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Case Report

Chronic Kidney Disease

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Integrative Ayurvedic management of Chronic Kidney Disease highlighting the efficacy of Panchakarma and Ayurvedic Formulations: A Case Report

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Chronic Kidney Disease (CKD) is a progressive condition marked by a gradual decline in renal functions, often accompanied by complex and poorly understood etiopathogenesis. Conventional medical treatments for CKD, including peritoneal dialysis, haemodialysis and renal transplantation, aims to manage symptoms but presents limitations. Ayurveda provides a comprehensive alternative, emphasizing dietary and lifestyle interventions alongside the therapeutic potential of ayurvedic formulations and bio-balancing therapies. This study reflects the case of a 57-year-old male with CKD, Type 2 Diabetes and hypertension, who had symptoms such as dyspnoea, facial puffiness, constipation and generalized weakness. Following Ayurvedic treatment, which included Ayurvedic medications and Panchakarma therapies, the patient reported significant symptomatic relief. Laboratory investigations revealed a notable reduction in serum urea and creatinine levels, further affirming the effectiveness of the intervention. This case underscores the potential of Ayurvedic management as a holistic, safe, and efficacious approach for CKD, offering promising avenues for integrated healthcare.

Keywords: Chronic Kidney Disease, Type 2 Diabetes, Hypertension, Panchakarma, Urea, Creatinine, Ayurveda Management, Vrikka Vikara

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Introduction

Chronic Kidney Disease (CKD), also known as chronic kidney failure, is a progressive loss of renal functions occurring over months or years. This condition often presents nonspecific symptoms that may overlap with other illnesses due to the kidney's exceptional ability to adapt and compensate for functional decline. Symptoms typically emerge in the advanced stages of the disease and includes nausea, vomiting, fatigue, sleep disturbances, altered urine output, cognitive decline, muscle cramps, swelling of extremities, persistent itching, breathlessness and hypertension.**[1]** CKD is frequently identified through screening individuals at high risk, such as those with diabetes, hypertension or a family history of kidney disease. The diagnosis requires evidence of kidney impairment persisting for more than three months, distinguishing it from acute kidney injury. It is recognized as a significant global public health challenge, with an estimated prevalence of 10%, affecting approximately 850 million individuals worldwide.**[2]** The burden is particularly pronounced in low- and middle-income countries due to limited healthcare resources and the rising extensiveness of risk factors such as diabetes and hypertension, especially in regions like Asia. In India, CKD pervasiveness is estimated to range from 4.7% to 17.4%, with urban areas showing a higher prevalence due to lifestyle and environmental influences.**[3]** Despite advancements in conventional medicine, CKD management often culminates in renal replacement therapy, including dialysis or kidney transplantation, underscoring the need for alternative approaches.

Ayurveda offers a holistic perspective on disease management, focusing on the interplay of *Dosha*, *Dushya* and *Adhishthana*, along with the patient's overall strength and disease severity.**[4]** Although CKD is not explicitly described in classical *Ayurvedic* texts, its pathogenesis can be understood within the framework of *Ayurvedic* principles, Enabling effective and individualized therapeutic strategies. This article highlights the case of a 57-year-old male with diabetes and hypertension, recently diagnosed with CKD, successfully managed through Ayurvedic therapies. This case underscores the potential of Ayurveda as a complementary approach to addressing the complex challenges of CKD.

Case Report

A 57-year-old male with a history of hypertension diagnosed three years ago and Type 2 Diabetes Mellitus for 30 years, recently diagnosed with Chronic Kidney Disease (CKD), presented to Jeena Sikho Lifecare Ltd. Hospital, Dera Bassi, Chandigarh, on June 28, 2024. The patient reported complaints of constipation, frothy urination, dyspnoea on exertion, facial puffiness and generalized weakness. The 2D Echo report dated June 25, 2024, revealed the left ventricular ejection fraction (LVEF) of 45 - 48%, concentric left ventricular hypertrophy (LVH) and mild mitral regurgitation (MR). The patient's initial evaluation on the first day is summarized in Table 1.

Table 1: Examination Findings

Parameter	Findings
Blood Pressure	150/80 mm of Hg
Pulse Rate	72/min
Weight	89 kg
Nadi	Vata Pittaj
Mala	Malavashtambha (constipation)
Mutra	Safena(frothy)
Jivha	Saam (coated)
Shabda	Spashta
Sparsha	Anushnashita
Akruti	Sthula
Drik	Akshikutashotha
Kshudha	Alpa
Agni	Mand
Nidra	Prakrut

The results of the diagnostic tests performed on the day of admission are outlined in Table 2.

