Case Report

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A Case Report on the Integrative Management of Chronic Kidney Disease: An Ayurvedic Approach

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ABSTRACT

Chronic Kidney Disease (CKD) is a progressively debilitating condition, primarily affecting individuals with diabetes mellitus and hypertension, contributing significantly to global morbidity and mortality rates. As of 2021, CKD has emerged as the 9th leading cause of death worldwide. In patients with CKD, renal function declines gradually over time, often resulting in severe complications. Conventional treatments like dialysis and renal replacement therapy remain financially inaccessible to many, leading to a growing interest in alternative medical systems such as Ayurveda.

Ayurveda provides a unique perspective on CKD, categorizing it under *Madhyama rogamarga vyadhi*, associated with accumulated *kleda* (excessive bodily fluids) throughout the body. Though the kidney is not explicitly mentioned in classical Ayurvedic texts, it can be correlated with *vrikka*. The embryological origin of *vrikka* is linked to *medas* (adipose tissue) and *rakta* (blood), which, when disturbed by improper diet and lifestyle, contribute to the pathogenesis of CKD. Ayurvedic management focuses on restoring balance in these *dhatus*, offering a holistic treatment approach that may complement conventional therapies.

A case report of a 57-year-old male diagnosed with CKD stage V in 2010 illustrates the effectiveness of Ayurvedic interventions. The patient, presenting with recurrent vomiting, loss of appetite, decreased urine output, disturbed sleep, constipation, and right lower limb cellulitis, underwent Panchakarma therapy at Jeena Sikho Lifecare Limited Hospital, Derabassi, Chandigarh, in April 2024. He followed an Ayurvedic diet, practiced yoga and made lifestyle modifications, along with Ayurvedic medication, leading to positive clinical outcomes. This case underscores the potential of an integrative Ayurvedic approach to managing CKD effectively.

INTRODUCTION

Chronic Kidney Disease (CKD) has become an increasingly significant global health issue, now ranking as the 9th leading cause of death worldwide as of 2021.**1** This reflects a sharp rise from 19th place in 2000, with deaths attributed to CKD

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increasing by 95% over the same period.**2** The condition remains closely associated with diabetes mellitus and hypertension, the two major contributors to its pathogenesis. The global prevalence of CKD is estimated at 9.13%,**3**affecting millions across the globe, particularly in low and middle-income countries where access to treatments like dialysis remains limited.

Chronic Kidney Disease (CKD) encompasses a range of pathological conditions that lead to impaired kidney function, often accompanied by a slow and steady decline in glomerular filtration rate (GFR).**4**If not properly managed, CKD can progress to end-stage renal disease (ESRD). In India, the prevalence of CKD has been on the rise, driven by shifts in lifestyle, dietary habits, hypertension and poorly controlled diabetes. The restoration of kidney function is typically only achievable through dialysis or kidney transplantation, both of which are expensive and out of reach for many, especially for individuals from economically disadvantaged backgrounds. This financial burden makes it difficult for most of the population to afford such treatments. As a result, there is growing interest in alternative medical systems, particularly Ayurveda. In light of this, exploring an Ayurvedic understanding of CKD becomes imperative, particularly from an etiological standpoint.

This case report highlights the remarkable potential of Ayurveda in the management of CKD, demonstrating its ability to correct the root imbalances contributing to the disease while enhancing the overall well-being of the patient. It emphasizes the holistic approach of Ayurveda, which not only addresses the physical symptoms but also promotes long-term improvements in quality of life.

CASE REPORT

A 57-year-old male with a known diagnosis of CKD stage V presented to Jeena Sikho Lifecare Ltd Hospital, Derabassi, on 24th April 2024, with complaints of recurrent vomiting for 10 days, along with loss of appetite, reduced urine output, disturbed sleep and constipation. The patient also had a history of right lower limb cellulitis, which occurred 20 days ago. He had a 15-year history of hypertension and was receiving regular antihypertensive therapy. He was diagnosed with CKD stage V in 2018 but had not been initiated on maintenance haemodialysis (MHD). The patient had no history of alcohol consumption or smoking. The findings from the patient's initial evaluation on day one is presented in Table 1.

