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RESEARCH ARTICLE

COMPREHENSIVE MANAGEMENT OF CHRONIC KIDNEY DISEASE: A HOLISTIC APPROACH INTEGRATING LIFESTYLE MODIFICATIONS AND *AYURVEDIC* PRINCIPLES: A CASE REPORT

Acharya Manish [1], Richa[2], Rachna[3], Tanu Rani[4] and Renu Bhardwaj[5]

1. Director, Meditation Guru, Jeena Sikho Lifecare Limited, India.
2. Senior Research officer, BAMS, PGDIP, CICR, CAIM, CMW, Jeena Sikho Lifecare Limited, India.
3. Consultant, BAMS, Jeena Sikho Lifecare LimitedClinic, Baltana,Punjab, India.
4. Research Associate, BAMS, Jeena Sikho Lifecare Limited, India.
5. Research Associate, MSc Horticulture, Jeena Sikho Lifecare Limited, India.

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Abstract

In *Ayurveda*, CKD can be correlated with conditions such as *Mutrakrichchhra, Mutraghata*, and *Prameha-janya Vrikka Vikara,* where vitiation of *Vata* and *Kapha Dosha*, impairment of *Agni,* accumulation of *Ama,* and obstruction of *Mutravaha Srotas* lead to progressive deterioration of renal structure and function.The present case report describes the clinical outcome of an integrated *Ayurvedic* management approach in a 39-year-old male with CKD for 8 years, hypertension for 8 years, and type 2 diabetes mellitus for 10 years, who presented to Jeena Sikho Lifecare Clinic, Baltana, Zirakpur, Punjab, in July 2024. The patient exhibited multiple systemic complaints including generalized weakness (*Daurbalya*), gastric disturbances (*Amlapitta),* fever *(Jvara),* frothy urine *(Phenila Mutratā),* headache (*Shirashoola*), vomiting(*Chhardi*), and throat infection *(Kanthashotha)*, indicating multisystem involvement and *Mutravaha Srotas* dysfunction. The patient was managed with an integrated *Ayurvedic* protocol consisting of dietary and lifestyle modifications along with *Panchakarma* therapies along with supportive *Ayurvedic* medications. Post-treatment evaluation revealed marked clinical improvement, with complete resolution of major symptoms and significant relief in associated complaints. Biochemical parameters showed substantial improvement, with blood urea levels reduced from 164.78 mg/dl to 76.60 mg/dl and serum creatinine from 7.60 mg/dl to 5.50 mg/dl, indicating supportive enhancement in renal function. This case suggests that integrated *Ayurvedic* interventions, including *Panchakarma*, may play a supportive role in improving clinical symptoms and renal biochemical parameters in CKD patients.

Corresponding Author:- Richa
Address:-Senior Research officer, BAMS, PGDIP, CICR, CAIM, CMW, Jeena Sikho Lifecare Limited, India.

Introduction:-

Chronic Kidney Disease (CKD) is a major global public health problem that has gained increasing attention due to its rising prevalence, progressive nature, associated systemic complications, and significant impact on quality of life. CKD is defined as a structural or functional abnormality of the kidneys lasting for more than three months, with or without decreased glomerular filtration rate (GFR), manifested by pathological abnormalities, markers of kidney damage such as proteinuria, or imaging abnormalities.[1] A progressive decline in GFR ultimately leads to end-stage renal disease (ESRD), which requires renal replacement therapy (RRT) in the form of dialysis or kidney transplantation for survival. According to global epidemiological studies, CKD affects approximately 10–13% of the adult population worldwide, making it one of the most common chronic diseases.[2] The increasing burden of diabetes mellitus, hypertension, obesity, aging populations, and lifestyle-related disorders has contributed significantly to the rising incidence of CKD. The World Health Organization (WHO) and other international health agencies have recognized CKD as a major non-communicable disease due to its association with cardiovascular morbidity, increased mortality, disability, and high healthcare expenditures.[3] In developing countries like India, the prevalence of CKD is rising rapidly due to epidemiological transition, urbanization, and lifestyle changes. Limited awareness, late diagnosis, and inadequate access to specialized healthcare further worsen disease outcomes.