Table 2: Investigations on the day of Admission (June 28, 2024)

Laboratory Test	Observed Value
Blood Count	
Hemoglobin	**6.7 g/dl**
Total Leucocyte Count	6700/cumm
RBC	**2.07 Mill/Cumm**
Platelet Count	2.43 Lacs/Cumm

Random Plasma Glucose	**176 mg/dl**
Renal Function Test	
Blood Urea	**249.03 mg/dl**
Serum Creatinine	**11.25 mg/dl**
Serum Uric Acid	**8.40 mg/dl**
Electrolytes	
Sodium Na+	134.1 mEq/L
Potassium K+	4.55mEq/L
Chloride Cl-	101.2 m Eq/L
Liver Function Test	
Bilirubin Direct	0.28 mg/dl
Bilirubin In-Direct	0.35 mg/dl
Bilirubin Total	0.63 mg/dl
ALT/SGPT	15.69 IU/L
AST/SGOT	15.20 IU/L
Alkaline Phosphatase	144.32 U/L
Albumin	4.24 g/dl
Globulin	3.20 g/dl
Total Protein	7.44 g/dl
Immunology- Serology	
HIV I & HIV II Antibody	Non-Reactive
HCV Antibody	Non-Reactive
Hepatitis B Surface Antigen	Non-Reactive
Hepatitis C Virus Antigen	Non-Reactive
Chol/HDL Ratio	3.90

The patient underwent a thorough diagnostic workup, including urinalysis, complete blood count (CBC), renal function tests (RFT), serum electrolyte analysis and liver function tests (LFT).

The patient underwent a comprehensive Panchakarma protocol, which included *Awagaha Swedana* (therapeutic tub bathing), *Shiropichu* (medicated oil application on the scalp), *Shiroabhyanga* (head massage with Ayurvedic medicated oils), *Sneha Basti* (oil enema), *Kashay Basti* (decoction enema), *Lepam* (Ayurvedic medicated paste application) and *Netra Tarpana* (nourishing eye treatment). These therapies were complemented with Ayurvedic medications and tailored dietary and lifestyle recommendations designed to enhance overall well-being and support kidney function restoration.

The patient was discharged on July 7, 2024, demonstrating significant clinical improvement. Symptoms such as constipation, frothy urination, dyspnoea on exertion, facial puffiness and generalized weakness had considerably diminished. Additionally, there was a notable enhancement in appetite and urine output, contributing to an improved sense of overall well-being at the time of discharge.

Treatment Plan

I. Diet Plan Overview [5]

At Jeena Sikho Lifecare Ltd. Hospital, Dera Bassi, the patient's diet was customized to support kidney health and recovery, incorporating the following elements:

1. Foods to Avoid: Excluded wheat, processed foods, dairy, animal products, coffee, tea, and post-8 PM meals.

2. Hydration: Advised 1.5 litres of fluid daily, including alkaline water, Herbal tea and turmeric-infused water.

3. Millets: Recommended five varieties - foxtail, barnyard, little, kodo and browntop - prepared in stainless steel utensils.

4. Structured Meals (DIP Diet):

- **Early Morning:** Curry leaves, Herbal tea, raw ginger and turmeric.
- **Breakfast:** Seasonal and steamed fruits, sprouts and fermented millet shakes. Plate 1 with assorted fruits (seasonal) paired with steamed sprouts. Red Juice.

- **Lunch:** Millet dishes with steamed vegetables or sprouts. Plate 1 with steamed vegetable salad or sprouts and Plate 2 with a millet-based dish. Steamed salads (grams equivalent to 5 × the patient's weight) alongside cooked millet dishes.
- **Snacks:** Green and red juices, soaked almonds.
- **Dinner:** Plate 1 with a steamed vegetable salad or sprouts and Plate 2 with a millet-based dish. Millet khichdi, soups, chutneys, steamed salads.

शाल्यादीनां तु धान्यानां यवकाः श्यामकाः प्रियङ्गवः। कोद्रवाः शालिपर्ण्यश्च लघवः कषायोष्णगुणाः स्मृताः॥"[5] (Charaka Samhita, Sutrasthana 27/88).

5. Periodic Fasting: Encouraged fasting every 3–4 days to promote detoxification.

6. Special Practices: Gratitude before meals and sitting in *Vajrasana* post-meal for digestion.

7. Dietary Variations: Emphasis on natural foods - Herbal tea, juices, steamed seasonal fruits, sprouts and salads - with no added salt.

II. Lifestyle Recommendations[6]

1. Sunlight: Spend 30 minutes in morning sunlight to boost vitamin D and health.

2. Yoga: Practice yoga (*Sukhasana*) for one hour daily to enhanc strength, flexibility & mental clarity.

3. Meditation: Engage in mindfulness meditation (*Sukshama Pranayama)* to reduce stress and improve well-being.

4. Grass-Ground Walk: Walk barefoot on natural surfaces for 30 minutes to enhance circulation and connect with nature.

5. Sleep: Maintain 6 - 8 hours of quality sleep for recovery.

6. Routine: Follow a structured daily schedule for balanced living.

***III. Panchakarma* Procedures Administered to the Patient**

***A. Awagaha Swedana*[7]**

Procedure: The patient was seated in a tub filled with warm water (approximately 42°C) infused with medicinal herbs for 30 minutes under supervision.