Table 1: Initial Assessment Observations of the Patient on Day One

Parameter	Findings	Parameter	Findings
Temperature	98.6˚F	*Nadi*	*Vataj Kaphaj*
Blood Pressure	138/82 mm of Hg	*Mala*	*Malavashthamba*
Pulse Rate	100/min	*Mutra*	*Alpa matra*
Weight	51 Kg	*Jivha*	*Saam*
CNS	Conscious, well oriented	*Drik*	*Avikruta*
CVS	S1S2 Clear	*Kshudha*	*Alpa*
Chest	Chest Clear, bilaterally equal	*Agni*	*Mandya*
P/A	Soft, no tenderness	*Nidra*	*Khandita*

The laboratory investigations conducted on the day of admission; April 24, 2024, are summarized in Table 2.

Table 2: Laboratory Investigations on the Day of Admission (April 24, 2024)

Laboratory Test	Observed Value
Blood Count	
Hemoglobin	10.2 g/dl
Total Leucocyte Count	7600/cmm
RBC	3.64 mill/cmm
Platelet Count	1.83 lacs/cmm
Renal Function Test	
Blood Urea	135.93 mg/dl
Serum Creatinine	7.57 mg/dl
Serum Uric Acid	6.07 mg/dl
Electrolytes	
Sodium Na+	139.9 mEq/L
Potassium K+	4.17 mEq/L
Chloride Cl-	106.0 mEq/L
Urine Examination	
Urine Protein	++

The patient underwent diagnostic tests, including a DTPA scan, Urine analysis, Complete Blood Count (CBC) and Renal Function Test (RFT).

The patient received a comprehensive Panchakarma regimen, which included Awagaha Swedana, Guduchyadi Siddha Sneha Basti, Shiropichu, Shiroabhyangamm, Leech Therapyand full-body oil massage (Sarwang Snehana) followed by full-body steam therapy(Sarvang Swedana). Alongside Panchakarma, the patient was administered Ayurvedic medicines and adhered to dietary and lifestyle modifications. The patient was prescribed and continued the following medications during treatment: Sodium Bicarbonate 1000 mg, twice daily; Clinidipine 1 mg, twice daily; Calcium Acetate 1 tablet, twice daily; and an Iron supplement, once daily.

The patient was discharged on May 3, 2024, showing significant improvement. Symptoms such as disturbed sleep, vomiting, constipation, itching and pedal edema

were alleviated. Additionally, there was an improvement in appetite and urine output.

Table 3: Follow-Up Investigations and Results

Laboratory test	24/04/2024	27/04/2024	03/05/2024
Urea	135.93 mg/dl	106.77 mg/dl	89.74 mg/dl
Creatinine	7.57 mg/dl	6.43 mg/dl	5.72 mg/dl
Uric Acid	6.07 mg/dl	6.57 mg/dl	7.45 mg/dl
Na+	139.9 mEq/L	138.4 mEq/L	140 mEq/L
K+	4.17 mEq/L	4.43 mEq/L	4.69 mEq/L
Cl-	106.0 mEq/L	103 mEq/L	105.6 mEq/L

Treatment Plan

I. Dietary Regimen:

The diet plan[5] recommended by Jeena Sikho Lifecare Ltd Hospital, Derabassi emphasizes the following guidelines:

a. Dietary Restrictions:

- Eliminate wheat, processed foods, refined products, dairy products, animal-based items, coffee and tea.
- Avoid consuming food after 8:00 PM.

b. Hydration:

- Drink alkaline water 3-4 times daily.
- Incorporate herbal teas, living water and turmeric-infused water into the routine.
- Drink water only when thirsty, limiting intake to small, regular sips.

c. Millet Inclusion:

- Integrate five types of millet into meals: Foxtail, Barnyard, Little, Kodo and Browntop millet.
- Only use steel utensils for preparing millet dishes.