CKD is often asymptomatic in its early stages, and many patients remain undiagnosed until significant kidney damage has occurred. As renal function deteriorates, patients may experience symptoms such as fatigue, edema, shortness of breath, nocturia, pruritus, nausea, vomiting, and cognitive impairment.[4] Progressive CKD can lead to anemia, mineral and bone disorders, cardiovascular complications, electrolyte imbalance, and ultimately ESRD. Conventional management of CKD includes blood pressure control, glycemic management, dietary protein restriction, and pharmacological interventions aimed at slowing disease progression. However, these approaches are often associated with side effects, high costs, and limited efficacy in advanced stages, prompting interest in complementary and integrative therapeutic systems such as *Ayurveda*.[5]*Ayurveda* is a traditional system of medicine that originated in India more than 5,000 years ago and is widely practiced across South Asia and globally. *Ayurveda* is based on the holistic concept of maintaining balance among the three fundamental bio-energies or *Doshas—Vata, Pitta,* and *Kapha*—to sustain health and prevent disease. It emphasizes individualized treatment based on *Prakriti* (constitution), *Vikriti* (disease state), *Agni* (digestive fire), *Dhatu* (tissues), and *Srotas* (body channels).[6] Unlike conventional medicine, which often focuses on symptom suppression, *Ayurveda* aims to correct the root cause of disease through dietary regulation (*Ahara)*, lifestyle modifications *(Vihara),* herbal formulations *(Aushadha),* detoxification therapies (*Panchakarma*), and mental and spiritual practices.[7]

In *Ayurvedic* literature, there is no direct term corresponding to CKD; however, renal disorders are described under conditions such as *Mutravaha Srotas Vikara, Mutrakrichra, Mutraghata, Ashmari,* and *Prameha*-related complications.[8] The kidneys (*Vrikka*) are considered vital organs associated with *Meda* and *Rakta Dhatus*, and their functional integrity is essential for maintaining systemic homeostasis. Impairment of *Vrikka* function is believed to occur due to *Dosha* imbalance, *Agni* dysfunction, accumulation of *Ama* (metabolic toxins), and obstruction of *Srotas*, leading to impaired urine formation and excretion.[9] In *Ayurveda*, kidney function is closely associated with *Apana Vata,* a subtype of *Vata Dosha* responsible for excretory functions including urination, defecation, and reproduction. Disturbance of *Apana Vata* leads to abnormalities in urinary output and contributes to renal pathology.[10]*Kapha Dosha* is associated with structural integrity and fluid balance, while *Pitta* is responsible for metabolic and excretory processes. The imbalance of these *Doshas*, particularly *Vata* and *Kapha*, plays a crucial role in the pathogenesis of renal disorders.[11]*Ayurvedic* management of CKD focuses on restoring *Dosha* balance, improving *Agni*, eliminating *Ama*, clearing *Srotas* obstruction, and strengthening renal tissues. Dietary and lifestyle interventions are considered fundamental in preventing disease progression.

Patients are advised to consume light, easily digestible, and *Vata*-pacifying foods while avoiding heavy, oily, processed, and incompatible foods. Lifestyle modifications such as yoga, meditation, pranayama, and adequate sleep are recommended to reduce stress and maintain systemic balance.[12]*Ayurvedic* medicines play a significant role in *Ayurvedic* nephroprotective therapy. Several medicinal plants have been traditionally used to support kidney health and treat urinary disorders. *Punarnava (Boerhavia diffusa)* is widely recognized for its diuretic, anti-inflammatory, and nephroprotective properties. It is commonly used in conditions associated with edema and renal dysfunction. *Gokshura (Tribulus terrestris) i*s known for its *Mutrala (*diuretic) and *Balya* (strengthening) properties and is used in urinary tract disorders and kidney stones.[13] *Shatavari* (*Asparagus racemosus)* is considered a *Rasayana* (rejuvenative) herb that supports tissue nourishment and enhances immunity. Other herbs such as *Varuna (Crataeva nurvala), Chandraprabha*, and *Dashamoola* formulations are also used in renal disorders.[14]

Samprapti Ghatka* of *Vrikka vikara[15]

***Dosha* (Functional Principles):**

- Predominant *Kapha* and *Pitta* involvement initially causing obstruction (*Srotorodha*).
- Secondary *Vata* aggravation occurs due to tissue depletion (*Dhatu Kshaya*).

