingredients:	SOS	provide analgesic, anti-inflammatory, immunity-boosting, and pain-relieving benefits.

	Magnesium stearate, talcum powder		
Sama Vati	Vidarikand ( <i>Puerariatuberosa</i> ), Beej Band Lal, ( <i>Sidacordifolia</i> ), Akarkara, ( <i>Anacycluspyrethrum</i> ), Talmakhana ( <i>Asteracanthalongifolia</i> ), Musli ( <i>Asparagus adscendens</i> ), Aawla ( <i>Emblicaofficinale</i> ), Sonth ( <i>Zingiberofficinale</i> ), Jaiphal ( <i>Myristicafragrans</i> ), Swarnmakshik ( <i>Copper pyrite</i> ), Shilajitshudh ( <i>Asphaltumpanjabinum</i> ), Kaunch ( <i>Mucunaprurita</i> ), Shatawar ( <i>Asparagusracemosus</i> ), Ashwagandha ( <i>Withaniasomnifera</i> )	23/02/2024 to 27/02/2024	supports this patient by improving digestion, relieving constipation, enhancing liver function, boosting immunity
Skin Cure Cap.	Anant ( <i>Hemidesmusindicus</i> ), Neem ( <i>Azadirachtaindica</i> ), Gulab ( <i>Rosacentifolialinn</i> ), Haldi ( <i>Curcumalongalinn</i> ), Gilloy ( <i>Tinosporacordifolia</i> ) Mulethi ( <i>Glycyrrhizaglabralinn</i> ), Chirayata ( <i>Swerticachiraytaroxb</i> ), Baboot ( <i>Acaciacatechuwilld</i> ), Manjith ( <i>Rubiocordifolia</i> ) Vidang ( <i>Embeliaribesburn</i> ), Sharpunkha ( <i>Tephrosiapurpurea</i> ), Khadir ( <i>Acaciacatechueilld</i> ), Sanay ( <i>Cassiaangustifolia</i> ) Gandhak ( <i>Sulphur</i> ), Yashad	25/02/2024 to 27/02/2024	acts as a blood purifier, has anti-inflammatory properties, and helps to relieve itching.
MahaAmritamChurna	Sanay ( <i>Cassiaangustifolia</i> ), Ajwain ( <i>Trachyspermumammi</i> ), Nishoth ( <i>Operculinaturpethum</i> ), Mulethi ( <i>Glycyrrhizaglabra</i> ), Himalayan Black Salt ( <i>Unaquasoddichloredum</i> ), Shudhasvarjiksara ( <i>Astonemanindicam</i> ), Harad ( <i>Terminaliachebula</i> )	25/02/2024 to 27/02/2024	Managing gastrointestinal disorders (GIT), gastroesophageal reflux disease (GERD), and indigestion
GadoodSudharkVati	Kahu ( <i>Anacardiumoccidentale</i> ), Varuna ( <i>Crataevanurvula</i> ), Gokshur ( <i>Tribulusterrestris</i> ), Khayarain ( <i>Cucumissativus</i> ), ShodhitGuggal ( <i>Commiphorawightii</i> )	25/02/2024 to 27/02/2024	effective in managing conditions such as prostatomegaly, prostatitis and benign prostatic hyperplasia

### Medications Administered During Hospital Stay

On February 21, 2024, upon examination, the patient's general condition was assessed as average, with stable vitals. The patient reported headache, for which Tab. ShirshoolVati (2 tablets, stat) was administered. Additionally, an exercise ball was recommended to support rehabilitation for the patient's left hemiplegic condition. The medications initiated during the inpatient period are detailed below.

Tab. YakritShothaHarVati 1 TDS (*Adhobhakta* with *KoshnaJala*)

Tab. Mutravardhak 1 TDS (*Adhobhakta* with *KoshnaJala*)

Cap. Nephron plus 1 TDS (*Adhobhakta* with *KoshnaJala*)

Tab. VatHarRas 1 BD (*Adhobhakta* with *KoshnaJala*)

Tab. ShirshoolVati 2 Stat (with *KoshnaJala*)

Syp. Kidney Care 10 ml TDS (*Adhobhakta* with *samamatraKoshnaJala*)

Dr.Shuddhi Powder half tsp. HS (*Nishikal* with *KoshnaJala*)

On February 22, 2024, the patient's headache had subsided, leading to the discontinuation of Tab. ShirshoolVati. Upon examination, vitals were stable. The patient reported complaints of dysuria and mild chest discomfort, for which Tab. ChanderVati was initiated in addition to the ongoing medications.