d. Meal Schedule: Disciplined and Intelligent Diet Plan – DIP[6]:

- Breakfast (9:00-10:00 AM): Include a variety of fruits on Plate 1.
- Lunch (12:30-2:00 PM): Plate 1 consists of steamed vegetables or sprouts; Plate 2 includes a millet-based dish.
- Dinner (6:15-7:30 PM): Same as lunch, but served earlier.

e. Fasting:

- Implement a fasting routine once a week or every 3-4 days.

f. Special Practices:

- Practice gratitude before each meal.
- Sit in Vajrasana for a short period after meals to aid digestion.

g. Dietary Variety:

- The diet features a range of solid, semi-solid and smoothie options with no added salt.
- Suggested foods include herbal tea, red juice, fresh fruits, fermented millet beverages, steamed sprouts, soaked almonds and a variety of salads.

II. Lifestyle Recommendations:

- **Sungazing:** Spend at least 30 minutes each day absorbing sunlight, preferably during early morning hours, to harness the benefits of natural vitamin D and promote overall well-being.
- **Yoga Practice:** Engage in a daily yoga routine from 6:00 to 7:00 AM, focusing on postures that promote flexibility, strength and mental clarity.
- **Meditation:** Incorporate meditation into your routine to reduce stress, enhance relaxation and foster mental balance and mindfulness.
- **Barefoot Walking:** Walk briskly for 30 minutes each day, ideally barefoot on natural surfaces like grass, to improve circulation, grounding and connection to nature.
- **Sleep:** Aim to achieve 6-8 hours of uninterrupted, restful sleep each night to support physical and mental rejuvenation.
- **Daily Routine (Dincharya):** Follow a consistent daily regimen that aligns with natural rhythms, ensuring balance in activities, meals, rest and exercise for holistic health.

III.Panchakarma Procedures:

a. Awagaha Swedana

Procedure:

- The patient is immersed in a tub of warm water infused with therapeutic herbs.

- The water temperature is maintained at 42°C to promote sweating.
- The procedure lasts for approximately 30 minutes under close supervision.

Physiology:

- The warm water induces vasodilation, enhancing blood circulation to the skin.
- Sweating facilitates the removal of metabolic waste products and toxins from the body.
- The medicinal properties of the herbs are absorbed through the skin, promoting overall health.

Mode of Action:

- Immersion in water at 42°C increases body temperature, triggering vasodilation and activating the sympathetic nervous system. This stimulates the release of epinephrine, norepinephrine, and thyroid hormones, enhancing metabolic rate and promoting fat breakdown (lipolysis). The process also aids in the elimination of waste products, including urea, creatinine, ammonia and uric acid, through sweat, supporting detoxification and overall metabolic health.

As per Acharya Charak's description in Cha. Siddhi Sthana 1/8, Awagaha Sweda, a type of Sagni Sweda therapy, helps liquify and mobilize Doshas lodged within the body's microchannels i.e. srotas.**7**

b. Guduchyadi Siddha Sneha Matra Basti

Procedure:

- Warm medicated 90 ml of oil (Guduchyadi Siddha Sneha) is administered rectally while the patient is positioned comfortably.
- The oil is retained for a prescribed duration to maximize therapeutic effects.

Physiology & Mode of Action: The medicated oil is absorbed through the rectal mucosa, promoting lubrication of the intestines and facilitating smoother bowel movements. Matra Basti helps to balance *Vata dosha*, enhancing the natural expulsion of flatus, faeces and urine, while improving overall *Vata* functions.**8**The medicated oil circulates throughout the body, calming aggravated *Vata* and providing both local and systemic relief.