***Dushya* (Affected Tissues):**

- *Rakta* (blood), *Meda* (adipose tissue), *Majja* (bone marrow and nerve tissue), and *Mutra* (urinary system).

***Adhisthana (*Site of Pathology):**

- *Vrikk (Kidney)*, *Basti (Urinary bladder)*, *Mutravaha Srotas* (urinary channels), and *Raktavaha Srotas* (blood channels).

***Samprapti* (Pathogenesis):**

- Faulty diet (*Ahara*) and lifestyle (*Vihara*) lead to weakened digestive fire (*Mandagni*).
- Formation of toxins (*Ama*) and aggravation of *Kapha* cause obstruction (*Srotorodha*) in *Mutravaha* and *Raktavaha Srotas.*
- *Vata* aggravation due to tissue depletion (*Dhatu Kshaya*) leads to degeneration of renal and urinary tissues (*Basti-Kshaya Avastha*).

***Srotas (*Channels Involved):**

- *Mutravaha Srotas* (urinary channels), *Raktavaha Srotas* (blood channels), and systemic *Pranavaha Srotas* (affected due to hypertension).

***Purvarupa (*Early/Prodromal Symptoms):**

- Fatigue, mild edema, pallor, anorexia, mild dyspnoea, and dizziness (*Shirashoola*, *Bhrama*).

***Rupa* (Clinical Manifestations):**

- Oliguria (*Mutraalpata*), pedal edema (*Shotha*), generalized weakness (*Daurbalya*), anorexia (*Aruchi*), nausea (*Mūrchā*), itching (*Kandu*), dyspnoea (*Shwasa*), palpitations (*Hridaya Spandana*), and signs of hypertension (*Uccha Raktachapa*).

Case Report:-

A 39-year-old male with a known case of CKD for 8 Years, hypertension for 8 years, and Type 2 Diabetes Mellitus (T2DM) for 10 years, visited Jeena Sikho Lifecare Limited Clinic, Zirakpur, Punjab on 14 July 2024. At that time, the patient was on an insulin mixtard and not taking any hypertensive medicines. The patient suffered from generalized weakness (*Daurbalya*), gastric disturbances such as indigestion and acidity *(Amlapitta),* fever *(Jvara),* frothy urine *(Phenila Mutratā),* headache *(Shirashoola),* vomiting (*Chhardi*), and throat infection with irritation and inflammation *(Kanthashotha).*The patient was admitted to the IPD for treatment from 14/07/2024 to 19/07/2024.

Table 1: Vitals during the initial examination on the first day of the visit

Parameters	**Findings**
Blood Pressure	140/80 mmHg
Pulse Rate	88/min
Random Blood Sugar (RBS)	137 mg/dl
Weight	79.5kg

Table 2: *Ashtavidha Pariksha* on the first-day visit of the patient

Parameters	Findings
***Nadi* (Pulse)**	*Vatapittaj*
***Mala* (Stool)**	*Abadha* (Normal)
***Mutra* (Urine)**	*Phenila*(Frothy urine)
***Jiwha*(Tongue)**	*Saam* (Coated)
***Shabda* (Speech)**	*Spashta* (Clear)
***Sparsha* (Touch)**	*Anushna Sheeta* (Moderate temperature)
***Drika* (Eyesight)**	*Avikrit* (Normal)
***Akriti* (Appearance)**	*Madhyam* (Moderate)

Interventions:-

Ahara Krama[16]**:** The dietary guidelines provided by Jeena Sikho Lifecare Limited Clinic included the following:

Do's and Don'ts:

1. Avoid eating after 8 PM.
2. Take a small bite of solid food and chew it 32 times to aid proper digestion and nutrient absorption.
3. Do not consume wheat, refined food, milk, milk products, coffee, tea, and packed food.