Physiological Effects

- Warm water induces vasodilation, increas blood circulation to skin & stimulating perspiration.
- Sweating assists in eliminating metabolic wastes such as urea, creatinine and uric acid.
- The *Ayurvedic* components in the water are absorbed through the skin, exerting systemic therapeutic effects.

Mode of Action

- The rise in body temperature promotes vasodilation and activates the sympathetic nervous system, leading to the release of catecholamines and thyroid hormones, which enhance metabolism and fat breakdown.
- Facilitates the liquefaction and movement of *Doshas* within bodily microchannels (*Srotas*), aligning with principles from *Ayurvedic* texts (*Charaka Siddhi Sthana* 1/8).
- Classified under *Sagni Swedana* therapy*, Awagaha Swedana* supports detoxification and helps to restore systemic balance.

***B. ShiroPichu* with *Brahmi* Oil**

Procedure: A cotton pad soaked in warm *Brahmi* oil is gently placed on the forehead and maintained under supervision for 30 to 60 minutes.

Physiological & Mode of Action: The medicinal oil is absorbed through the skin, nourishing underlying tissues and calming the nervous system, which helps to alleviate mental exhaustion and stress. *ShiroPichu*, facilitates the absorption of *Brahmi* oil into the skin, raising the local temperature and improving blood circulation. This increased blood flow, enhances oxygen and nutrient delivery while aiding in removing metabolic waste. The therapy's anti-inflammatory and soothing properties helps to relax muscles, alleviates headache and migraine, reduces mental stress, and promotes overall relaxation and well-being.

C. Gokshur* and *Punarnava Siddha Sneha Basti

Procedure: Warm medicated oil, prepared with *Gokshur* and *Punarnava Siddha Sneha* (90 ml), is administered rectally, allowing for gradual absorption over a specified period.

Physiological Effects and Mode of Action: The medicated oil is absorbed through the rectal mucosa, providing lubrication to the intestines, facilitating bowel movements and pacifying the vitiated or raised *Vata Dosha*. It helps in the expulsion of gas, faeces, and urine, delivering both localized and systemic therapeutic effects.

Therapeutic Benefits of Ingredients:

- ***Gokshur:*** Renowned for its diuretic properties, it supports urinary health, helps to balance *Doshas* and promotes overall detoxification.
- ***Punarnava:*** Known for its anti-inflammatory action, it enhances kidney function, aids in detoxification, manages fluid retention and reduces swelling.**[8]**

This formulation supports kidney health, improves detoxification pathways, aids in the elimination of metabolic wastes, and restores *Dosha* equilibrium, offering compreh. benefits for systemic well-being.

D. Gokshur* and *Punarnava Siddha Kashaya Basti

Procedure: A decoction (*kashaya*) of 350 ml prepared with *Gokshur* and *Punarnava Siddha* was administered rectally as a therapeutic enema (*Niruha Basti*). Quantity and duration of retention were determined, based on patient's condition.

Physiological Effects and Mode of Action: The medicated decoction acts through the rectal mucosa, helped to regulate bowel function, pacified *Vata dosha* and supported urinary and renal health. It facilitated the removal of toxins and excess fluid while improving circulation and reduced inflammation in the lower abdominal region.

Therapeutic Benefits of Ingredients:

- ***Gokshur:*** Diuretic and *Dosha*-balancing properties that supports urinary tract health and detoxification.
- ***Punarnava:*** Anti-inflammatory and nephroprotective actions, aids in kidney function, manages fluid retention and promotes detoxification.**[9]**

Gokshur and *Punarnava Siddha Kashaya Basti* and *Sneha Basti* were administered on alternate days as part of the therapeutic regimen. This formulation offers a holistic approach for detoxification, kidney health and systemic balance, making it a valuable intervention in managing conditions like chronic kidney disease.

***E. Dashmoola* and *Trikatu Lepam* Application**

Procedure: An *Ayurvedic* paste (*Ushna Lepam*) was prepared, using *Dashmoola* and *Trikatu* powders mixed with a *Ayurvedic* decoction, is applied evenly over the chest and legs.

The paste is kept in place for a specific duration under medical supervision.

Physiological Effects and Mode of Action: The application of *Dashmoola* and *Trikatu lepam (Ushna Lepam)* facilitates localized vasodilation, improving blood circulation and reducing inflammation. These herbs possess anti-inflammatory, analgesic and mucolytic properties, which helps to alleviate chest congestion, improve respiratory functions and reduces localized swelling or pain in the legs.

Therapeutic Benefits of Ingredients:

- ***Dashmoola:*** Aids in reducing inflammation, pacifying vitiated or elevated *Vata Dosha* and alleviating musculoskeletal discomfort.**[10]**
- ***Trikatu:*** Acts as a stimulant and expectorant, promoting mucus clearance and enhancing metabolic activity in the applied area.