On February 23, 2024, the patient reported complaints of body ache and gastritis. Vitals remained stable. Tab. SamaVati (1 tablet, twice daily) was initiated, and Cap. Go Flexi was administered as a single dose (stat).

On February 24, 2024, the patient reported complaints of gastritis and intermittent whole-body itching. Tab. ChanderVati was discontinued. It was advised to incorporate *neem* oil into *Ksheerbala* oil during the *Snehan* procedure. All other treatments were continued as prescribed.

On February 25, 2024, the patient reported general weakness, itching, and constipation. *Nasya* with *ShadbinduTaila* and *NiruhaBasti* were advised on alternate days as part of the *Panchakarma* regimen.

Additionally, the following medications were initiated: Tab. GadoodSudharak (1 tablet, thrice daily), Cap. Skin Cure (1 capsule, thrice daily), MahaAmritamChurna (½ teaspoon), and Go Flexi (single dose, stat).

On February 26, 2024, the patient had no new complaints but reported mild indigestion. Powder Relivon (½ teaspoon, stat) was administered.

On February 27, 2024, the patient had no new complaints, and the current treatment regimen was continued. Discharge planning was initiated.

### Medications Advised at the time of Discharge

The medications prescribed for 1 month to the patient at the time of discharge are as follows.

Cap. Nefron plus 2 BD (*AdhobhaktawithKoshnaJala*)

Tab. YakritShothHarVati 2 BD  
(*AdhobhaktawithKoshnaJala*)

Tab. MutravardhakVati 1 BD  
(*AdhobhaktawithKoshnaJala*)

Syp. Kidney Care 15 ml BD  
(*AdhobhaktawithSamaMatraKoshnaJala*)

Dr Shuddhi Powder half tsp HS (*NishikalawithKoshnaJala*)

Tab. Chandervati 1 BD (*AdhobhaktawithKoshnaJala*)

Tab. Raktachap 1 BD (*AdhobhaktawithKoshnaJala*)

VataHarRasVati 1 BD (*AdhobhaktawithKoshnaJala*)

Medh Cap. 1 BD (*AdhobhaktawithKoshnaJala*)

### Medications Advised on follow-ups

The patient returned for a follow-up on April 6, 2024, presenting with complaints of general weakness and fever persisting from one week. After evaluation, the patient was advised to continue Nefron Plus Cap., YakritShothHarVati, ChanderVati, and Syp. Kidney Care. Additionally, the following medications were prescribed for further management:

Tab. SootshekharRas 1 BD

(*AdhobhaktawithKoshnaJala*)

Tab. Samavati 1 BD (*AdhobhaktawithKoshnaJala*)

GFR Powder 1 tsp TDS (*AdhobhaktawithKoshnaJala*)

RelivonPowder1 tsp HS(*Nishikala withKoshnaJala*),

Syp. VishHarRas 10ml BD

(*AdhobhaktawithSamamatraKoshnaJala*).

On May 8, 2024, the patient returned for a follow-up with no new complaints. As a result, Syp. VishHarRas was discontinued, and Powder Divya Shakti, 1 teaspoon at bedtime, was initiated.

On June 30, 2024, the patient returned for a follow-up with complaints of body itching and constipation. In addition to continuing Cap. Nephron Plus, YakritShothHarVati 1 BD, ChanderVati 1 TDS, and GFR Powder 1 Tsp BD, the following medications were prescribed:

Nephro Care Syp15 ml BD  
(*AdhobhaktawithSamamatraKoshnaJala*).

MahaAmritamChurna ½ tsp HS (*Nishikala withKoshnaJala*),

Liver Tonic 10 ml BD  
(*AdhobhaktawithSamamatraKoshnaJala*).