***Jala Sevan* (Water intake):**

1. Take small sips of water.
2. Drink about 250ml of alkaline water 3 to 4 times a day.
3. Consume Herbal tea 300ml twice daily. To prepare 300 ml of Herbal tea, combine 2 cloves *(Trifolium pratense),* 2 cardamom pods, 10 black pepper seeds *(Piper nigrum),* 5 gm cinnamon sticks *(Cinnamomum verum),* and a half tea spoon of fennel *seeds (Foeniculum vulgare)* with hot water.
4. Drink Red juice made up Beetroot, Pomegranate and Carrot (100-150 ml).
5. Green juice composed of *Neem (Azadirachta indica),Tulsi (Ocimum tenuiflorum),Paan(Piper betle),Karela (Momordica charantia),Jamun(Syzygium cumini),Sadabahar (Vinca rosea)* taken in quantities of 10 gm each, 200 ml water added, ground in a mixer grinder, filtered, and consumed in a quantity of (100-150 ml).
6. Living water: The approach involves a three-tiered filtration system using clay pots, each serving a specific purpose to purify and energize the water: Top Pot: Fill this pot with a mixture of small and large river stones, followed by charcoal made from burning wood. This layer acts as an initial filter, removing larger impurities. Middle Pot: Place a similar mix of stones here. Additionally, add *Moringa* seed powder (also known as drumstick or "*Sahjan"* powder), a silver vessel, a copper vessel, and *Rudraksha(Elaeocarpus angustififolium)*. *Moringa* seeds are known for their natural water-purifying properties, while silver and copper are believed to enhance the quality of water. Bottom Pot: This pot remains unaltered and serves as the collection chamber for the purified water. Advised to drink as per the need.
7. Boil 2 liters of water to reduce it to 1 liter and consume.

Aim to drink 1 liter of alkaline water daily (Procedure as follow):

1. Setup the Glass Jug: Fill a clean jug with fresh drinking water.
2. Add Copper Vessel: Place a copper vessel or glass inside the jug.
3. Infuse Flavors: Add slices of carrot, cucumber, and lemon to the water.
4. Add Herbs: Include ginger slices, mint leaves, and coriander leaves.
5. Optional Spice: Add a slice of green chili for added flavor.
6. Let it Sit: Allow the mixture to sit for 12 hours.
7. Add *Amalaki (Emblica officinalis)* and Basil *(Ocimum tenuiflorum):* After 6 hours, add 3–4 pieces of *Amalaki* and a handful of Basil leaves. Let it infuse for 6 hours.
8. Ready to Drink: 3 to 4 times a day in divided portions

***Shooka Dhanya Sevan*:**

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

***Ayurvedic* and Disciplined & intelligent Person's diet (DIP) includes:**

Time	Meal	Items Included
5:45 AM	Early Morning	Herbal tea, curry leaves (1 leaf per minute, up to 5 leaves), raw ginger, turmeric
9:00 – 10:00 AM	Breakfast	Steamed seasonal fruits (weight × 10 grams), *mugda yusha*, fermented millet shake (4–5 types)
11:00 AM	Morning Snack	Red juice (150 ml), ingredients include Carrot (*Daucus carota),* Beetroot (*Beta vulgaris)*
12:30 – 2:00 PM	Lunch	Plate 1: Steamed salad (weight × 5 grams) Plate 2: Millet recipe
4:00 – 4:20 PM	Evening Snack	Green juice (100–150 ml), ingredients include Coriander leaves (*Coriandrum sativum),* Mint leaves (*Mentha spicata*), Spinach leaves (*Spinacia oleracea),* Curry leaves (*Murraya koenigii), Tulsi* leaves (*Ocimum tenuiflorum)*
6:15 – 7:30 PM	Dinner	Plate 1: Steamed salad (weight × 5 grams), chutney, soup Plate 2: Millet khichdi

Fasting:
1. One-day fasting per week.