Benefits of Guduchyadi:

- **Guduchi:** Known for its potent immune-modulating, anti-inflammatory and rejuvenating properties, it supports detoxification, enhances metabolism and promotes overall balance of the *Tridosha*.**9**
- **Other Herbs in the Formulation:** Complementing Guduchi, the formulation works to reduce inflammation, improve kidney function, and aid in managing water retention, while also supporting detoxification and overall well-being.

c. Shiroabhyangamm and Shiropichu with Brahmi Oil (Head Massage and Oil Application)

Procedure:

- Warm Brahmi oil is massaged onto the scalp and neck for 20-30 minutes as part of Shiroabhyangam.**10**
- In Shiropichu, a cloth or cotton pad soaked in Brahmi oil is placed on the crown of the head and retained for an extended period to ensure deeper absorption of the oil.**11**

Physiology & Mode of Action: Both Shiroabhyangam and Shiropichu stimulate circulation and lymphatic drainage in the scalp and neck region, enhancing the movement of lymphatic fluids and increasing plasma tryptophan levels. This stimulates the pineal gland, resulting in the secretion of melatonin and serotonin, which help regulate sleep, mood and relaxation. The prolonged contact of Brahmi oil in Shiropichu allows for sustained nourishment and calming of the nervous system.

Benefits of Brahmi Oil:

- Brahmi oil is renowned for its calming and neuroprotective properties, supporting cognitive function, alleviating stress and enhancing sleep quality. It also nourishes the scalp, promoting healthy hair growth and reducing hair fall.

d.Leech Therapy at Right Foot

Procedure:

- Applied to the right foot for 2 days. Sterile leeches were placed on the cleaned area to draw blood for about 30-45 minutes before detaching naturally. The site was disinfected and dressed post-procedure.

Mode of Action:

- Leech saliva contains anticoagulants (hirudin),

enzymes and vasodilators, improving blood flow, reducing inflammation and aiding in the removal of toxins.**12**

Benefits:

- Enhances circulation, reduces swelling and inflammation, relieves pain and promotes wound healing.

e.Snehan with Marichyadi and Mahanarayan Taila (Alternating Days) with Sarvanga Sweda

Procedure:

- **Snehan (Oleation):** The patient was administered external oleation therapy (Snehan) using **Marichyadi Taila** and **Mahanarayan Taila** on alternate days. These medicated oils were applied to the entire body (Sarvanga) to induce deep penetration into the tissues.
- The oils were gently massaged in circular and long strokes, following the direction of muscle fibres. The application lasted for about 30-40 minutes, ensuring that the oils were absorbed through the skin.
- After the Snehan, **Sarvanga Swedan** (full-body steam therapy) was administered, where the patient was exposed to steam from herbal decoctions, further aiding in the absorption of the medicated oils and promoting sweating.

Physiology & Mode of Action:

- **Marichyadi Taila** is a warming oil with anti-inflammatory, analgesic and stimulating properties. It improves circulation, reduces stiffness and alleviates pain in the joints and muscles.**13**
- **Mahanarayan Taila** is a classical oil used for its Vata-pacifying properties. It provides nourishment to the muscles, bones and joints, helping to reduce pain and inflammation while improving mobility.**14**
- **Sarvanga Sweda** (steam therapy) enhances the absorption of the oils, opens up the skin pores, and promotes sweating, which helps in the detoxification process. It also aids in relieving muscle stiffness and joint pain, reducing Vata and Kapha dosha imbalances.**15**

Benefits:

- **Relieves Muscular Pain and Stiffness:** The combination of oil application and steam therapy soothes inflamed muscles and joints, reduces pain and improves flexibility.
- **Enhances Detoxification:** Sweating induced by Sweda therapy helps remove toxins and metabolic wastes from the body.
- **Improves Circulation:** Both the massage and steam promote better blood circulation, ensuring proper nourishment of tissues.
- **Pacifies Vata and Kapha Doshas:** This treatment is highly effective in balancing aggravated Vata, which is often linked to pain and stiffness, and Kapha, which can cause sluggishness and fluid retention.

IV. Medicinal Intervention

The medications provided to the patient during hospitalization and at the time of dischargeare outlined in Table 4.