Skin Cure Cap 1 BD (*AdhobhaktawithKoshnaJala*)

On November 6, 2024, the patient returned for a follow-up with a recent DTPA scan showing an improved Total GFR of 12.4 ml/min. The patient reported complaints of left-sided headache, left eye pain, back pain, and frothy urination. He was advised to continue Cap. Nephron Plus, Tab. YakritShothHarVati 2 BD and GFR Powder ½ tsp BD. Additionally, the following medications were prescribed:

Tab. MutravardhakVati 1 TDS

(*AdhobhaktawithKoshnaJala*)

Syp. Vrikka Care 15 ml BD

(*AdhobhaktawithSamamatraKoshnaJala*)

Tab. Go Flexi 1 BD (*AdhobhaktawithKoshnaJala*)

### RESULT

The patient, with a medical history of hypertension and left hemiplegia secondary to a stroke, exhibited a range of symptoms upon presentation, including constipation, gastritis, bilateral pedal oedema, facial puffiness, pleural effusion and generalized pruritus. Initial laboratory assessments indicated severely impaired renal function, with a Glomerular Filtration Rate (GFR) of 6.57 ml/min and elevated serum creatinine levels of 4.00 mg/dl.

Following the implementation of a holistic *Ayurvedic* management plan, which included personalized dietary modifications, *Panchakarma* therapies and lifestyle interventions, significant symptomatic relief and investigational improvements were observed.

#### 1. Symptomatic Relief:

- The patient reported a marked reduction in gastrointestinal symptoms, with constipation alleviated and gastritis symptoms significantly improved.
- Edema on the face and lower extremities diminished, contributing to enhanced comfort and mobility.
- Generalized pruritus resolved, leading to, improved quality of life and sleep patterns.

#### 2. Investigational Improvements:

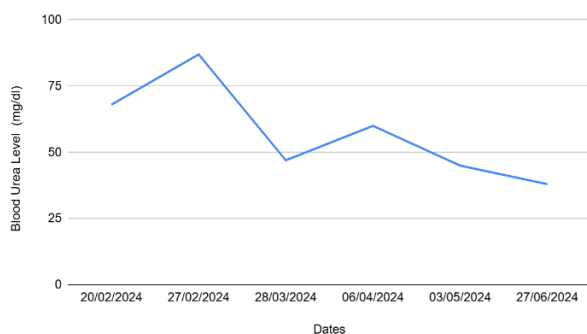
- Post-treatment DTPA Scan evaluations demonstrated a notable increase in Global GFR, rising from 6.57 ml/min to 12.4 ml/min, indicating a positive response to the *Ayurvedic* interventions.
- Serum creatinine levels decreased from 4.00 mg/dl to 2.90 mg/dl, reflecting improved renal function.
- Blood Urea levels decreased from 68.00 mg/dl to 38.00 mg/dl, reflecting improved renal function.

**Table 4: Follow-Up Investigations and Results.**

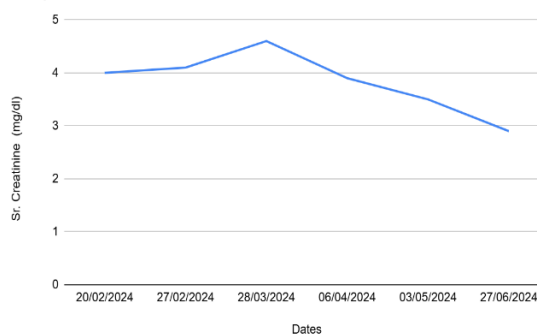
Laboratory test	20/02/2024	27/02/2024	28/03/2024	06/04/2024	03/05/2024	27/06/2024
Urea	68 mg /dl	87 mg/dl	47 mg/dl	60 mg/dl	45 mg/dl	38 mg/dl
Creatinine	4.00 mg/dl	4.10 mg/dl	4.6 mg/dl	3.9 mg/dl	3.5 mg/dl	2.9 mg/dl

Graphs 1 and 2 depict the progressive decline in Blood Urea and Creatinine levels over time.