Special Instructions:
1. Express gratitude to the divine before consuming food or drinks.
2. Sit in *Vajrasan* (a yoga posture) after each meal.
3. 10-minute slow walk after every meal.

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

Lifestyle Recommendations:-
(i) Include *Dhyana* (meditation) for relaxation.
(ii) Engage in *Yoga* (*Sukhasana* and *Sukshma pranayama*) from 6:00 AM to 7:00 AM.
(iii) Practice barefoot brisk walk for 30 minutes.
(iv) Ensure 6-8 hours of quality sleep each night.
(v) Adhere to a structured daily routine.

***Panchkarma* procedures were administered to patients:-**
***Avagha Swedana* [17]:-**
Procedure: The patient was immersed up to the navel in a tub of warm water. Sweating was encouraged by maintaining the water temperature at 42˚C.The procedure was recommended to be followed for 40 minutes.

***GokshurPunarnava Siddha Sneha Basti* (90ml)[18]:-**
Procedure: 90ml of this *Gokshur punarnava* oil was inserted with the patient laying in the left lateral Position. The *Gokshur* and *PunarnavaSiddhaSneha* were gently introduced into the rectum using an enema tube. The patient usually does this *sneha basti* for 8-12 hours.

***Kashaya Basti* with *Punarnava* and *Gokshur*[19]:-**
Procedure: The roots of *Gokshur (Tribulus terrestris)* and *Punarnava (Boerhavia diffusa),* were taken in quantity of 50gm each and 20 gms of *fennel (Foeniculum vulgare)Kalka* boiled with 1600 ml of water, reduced to 400ml, and filtered. Rock salt :10gm was mixed with Honey: 40 ml, & stirred hard till frothing. 30 ml of *Ksheerbala Taila* was taken and the mixture of Honey and Rock salt mixed with The decoction of *Gokshur* and *Punarnava*, totaling a volume of 480 ml. The patient was positioned on his left side with his right knee flexed to his abdominal wall and the left knee fully extended. The enema apparatus was sterilized; the enema tube was lubricated for easy administration. The lukewarm *Gokshur* and *PunarnavaNiruha Basti* (480 ml) was gently introduced into the rectum using the enema tube. The patient was asked to retain the liquid as long as comfortably possible.

***Shirodhara*with *Ksheerabala*oil [20] :-**
Procedure: The procedure began with the patient lying in a supine position, followed by the continuous pouring of warm *Ksheerabala* oil over the forehead from a *Shirodhara* pot from a height of 6 inches. The oil flowed in a rhythmic stream over the *Ajna* (third eye) *chakra* for 45 minutes. This procedure was administered on alternate days, using 1 litre of oil maintained at 40°C.

***Shiropichu* with *Brahmi Tail*[21] :-**
Procedure: Warm *Brahmi Tail* was massaged on the scalp and neck for 20–30 minutes, a cloth pad soaked in this warm oil was placed on the forehead, covering the *Ajna Chakra* and crown, left in place for 20 minutes. The cloth was removed, & the patient was advised to massage the scalp gently.

***Sarvanga Abhyanga* with *Bala* oil[22] :-**
Procedure: In *Sarvanga Abhyanga* with *Bala* oil, lukewarm oil is applied over the whole body and massaged with gentle, rhythmic strokes from head to toe, paying attention to joints and muscles. The process lasts 30–45 minutes, followed by mild steam therapy *(Swedana)* and a warm bath, leaving the body relaxed, nourished, and rejuvenated.

***Vrikka Basti* with *Punarnava Taila*[23] :-**

Procedure: It was kept at a steady, pleasant temperature. Deep penetration into the underlying tissues was ensured by the oil's retention for 20 to 30 minutes. With the removal of *Tail*, the area was gently massaged to improve blood flow and absorption.

Shaman Chikitsa:-

Based on the clinical evaluation, a detailed and patient-specific medication protocol was devised, as outlined in Table 3.