Table 4: Medications Administered During Hospitalization and at Discharge

Medicine	Dosage	Duration
Medicine during patient's hospitalization		
Chitrakadi Vati	2 Tab. BD Adhobhakta with koshna jala	25/04/24 – 03/05/24
Arogya Vati	2 Tab. BD Adhobhakta with koshna jala	25/04/24 – 03/05/24
Sanjeevani Cap.	2 Cap. BD Adhobhakta with koshna jala	25/04/24 – 03/05/24
GFR powder	half Tsf BD Adhobhakta with koshna jala	25/04/24 – 03/05/24
Kidney Care Syp.	20 ml BD Adhobhakta kala with samamatra koshna jala	25/04/24 – 03/05/24
Medicine given on discharge		
GFR powder	1 Tsf BD Adhobhakta with koshna jala	1 month
Chander Vati	2 Tab. BD Adhobhakta with koshna jala	1 month
DS powder	Half Tsf HS Nisha kala with koshna jala	1 month
Arogya Vati	2 Tab. BD Adhobhakta with koshna jala	1 month
CKD Syp	20 ml BD Adhobhakta with samamatra koshna jala	1 month

RESULTS

The patient, a 57-year-old male diagnosed with stage V Chronic Kidney Disease (CKD), underwent a comprehensive Ayurvedic treatment regimen, including Panchakarma therapy, dietary modifications and lifestyle changes. Significant clinical improvements were observed following the initiation of treatment on April 24, 2024.

Laboratory investigations conducted at various intervals during treatment revealed a marked reduction in key renal function parameters as shown in Table 5. The results are summarized as follows:

Table 5: Laboratory Investigations and Results in Key Renal Function Parameters

Parameter	Initial Value (24/04/2024)	Follow-Up Value (27/04/2024)	Follow-Up Value (03/05/2024)
Blood Urea	135.93 mg/dl	106.77 mg/dl	89.74 mg/dl
Serum Creatinine	7.57 mg/dl	6.43 mg/dl	5.72 mg/dl

The patient reported significant alleviation of symptoms, including reduced vomiting, improved appetite, enhanced urine output and relief from constipation and disturbed sleep as shown in Table 6. The quality of life improved markedly, as evidenced by the patient's subjective feedback and clinical observations.

The patient was discharged on May 3, 2024, demonstrating substantial clinical improvement and a positive response to the integrative Ayurvedic approach.

Table 6. Symptoms Observed Before and After Treatment

Symptoms at the time of Admission (24/04/24)	After Treatment on 03/05/24
Loss of Appetite	Appetite improved
Disturbed sleep (4/10)	Sound sleep (9/10)
Recurrent vomiting	Better, no vomiting
Constipation	Clear
Itching over Right foot (4/10)	Relief now (0/10)
Pedal Oedema 20	No oedema
Decreased Urine Output	Improved urine output

DISCUSSION

Chronic Kidney Disease (CKD) is a progressive and debilitating condition characterized by a gradual decline in renal function, often leading to end-stage renal disease (ESRD) if left unmanaged. The global prevalence of CKD is alarmingly high, particularly in populations with a high incidence of diabetes and hypertension, which are the primary risk factors contributing to its pathogenesis. The multifactorial nature of CKD necessitates a comprehensive approach to management that addresses not only the physiological aspects of the disease but also the underlying lifestyle and dietary factors that exacerbate its progression.

The Ayurvedic perspective on CKD categorizes it under the framework of Madhyama rogamarga vyadhi, which is associated with the accumulation of *kleda* (excessive bodily fluids) and imbalances in the body's doshas. In Ayurveda, the kidneys are correlated with the concept of Vrikka, which emphasizes the importance of maintaining balance among the body's dhatus (tissues) to prevent disease. This holistic approach is particularly relevant in the context of CKD, where conventional treatments such as dialysis and renal replacement therapy may not be accessible to all patients, especially in low and middle-income countries.

The Panchakarma procedure, a cornerstone of Ayurvedic treatment, plays a crucial role in the management of CKD. This detoxification and rejuvenation therapy aims to eliminate accumulated toxins (ama) from the body, restore dosha balance and enhance overall health. In this case, the patient underwent a comprehensive Panchakarma regimen that included Awagaha Swedana (herbal steam therapy), Guduchyadi Siddha Sneha Basti (medicated oil enema), Shiropichu (oil application on the head), Shiroabhyangam (head massage), Leech Therapy and Sarvang Swedana (full-body steam therapy). Each of these modalities contributes to the therapeutic goals of reducing inflammation, improving circulation and promoting renal function.