Graph 1. Blood Urea level reduction over time

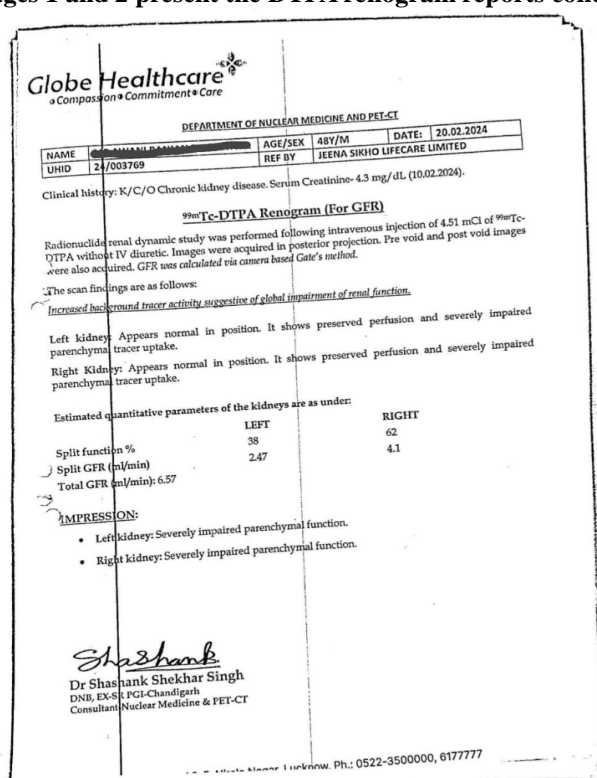
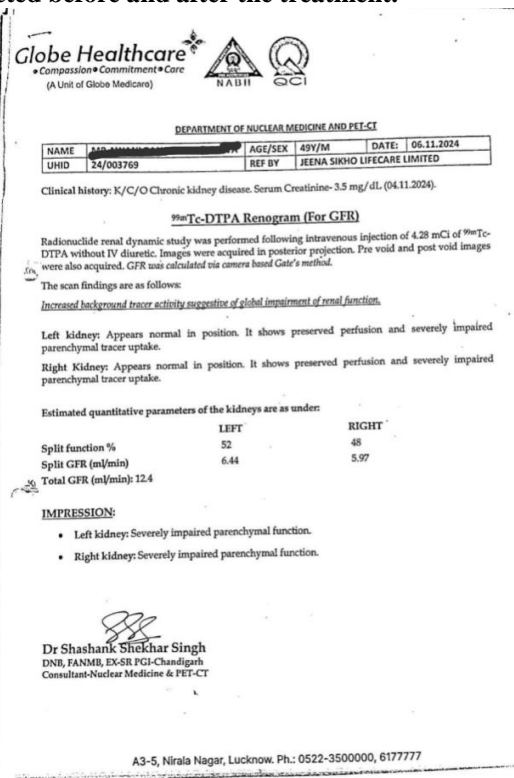


Graph 2. Sr. Creatinine reduction over time

**Table 5: 99 m Tc-DTPA Renogram (For GFR) Report before and after treatment.**

Quantitative Parameters	Before Treatment (20/02/2024)		After Treatment (6/11/2024)	
	Left	Right	Left	Right
Split Function %	38	62	52	48
Split GFR (ml/min)	2.47	4.1	6.44	5.97
Total GFR (ml/min)	6.57		12.4	

Images 1 and 2 present the DTPA renogram reports conducted before and after the treatment.

**Image 1: Before Treatment.****Image 2: After Treatment.**

## DISCUSSION

Chronic Kidney Disease (CKD) represents a significant global health challenge, characterized by a progressive

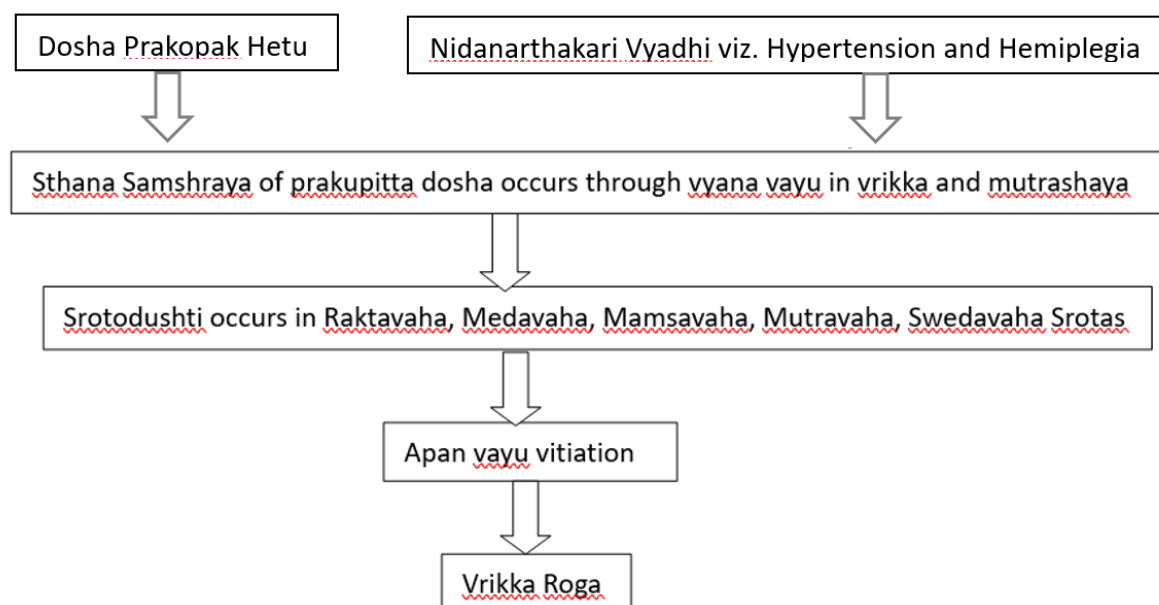
decline in renal function and associated complications, including cardiovascular disease and anaemia. The management of CKD often necessitates a multifaceted