This external therapy complements systemic treatments, providing symptomatic relief and contributing to overall therapeutic outcomes.

F. Netra Tarpana* with *Triphala Ghrita

Procedure: A medicated ghee preparation, *Triphala Ghrita*, is gently poured and retained in a reservoir made of dough placed around the eyes. The therapy lasts for a specific duration under supervision.

Physiological Effects and Mode of Action: *Netra Tarpana* nourishes ocular tissues, improves blood circulation in the eye region and soothes dryness or irritation. The *Triphala Ghrita* provides antioxidants and has anti-inflammatory properties, promoting healing and maintaining ocular health.

Therapeutic Benefits of *Triphala Ghrita*:

- ***Triphala:*** Rejuvenates and detoxifies ocular tissues, enhances vision and alleviates strain.
- ***Ghrita*:** Acts as a medium for deep absorption, supporting the regenerative and cooling effects on the eyes.

This therapy is indicated in conditions like dry eye syndrome, eye strain and age-related vision decline, offering both preventive and curative benefits. **[11]**Top of Form

Netra Tarpana with *Triphala Ghrita* and the application of *Dashmoola* and *Trikatu Lepam* were performed on alternate days as a part of the treatment regimen.

IV. Medicinal Intervention

The *Ayurvedic* therapeutic regimen for this case involved a combination of specialized *ayurvedic* formulations, including Renal Support Syrup, Chander Vati, GFR Powder and Prameha Rog har Powder*,* alongside *Panchakarma* treatments. A detailed breakdown of these *Ayurvedic* treatment, including their components, dosage, administration schedule and specific therapeutic indications, is provided in Table 4.

Table 4: Ayurvedic Medications, Composition, Dosage, Duration and Therapeutic Benefits in the Management of CKD.

Medicine Name	Ingredients	Dosage with Anupana	Therapeutic Effects
Trivritta Avaleha	Trivrit (Operculina turpethum), Sita (Saccharum officinarum), Madhu (Honey), Ela (Elettaria cardomomum), Twak (Cinnamomum verum), Patra (Cinnamomum tamala).	Half tsp HS (Nishakala with Koshna Jala)	Helps in eliminating metabolic toxins and excess fluid through its mild laxative and diuretic properties
GFR Powder	Bhoomi Amla (Phyllanthus fraternus), Badiharad (Terminalia chebula), Bahera (Terminalia belerica), Kasni (Cichorium lendivia), Makoy (Solanum nigrum), Punarnava (Boerhaavia diffusa), Gokhru (Tribulus terrestris).	Half a teaspoon BD (Adhobhakta with Koshna Jala)	Supports kidney function and reduces inflammation, helps to alleviate renal symptoms.
Chander Vati	Kapoor Kachri (Hedychium spicatum), Vacha (Acorus calamus), Motha (Cyperus rotundus), Kalmegh (Andrographis paniculata), Giloy (Tinospora cordifolia), Devdaru (Cedrus deodara), Desi Haldi (Curcuma longa), Atees (Aconitum heterophyllum), Daru Haldi (Berberis aristata), Pipla Mool (Piper longum root), Chitraka (Plumbago zeylanica), Dhaniya (Coriandrum sativum), Harad (Terminalia chebula), Bahera (Terminalia bellirica), Amla (Phyllanthus emblica), Chavya (Piper chaba), Vayavidang (Embeliaribes), Pippal (Piper longum), Kalimirch (Piper nigrum), Sonth (Zingiber officinale dried ginger), Gaj Pipal (Scindapsus officinalis), Swarn Makshik Bhasma, Sajji Kshar, Senda Namak, Kala Namak, Choti Elaichi (Elettaria cardamomum), Dalchini (Cinnamomum verum), Tejpatra (Cinnamomum tamala), Danti (Baliospermum montanum), Nishothra (Operculina turpethum), Banslochan, Loh Bhasam, Shilajit (Asphaltum punjabinum), Guggal (Commiphora wightii).	2 tablets BD (Adhobhakta with Koshna Jala)	Alleviates urinary tract symptoms and promotes healthy urine flow.
Renal Support Syp.	Gokshura (Tribulus terrestris), Chirayata (Swertia chirata), Haritaki (Terminalia chebul), Karanja (Pongamia pinnata), Ashwagandha (Withania somniferia), Arjuna (Terminalia Arjuna), Nimba (Azadirachta Indica)	20 ml BD (Adhobhakta with Samamatra Koshna Jala)	Kidney disorder, UTI, urinary disorders
Prameh Rog Har Powder	Kutki (Picrorhiza kurroa), Chiraita (Swertia chirata), Neem (Azadirachta indica) Karela (Momordica charantia), Rasonth (Berberis aristata dc), Imli Beej (Tamarindus indica) Kala Namak, Giloy (Tinospora cordifolia), Sonth (Zingiber officinale) Babool Chaal (Vachellia nilotica), Sarpgandha (Rauvolfia serpentina) Trivang Bhasam, Yashad Bhasam, Revend Chinni (Rheum emodi) Sodhit Guggulu (Commiphora wightii), Methi (Trigonella foenum-graecum) Jamun (Extractum berberies), Babool Fruit (Syzygium cuminii) Karanj (Vachellia nilotica), Shilajit (Bitumen mineral), Haldi (Curuma longa) Harad (Terminalia chebula), Inderjaun (Holarrhena pubescens) Banshlochan (Bambusa arundinacea), Bahera (Terminalia bellirica) Amla (Phyllanthus emblica), White Musli (Chlorophytum borivilianum), Gurmar (Gymnema sylvestre)	1 Tsp BD (Pragbhakta with Koshna Jala)	Helps in, regulating high blood sugar levels, addressing urinary disorders and alleviating complications such as hyperglycaemia, diabetic neuropathy and retinopathy
FE Capsule	Makoy (Solanum nigrum), Shilajeet (Asphaltum punjabianum) Yasad Bhasam, Loh Bhasam, Swarn Makshik Bhasam, Mukta Shukti Pishti	2 BD (Adhobhakta with Koshna Jala)	Addresses anaemia, generalized weakness and overall vitality
Tab. URI Plus	Amalki (Emblica officinalis), Bibhitika (Terminalia belerica) Haritiki (Terminalia chebula), Gokshura (Tribulus terrestris) Shodhit Guggul (Commiphora wightii), Guduchi (Tinospora cordifolia)	2 Tablets BD (Adhobhakta with Koshna Jala)	Manages kidney dysfunction, urinary tract infections (UTIs), and kidney stones