Awagaha Swedana: This procedure helps in the relaxation of muscles and alleviation of stress, which can be beneficial for patients experiencing discomfort due to CKD. The herbal steam aids in the elimination of toxins through the skin, thereby supporting renal function.**16**

Guduchyadi Siddha Sneha Basti: The use of medicated oils in enemas is particularly effective in balancing the vata dosha, which is often aggravated in CKD patients. This therapy enhances the absorption of nutrients and promotes detoxification.

Shiropichu and Shiroabhyangam: These therapies focus on the head and neck region, promoting relaxation and mental clarity, which can be beneficial for patients dealing with the psychological stress associated with chronic illness.

Leech Therapy: This innovative approach is utilized to improve blood circulation and reduce swelling, which can be particularly advantageous for patients with edema, a common symptom of CKD.

Sarvang Swedana: Full-body steam therapy aids in the detoxification process and enhances metabolic functions, contributing to the overall improvement of the patient's health status.**17**

In conjunction with Panchakarma, the patient adhered to a meticulously designed dietary regimen that emphasized the elimination of processed foods, dairy, and animal-based products, while incorporating alkaline water, herbal tea and various types of millet. This dietary approach aligns

with Ayurvedic principles, promoting the consumption of wholesome, natural foods that support kidney health and overall well-being.

The Ayurvedic medicines administered during the treatment were selected based on their properties to enhance renal function, reduce inflammation and support the body's natural detoxification processes. The integration of these therapies not only addressed the physical symptoms of CKD but also promoted a holistic improvement in the patient's quality of life.

Chitrakadi Vati is an Ayurvedic formulation beneficial in managing CKD by supporting digestion, enhancing metabolism and promoting detoxification.**18** Ingredients like Chitraka and Pippali reduce Ama (toxins), while Yava Kshar and various salts help maintain electrolyte balance and assist in waste elimination. Hingu and Ajmoda alleviate gas and bloating, reducing toxin buildup and Shunthi and Marich provide anti-inflammatory effects. Together, these components support kidney health by easing metabolic load, aiding in detoxification and enhancing overall vitality.

Aarogya vaticontainsTrikatu, Triphala, Nagarmotha, Vaya Vidanga, Choti Elaichi and other herbs.**19** It is an Ayurvedic preparation that promotes general health and vitality, especially beneficial for individuals with Chronic Kidney Disease (CKD). It commonly includes components such as Trikatu and Triphala, which aid in enhancing digestion, stimulating metabolism and facilitating detoxification. By reducing fatigue and uplifting energy levels, Arogya Vati significantly supports kidney function and overall wellness in CKD patients.

Sanjeevani Capsule is formulated to aid kidney function in chronic kidney disease (CKD) through a combination of Ayurvedic herbs with detoxifying, anti-inflammatory and diuretic properties. Sanjeevani Vati**20** is traditionally known for its potent ability to balance doshas and support metabolic health, which can help reduce stress on the kidneys. Bhumiamla (Phyllanthus niruri) is a known hepatoprotective and renal-supportive herb, which protects kidney tissues and aids in detoxification. Ajwain (Carom seeds) contributes by improving digestion and reducing toxin buildup. Together, these ingredients work synergistically to support kidney health, reduce inflammation and enhance the body's natural detoxification processes in CKD management.

Chander Vati is an Ayurvedic preparation blending powerful herbs to promote kidney health, especially useful for managing Chronic Kidney Disease (CKD). Primary ingredients such as Kapoor Kachri and Vacha aid in relieving urinary tract discomfort and encourage smooth urine flow, while anti-inflammatory agents like Giloya and Motha help reduce inflammation and strengthen immunity.**21** Chander Vati also supports detoxification and boosts energy levels, making it particularly helpful for CKD patients dealing with fatigue. By fostering healthy urinary function and aiding in detoxification, Chander Vati acts as a supportive supplement in the holistic care of CKD, enhancing patients' overall well-being.