approach that addresses not only the physiological aspects of the disease but also the holistic well-being of the patient. This case study illustrates the potential of *Ayurvedic* interventions as a complementary strategy in the management of CKD, highlighting both symptomatic relief and investigational improvements.

The patient in this study, presented with a complex clinical profile, including a history of hypertension and left hemiplegia, which are known risk factors for CKD

progression. The initial symptoms, such as oedema, gastrointestinal disturbances, and pruritus are commonly associated with renal impairment and significantly impacted the quality of life. The *Ayurvedic* treatment protocol employed in this case was designed to address these symptoms while also targeting the underlying pathophysiological mechanisms of CKD. The *samprapti* (pathogenesis) of the disease in this case can be articulated as follows.



The dietary modifications implemented in this case, which emphasized the consumption of whole foods and the avoidance of processed items, align with contemporary nutritional guidelines for CKD management. The structured meal plan, not only provided essential nutrients but also promoted digestive health, which is crucial for patients with renal impairment. The emphasis on mindfulness practices, such as yoga and meditation, contributed to the patient's overall well-being, reducing stress and enhancing emotional resilience.

The *Ayurvedic* therapies of *Snehan*, *AwagahaSwedana*, *Shiropichu* with *Brahmi* oil and *Gokshur* & *Punarnava Siddha SnehaBasti* offers a multitude of benefits for patients, particularly those with chronic conditions such as Chronic Kidney Disease (CKD). *Snehan* or oleation therapy, enhances tissue hydration and promotes the elimination of toxins, thereby improving overall metabolic function. *AwagahaSwedana*, involving immersion in hot water, facilitates vasodilation and enhances circulation, aiding in the detoxification process and alleviating pain.<sup>[13]</sup> *Shiropichu* with *Brahmi* oil promotes relaxation and mental clarity, reducing stress and anxiety while enhancing cognitive function.<sup>[14]</sup> *Gokshur*<sup>[15]</sup> and *Punarnava Siddha SnehaBasti*, a medicated oil enema, effectively balances *Vatadosha*, promotes bowel regularity, and supports renal function

through its diuretic properties.<sup>[16]</sup> Additionally, Head Down Tilt (HDT) therapy, which positions the patient at a slight incline with the head lowered, aids in reducing plasma volume and promotes natriuresis, thereby enhancing fluid balance and supporting kidney health. Collectively, these therapies not only address the physical symptoms of CKD but also contribute to improved mental well-being and overall vitality.

The *Ayurvedic* medicines utilized in the management of Chronic Kidney Disease (CKD) offers a range of therapeutic benefits through their unique formulations.

**YakritShothHarVati:** Composed of ingredients such as *Punarnava*,<sup>[17]</sup> *Kalimirch*, and *Pippali*, this formulation is beneficial for managing liver dysfunction, reducing inflammation, and supporting renal health by promoting detoxification and improving metabolic processes.

**MutravardhakVati:** This formulation includes *Gokshura* and *Guggul*, known for their diuretic properties, which helps to alleviate urinary obstruction, reduce inflammation and support fluid balance, making it effective in managing water retention and enhancing kidney function.

**Nefron Plus Cap.:** Containing *HazroolYahoodBhasma* and *Chandraprabha* powder, this medicine is designed to

support kidney health, alleviate burning micturition, and address urinary tract infections (UTIs), thereby promoting overall renal function.

**Vat HarRasVati:** This formulation helps in balancing *Vatadosha*, alleviates symptoms associated with *Vata* imbalance, such as pain and discomfort and promotes digestive health, which is crucial for patients with CKD.