Divya Shakti Powder	Trikatu, Triphala, Nagarmotha (Cyperus rotundus), Vay Vidang (Embelia ribes), Chhoti Elaichi (Elettaria cardamomum), Tej Patta (Cinnamomum tamala), Laung (Syzygium aromaticum), Nishoth (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), Sajjiikhar, Pushkarmool (Inula racemosa), Mishri (Saccharum officinarum).	Half teaspoon HS (Nishikala with Koshna Jala)	Enhances overall vitality and energy levels, addresses fatigue and weakness.

The medications provided to the patient during hospitalization, at the time of discharge are outlined in Table 5.

Table 5: Medications Administered During Hospitalization and at Discharge

Medicine	Dosage
Medicine during patient's hospitalization	
Chander Vati	2 BD (Adhobhakta with Koshna Jala)
Syp. Renal Support	20 ml BD (Adhobhakta with Samamatra Koshna Jala)
GFR powder	1 Tsp BD (Adhobhakta with Koshna Jala)
Prameha Roghar Powder	1 Tsp BD (Pragbhakta with Koshna Jala)
FE Cap.	2 BD (Adhobhakta with Koshna Jala)
Medicines given or prescribed on discharge	
GFR powder	1 Tsp BD (Adhobhakta with Koshna Jala)
URI Plus Tablets	2 Tablets BD (Adhobhakta with Koshna Jala)
Chander Vati	2 Tab. BD (Adhobhakta with Koshna Jala)
DS powder	Half Tsp HS (Nishakala with Koshna Jala)
Prameha Roghar Powder	1 Tsp BD (Pragbhakta with Koshna Jala)

The patient continued his prescribed allopathic medications during hospitalization. The treatment regimen included Sodium Bicarbonate 1000 mg thrice daily, Rosuvastatin 5 mg once daily at bedtime (HS), Torsemide 40 mg twice daily (1 BD), along with Vitamin B supplements and Folic Acid once daily (OD) to address the patient's clinical needs comprehensively.

Result

The patient, a 57-year-old male with a history of Type 2 Diabetes Mellitus and hypertension, presented with multiple symptoms associated with Chronic Kidney Disease (CKD). Following a comprehensive Ayurvedic treatment regimen, significant improvements were observed in both symptomatically and laboratory investigations.

Symptomatic Improvement: Upon admission, the patient reported several distressing symptoms, including constipation, frothy urination, dyspnoea on exertion, facial puffiness and generalized weakness. The severity of these symptoms was assessed using a scoring system:

- **Pain:** Reduced from 2/10 (discomforting) at admission to 0/10 (no discomfort) at discharge.
- **Dyspnoea:** Decreased from 4/10 (slight-moderate) at admission to 0/10 (no difficulty) at discharge.

Overall, the patient experienced a marked reduction in the severity of symptoms, with notable improvements in appetite and urine output, contributing to an enhanced sense of well-being by the time of discharge.

Investigational Improvement: Laboratory investigations conducted before and after the treatment regimen demonstrated significant changes in key renal function parameters (Table 7):

- **Blood Urea Level:** Decreased from 249.03 mg/dl at admission to 59.2 mg/dl post-treatment.
- **Serum Creatinine:** Reduced from 11.23 mg/dl at admission to 3.70 mg/dl after treatment.