GFR Powder is an Ayurvedic blend crafted to support kidney health in Chronic Kidney Disease (CKD). Its core ingredients, including Bhoomi Amla, Haritaki and Punarnava, offer restorative and detoxifying effects. Bhoomi Amla helps safeguard kidney tissues, Haritaki promotes digestive health, and Punarnava functions as a diuretic to alleviate fluid buildup.**22** Collectively, these herbs work to minimize inflammation and boost overall vitality, establishing GFR Powder as a beneficial addition in the comprehensive management of CKD.

Kidney Care BLK combines Punarnavarishta, Chandanasava, Ushirasava and Gokshuradi Kadha to support kidney health in CKD. It promotes detoxification, reduces inflammation, and improves urinary function. The diuretic properties of these herbs help eliminate excess fluids, improve renal blood flow and enhance overall kidney function.

Divya Shakti Powder is a carefully crafted Ayurvedic blend with herbs that support kidney health and function, particularly beneficial in managing Chronic Kidney Disease (CKD). Key ingredients like Nagarmotha and Vaya Vidang have diuretic properties, helping to eliminate toxins and reduce fluid retention. Herbs like Chhoti Elaichi, Jeera and Dhanyaka support digestion and reduce inflammation, which can indirectly benefit kidney function by easing metabolic load. Additionally, Nagakesar and Nishotha aid in detoxification and have anti-inflammatory effects, while Pushkarmoola and Vacha help regulate circulation and manage symptoms of CKD, such as fatigue and poor digestion. Together, these ingredients provide a holistic approach to managing CKD by enhancing detoxification, digestion and renal health.

CKD Syrup is an Ayurvedic formulation designed to support kidney health in Chronic Kidney Disease (CKD) patients by promoting detoxification, balancing fluids and enhancing immunity. Kasani (chicory) helps to improve liver and kidney function, aiding in the removal of toxins. Gokshura acts as a natural diuretic, promoting urine flow and reducing fluid retention.**23** Shatavari supports the body's resistance to stress, while Giloya boosts immunity and reduces inflammation, both of which are crucial for CKD patients. Sorbitol aids in digestion, helping to reduce the metabolic load on the kidneys. Shudh Shilajita provides minerals and boosts vitality, helping to improve overall energy levels. Together, these ingredients offer a holistic approach to managing CKD by promoting detoxification, reducing inflammation and supporting renal function.

In summary, this case underscores the potential of an integrative Ayurvedic approach in managing CKD, particularly in patients who may not have access to conventional treatments. The positive clinical outcomes observed in this patient highlight the need for further research into the efficacy of Ayurvedic interventions in CKD

management, as well as the importance of a multidisciplinary approach that combines traditional and modern medical practices to optimize patient care.

CONCLUSION

This case study highlights the promising potential of Ayurvedic interventions, particularly Panchakarma therapy, in the management of Chronic Kidney Disease (CKD) stage V. The significant clinical improvements observed in the patient, including symptomatic relief from recurrent vomiting, loss of appetite, disturbed sleep and constipation, underscore the efficacy of a holistic approach that integrates traditional Ayurvedic practices with modern medical understanding.

Investigation-wise, the patient demonstrated notable improvements in key renal function parameters, with reductions in serum urea and creatinine levels from 135.93 mg/dl to 89.74 mg/dl and from 7.57 mg/dl to 5.72 mg/dl, respectively, over the course of treatment. These findings indicate a positive response to the Ayurvedic management plan, suggesting enhanced renal function and overall metabolic health.

As CKD continues to pose a substantial global health challenge, particularly in resource-limited settings, the findings from this case advocate for the exploration and validation of alternative treatment modalities. The Ayurvedic framework, with its emphasis on restoring balance within the body and addressing the root causes of disease, offers a complementary strategy that may enhance patient outcomes and quality of life.

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