**ShirShoolVati:** Effective for managing headaches and migraines, this formulation provides quick relief from acute pain, enhancing the patient's comfort during treatment.

**Syp. Kidney Care:** This syrup is formulated to support kidney function and improve urinary health, providing a holistic approach to manage CKD symptoms.<sup>[18]</sup>

**ChanderVati:** Known for its calming effects, this formulation helps in reducing stress and anxiety, which can be beneficial for patients dealing with chronic illnesses.

**Dr.ShuddhiPowder:** This medicine aids in detoxification and supports the elimination of metabolic wastes, contributing to improved renal health.

**Go Flexi Cap:** This formulation supports joint health and mobility, which can be particularly beneficial for patients experiencing discomfort due to CKD-related complications.<sup>[19]</sup>

**SamaVati:** This medicine is used to balance the *doshas* and improve digestive health, which is essential for overall well-being in CKD patients.

**Skin Cure Cap.:** This formulation addresses skin issues that may arise due to kidney dysfunction, promoting healthy skin and alleviating related symptoms.

**MahaAmritamChurna:** Composed of various herbs, this *churna* is known for its rejuvenating properties, enhancing vitality and overall health.

**GadoodSudharakVati:** This formulation is effective in improving digestive health, helps in managing prostate size and nutrient absorption.

Collectively, these *Ayurvedic* medicines provide a comprehensive approach to manage CKD, addressing both renal function and overall health through their synergistic effects.

This case study underscores the potential of *Ayurvedic* medicine as a viable complementary approach in the management of CKD. The observed symptomatic relief and investigational improvements highlight the importance of a holistic treatment strategy that addresses both the physical and emotional dimensions of health. As the global burden of CKD continues to rise, integrating

traditional practices with modern medical approaches may offer new avenues for enhancing patient care and improving outcomes in chronic kidney disease management.

### NEED FOR FURTHER RESEARCH

Despite the promising results observed in the management of Chronic Kidney Disease (CKD) through *Ayurvedic* interventions, there remains a critical need for further research to substantiate these findings, particularly in patients with complex comorbidities such as hemiplegia. Future studies should focus on conducting rigorous clinical trials with larger sample sizes to evaluate the efficacy and safety of specific *Ayurvedic* formulations in such unique patient population.

Additionally, comparative studies between *Ayurvedic* treatments and conventional medical approaches could provide valuable insights into their relative effectiveness, especially in individuals with CKD and neurological conditions. Exploring the underlying mechanisms of action of these *Ayurvedic* formulations at biochemical level will enhance understanding of their therapeutic potential, particularly in addressing the multifaceted challenges presented by hemiplegia alongside CKD.

Exploring the long-term effects of *Ayurvedic* therapies on kidney function and overall health outcomes in patients with hemiplegia is also essential. Furthermore, standardization of the preparation and dosage of *Ayurvedic* medicines will facilitate consistency in research and clinical practice.

Collaborative efforts between *Ayurvedic* practitioners and modern medical researchers can pave the way for integrative approaches that harness the strengths of both systems, ultimately improving patient care in CKD management, particularly for those with additional complications such as hemiplegia.

In conclusion, advancing research in this area is vital to establish evidence-based guidelines for the use of *Ayurveda* in CKD, ensuring that patients could receive safe and effective treatment options tailored to their complex health needs.

### CONCLUSION

This case study highlights the potential of *Ayurvedic* interventions along with Allopathic medicines in providing symptomatic relief and facilitating investigational improvements in a patient with Chronic Kidney Disease (CKD). The comprehensive treatment approach, which includes personalized dietary modifications, *Ayurvedic* formulations and *Panchakarma* therapies, resulted in significant enhancements in renal function, as evidenced by increased Glomerular Filtration Rate (GFR) and decreased serum creatinine and blood urea levels. Additionally, the patient experienced notable improvements in quality of life, with

reductions in oedema, gastrointestinal disturbances and pruritus.

The findings underscore the importance of a holistic management strategy that not only targets the physiological aspects of CKD but also addresses the overall well-being of the patient. By integrating traditional *Ayurvedic* practices with contemporary medical approach, healthcare providers may enhance patient outcomes and offer a more comprehensive framework for managing chronic conditions like CKD. Ultimately, this case study contributes to the growing body of evidence supporting the role of integrative medicine in enhancing the care and quality of life for patients with chronic kidney disease.

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