Graphs 1 and 2 illustrates a progressive reduction in blood urea levels and serum creatinine concentrations over time, reflecting an improvement in renal function. These results indicates a positive response to the Ayurvedic interventions and reflects an improvement in renal functions and overall metabolic status.

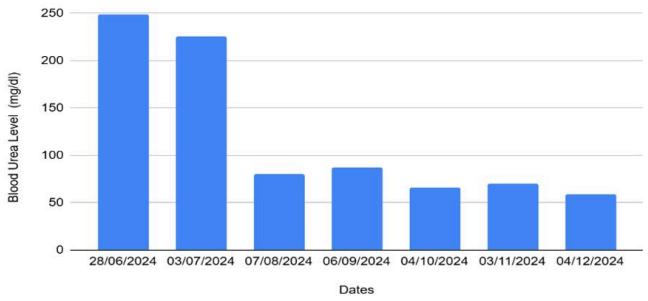
Table 6: Symptoms were observed on Day 1 and Day 7 with Scores

Symptom	Score at Admission (Day 1)	Score at Discharge (Day 7)
Pain	2/10 (Discomforting)	0/10 Relief
Dyspnoea	4/10 (Slight-moderate)	0/10

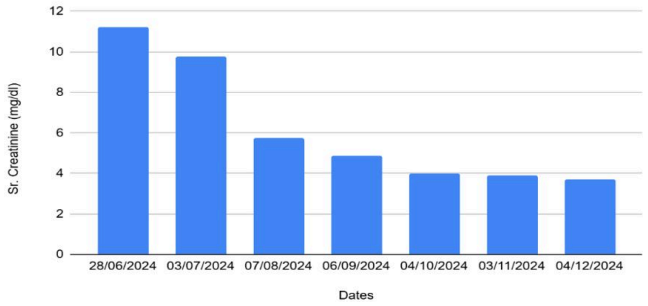
Table 7: Follow-Up Investigations and Results

Investigation	28/06/2024	03/07/2024	07/08/2024	06/09/2024	04/10/2024	03/11/2024	04/12/2024
Blood Urea	249.03 mg/dl	226.1 mg/dl	80.64 mg/dl	87.58 mg/dl	66.4 mg/dl	70 mg/dl	59.2mg/dl
Sr. creatinine	11.23 mg/dl	9.78 mg/dl	5.72 mg/dl	4.88 mg/dl	4.00 mg/dl	3.90 mg/dl	3.70 mg/dl

Graph 1. Blood Urea level reduction over time

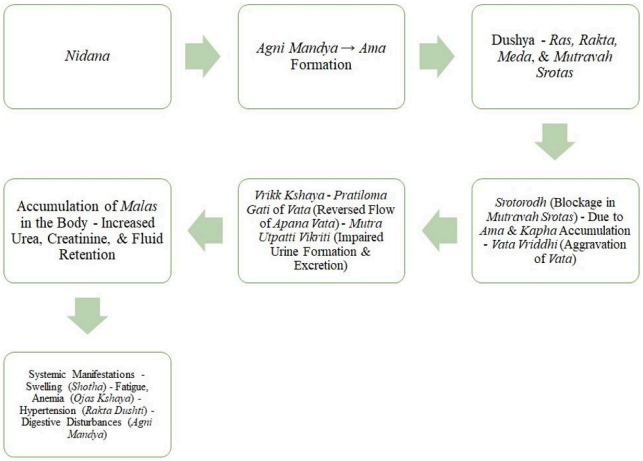


Graph 2. Sr. Creatinine level reduction over time



Discussion

Chronic Kidney Disease (CKD) represents a significant global health challenge, characterized by a progressive decline in renal functions and often accompanied by multifaceted symptoms that can severely impact the quality of life. This case study highlights the potential of *Ayurvedic* management as a holistic and integrative approach to CKD, demonstrating its efficacy in alleviating symptoms and improving renal function. The patient in this study, diagnosed with CKD alongside Type 2 Diabetes and hypertension, presented with a range of symptoms including dyspnoea, facial puffiness and generalized weakness. These symptoms are commonly associated with renal impairment and reflect the systemic effects of CKD. The *Samprapti* (pathogenesis) of the disease in this case can be described as follows:



The *Ayurvedic* treatment regimen employed in this case included a combination of *Ayurvedic* formulations and *Panchakarma* therapies designed to restore balance within the body and enhance overall health. The significant symptomatic relief observed, particularly in pain and dyspnoea, underscores the effectiveness of this integrative approach.

The *Panchakarma* therapies administered to the patient provided a comprehensive approach for detoxification and rejuvenation,**[12]** significantly contributing to manage Chronic Kidney Disease (CKD). *Awagaha Swedana,* involving medicine-infused warm water immersion, facilitated vasodilation and enhanced circulation, promoting the elimination of metabolic wastes such as urea and creatinine.**[13]** *Shiropichu* with *Brahmi* oil nourished the nervous system and alleviated mental fatigue,**[14]** while *Gokshur* and *Punarnava***[15]** *Sidha Sneha* and *Kashaya Basti* targeted renal function and supported detoxification. Applying *Lepam* with *Dashmoola* and *Trikatu* provided anti-inflammatory benefits, further aiding in symptoms relief. Additionally, *Netra Tarpan* with *Triphala Ghrit* offered therapeutic effects for eye health, enhancing overall well-being. Collectively, these therapies not only alleviated the patient's symptoms but also contributed to improve renal functions and a holistic sense of rejuvenation.

The Ayurvedic formulations utilized in the management of Chronic Kidney Disease (CKD) provided a multifaceted approach to enhance renal functions and overall health.**[16]** *Trivritta Avaleha*, known for its mild laxative and diuretic properties, aids in the elimination of metabolic toxins and excess fluid, thereby supporting kidney health. GFR Powder, composed of medicinal herbs like *Bhoomi Amla* and *Punarnava*, is specifically designed to enhance glomerular filtration rate and to reduce inflammation, promoting better renal function.**[17]** *Chander Vati* alleviates urinary tract symptoms and supports healthy urine flow, while Renal Support Syrup combination of potent ingredients such as *Arjuna* and *Gokshura* to address kidney disorders and urinary tract infections.**[18]** *Prameh Rog har Powder* helps to regulate blood sugar levels, which is crucial for diabetic patients and FE Capsules addresses anaemia and generalized weakness, enhancing overall vitality. Tab. URI Plus, with its blend of *Amalaki* and *Guduchi*,**[19]**

Further supports kidney functions and urinary health, while *Divya Shakti Powder* boosts energy levels and combats fatigue, contributing to the patient's overall well-being.**[20]** Collectively, these formulations are not only target the specific challenges of CKD but also promotes systemic balance and vitality.

Laboratory investigations revealed a notable reduction in serum urea and creatinine levels following treatment, indicating an improvement in renal function. This aligns with existing literature that supports the use of *Ayurvedic* therapies in managing renal disorders. Moreover, the holistic perspective of *Ayurveda* emphasizes on the importance of individualized treatment plans that consider the unique constitution *(Prakriti)* and imbalances (Vitiated *Dosha*) of each patient. This personalized approach may contribute to the observed improvements in the patient's condition, as it addresses not only the physical symptoms but also the underlying imbalances that contribute to disease progression.

Need for further research

The management of Chronic Kidney Disease (CKD) through *Ayurvedic* interventions, as demonstrated in this case report, highlights the potential benefits of integrating traditional practices with contemporary medical approaches. However, to substantiate these findings and to establish a robust evidence base, further research is imperative. Future studies should focus on larger, randomized controlled trials to evaluate the efficacy and safety of specific *Ayurvedic* formulations and therapies in diverse populations with varying stages of CKD. Additionally, investigations into the mechanistic pathways of these interventions could provide valuable insights into their pharmacological actions and interactions with conventional treatments. Longitudinal studies assessing the long-term outcomes of *Ayurvedic* management on renal function, quality of life and overall health are also essential. Furthermore, exploring the cost-effectiveness of *Ayurvedic* therapies compared to standard care could inform healthcare policies and patient management strategies. By addressing these research gaps, we can enhance understanding of *Ayurvedic* medicine's role in CKD management and could contribute to the development of integrative healthcare models that prioritize patient-centered care.

Conclusion

This case study demonstrates significant symptomatic and investigational improvements in a patient with Chronic Kidney Disease (CKD) following *Ayurvedic* management. The patient experienced marked relief from distressing symptoms such as dyspnoea, facial puffiness and generalized weakness, indicating the effectiveness of the holistic treatment approach. The reduction in symptom severity, not only enhanced the patient's quality of life but also highlighted the potential of *Ayurveda* in addressing the multifaceted challenges associated with CKD.

Investigational outcomes further corroborated the efficacy of the *Ayurvedic* interventions, as evidenced by notable decreases in serum urea from 249.03 mg/dl to 59.2mg/dl and creatinine levels from 11.23 mg/dl to 3.70 mg/dl.

References

1. Longo DL, Fauci AS, Kasper DL, Hauser SL, Jameson JL, Loscalzo J. Harrison’s Principles of Internal Medicine. 18th ed. Vol. *2. New York: McGraw-Hill; 2012. p. 2310 [Crossref][PubMed][Google Scholar]*

2. BMC Nephrology. Global incidence and death estimates of chronic kidney disease due to hypertension [Internet]. 2019 [cited 2024 Dec]. Available from: https://bmcnephrol. *biomedcentral.com [Crossref][PubMed][Google Scholar]*

3. BMJ Global Health. Prevalence of chronic kidney disease in Asia: a systematic review and analysis [Internet]. [cited 2024 Dec]. Available from: https://gh. *bmj.com [Crossref][PubMed][Google Scholar]*

4. Dash B, Sharma RK. Charaka Samhita: Text with English translation & critical exposition based on Cakrapani Datta's Ayurveda Dipika. Varanasi: Chowkhamba Sanskrit Series; 2012. . *[Crossref][PubMed][Google Scholar]*

5. Charaka. Charaka Saṃhitā, Sutrasthana, Chapter 27, Shloka 88. In: Shukla V, Tripathi RD, editors. Delhi: Chaukhambha Sanskrit Pratishthan; [year unknown]. *[Crossref][PubMed][Google Scholar]*

6. Manish, Chaudhary G, Singh SP, Singh M, Richa. Clinical evaluation of chronic kidney disease management: integrating lifestyle modification and Ayurveda. Int J AYUSH. 2024 Oct;2013(10). *doi: 10.22159/prl.ijayush.v2013i10.1152 [Crossref] [PubMed][Google Scholar]*

7. Pandey A, Azad AS, Bhardwaj A, Thakur G, Prakash G. Effectiveness of Gravitational Resistance and Diet (GRAD) system in reversing chronic kidney disease (CKD) among dialysis patients. Dayanand Ayurvedic College, Shridhar University, Pillani; 2022 [Internet]. Available from: https://davayurveda. *com/wp-content/uploads/2022/10/j-GRAD-System-Paper-FINAL-Mar-27-2.pdf [Crossref][PubMed] [Google Scholar]*

8. Singh RG, Singh RK, Usha, Sah AK, Tripathi YB. Medicinal properties of Boerhaavia diffusa Linn. (Punarnava): an overview. Int J Pharm Sci Res. *2010;1(6):40–5 [Crossref][PubMed][Google Scholar]*

9. Amilkanthwar RH, Dawale P, Gindewar AK. A role of Punarnavadi Kshir Basti and Punarnavadi Kwatha in the management of chronic kidney disease (CKD) —a case study. Int J Ayurveda Pharm Res. 2017;5(8):71–3. *[Crossref][PubMed][Google Scholar]*

10. Singh J. Dashmoola: anti-inflammatory Ayurvedic combination in Ayurveda [Internet]. Ayur Times. 2019 [cited 2024 Dec]. *Available from: [Article][Crossref][PubMed][Google Scholar]*

11. Arya K. Netra Tarpana: Ayurvedic treatment for dry eyes (case study) [Internet]. 2018 Jan 18 [cited 2024 Dec]. Available from: https://blog. *theayurvedaexperience.com/netra-tarpana-ayurvedic-treatment-for-dry-eyes-case-study/ [Crossref][PubMed][Google Scholar]*

12. Srikanth N, Bhuvaneshwari S. Panchakarma: Ayurvedic detoxification and rejuvenation therapy. Ancient Sci Life. 2016;36(1):28–32. *[Crossref] [PubMed][Google Scholar]*

13. Immersion in thermoneutral water: effects on atrial compliance. Aviat Space Environ Med. 2006 Dec;77(11):1183–7. . *[Crossref][PubMed][Google Scholar]*

14. Kumar A, Verma P. Therapeutic benefits of Shiropichu in alleviating psychological stress in chronic illness. J Ayurveda Integr Med. 2023;12(3):215–22. *[Crossref][PubMed][Google Scholar]*

15. Singh RG, Singh RK, Usha, Sah AK, Tripathi YB. Medicinal properties of Boerhaavia diffusa Linn. (Punarnava): an overview. Int J Pharm Sci Res. *2010;1(6):40–5 [Crossref][PubMed][Google Scholar]*

16. Sharma A, Patel B, Verma R. Efficacy of Ayurvedic formulations in chronic kidney disease management. J Ayurveda Integr Med. 2024;15(2):150–8. *[Crossref][PubMed][Google Scholar]*

17. Ghosh MN. The pharmacological basis of therapeutics in Ayurveda: a review on anti-inflammatory properties of Ayurvedic herbs. Indian J Med Res. 2010;132(3):222–8. *[Crossref][PubMed] [Google Scholar]*

18. Baghel MS, Swarnkar SK, Agarwal A, Yadav B. Role of Gokshuradi Guggulu and Punarnavadi Kashaya in the management of Mutrakricchra with special reference to urinary tract infection. AYU. 2012;33(4):504–8. *doi: 10.4103/0974-8520.110546 [Crossref][PubMed][Google Scholar]*

19. Gupta A, Kumar B. Clinical perspectives on Ayurveda and immunity with special reference to Guduchi (Tinospora cordifolia). J Tradit Complement Med. 2020;10(5):510–7. *doi: 10.1016/j.jtcme.2020.04.005 [Crossref][PubMed] [Google Scholar]*

20. Singh N, Rastogi RP. Inhibition of oxidative stress and inflammation in kidney diseases by Ayurvedic herbs: role of polyphenols and flavonoids. J Ayurveda Integr Med. 2015;6(1):50–5. *doi: 10.4103/0975-9476.146557 [Crossref][PubMed] [Google Scholar]*