Table 3: Medicine Name, Ingredients, Therapeutic Effect

Medicine Name	Ingredients	Therapeutic Effects
GFR Powder	***Varun*** *(Crateva nurvala),* ***Punarnava*** *(Boerhavia diffusa),* ***Gokshur*** *(Tribulus terrestris),* ***Kaasni*** *(Cichorium intybus),* ***Bhumi Amla*** *(Phyllanthus niruri),* ***Shirish*** *(Albizia lebbeck),* ***Shigru*** *(Moringa oleifera),* ***Apamarg*** *(Achyranthes aspera)*	Supports *Vrikka Karya* (kidney function) and acts as *Shothahara* (anti-inflammatory), helping alleviate renal symptoms.
Chandervati	***Kapoor Kachri*** *(Hedychium spicatum),* ***Vach*** *(Acorus calamus),***Motha** *(Cyperus rotundus),* ***Giloy*** *(Tinospora cordifolia),* ***Devadaru*** *(Cedrus deodara),* ***Daru Haldi*** *(Curcuma longa), Atees (Aconitum Heterophyllum),***Pippali Mūla***(Piper longum),* ***Amla*** *(Phyllanthus emblica),***Chitrak** *(Plumbago Zeylancia),* ***Dhaniya*** *(Coriandrum sativum),* ***Haritaki*** *(Terminalia chebula),* ***Vayavidang*** *(Embelia ribes),* ***Peepal*** *(Ficus religiosa),* ***Kalimirch*** *(Piper nigrum),* ***Sonth*** *(Zingiber officinale),* ***Gajapippali***(Scindapus Officinalis),***Swarn Makshik Bhasma, Sajjikshar ,Sendha Namak, Kala Namak, Choti Elaichi*** *(Elettaria cardamomum),* ***Dalchini*** *(Cinnamomum verum),* ***Tejpatta*** *(Cinnamomum tamala),* ***Danti*** *(Baliospermum montanum),***Nisoth** *(Operculina turpethum),* ***Banslochan*** *(Bambusa arundinacea),* ***Loh bhasma, Shilajeet*** *(Asphaltum punjabianum)***, Guggul** *(Commiphora wightii)*	Helps relieve *Mutravaha Srotas Vikara* (urinary tract symptoms) and supports *Mutra Pravartana* (healthy urine flow).

Divya Shakti Powder	***Trikatu*** *(Piper nigrum (Kali Mirch), Piper longum (Pippali), and dried Zingiber officinale (Saunth),* ***Triphala*** *(Haritaki (Terminalia chebula), Bibhitaki, (Terminalia bellirica) and****Bhumi Amalaki****(Phyllanthus niruri),****Nagarmotha*** *(Cyperus rotundus),* ***Vay Vidang*** *(Embelia ribes),* ***Chhoti Elaichi*** *(Elettaria cardamomum),* ***Tej Patta*** *(Cinnamomum tamala),* ***Laung*** *(Syzygium aromaticum),* ***Nisoth*** *(Operculina turpethum),* ***Sendha Namak, Dhaniya*** *(Coriandrum sativum),* ***Pippali Mūla****(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),* ***Sazzikshar, Pushkarmool***	It improves digestive function and metabolism of the body through its *deepan-pachan* properties. Helps in body detoxification via *virechan* (purgation).
Raktchapvati	***Jatamansi*** *(Nardostachys jatamansi),* ***Ajwain Khurasani*** *(Hyoscyamus niger),* ***Sarpgandha*** *(Rauwolf serpentineina),* ***Bhang*** *(Cannabis sativa),* ***Pippali Mool*** *(Piper longum),* ***Moti Pishti*** *(Pearl calcium),* ***Mukta sukti Pisti***	Supports *Hrid Poshana* and enhances *Agni*
I. VISH HAR RAS SYRUP	***Neem*** *(Azadirachta indica),* ***Giloy*** *(Tinospora cordifolia),* ***Kalmegh*** *(Andrographis paniculata),****Papaya*** *(Carica papaya),****Wheatgrass*** *(Triticum aestivum Linn.),* ***Punarnava*** *(Boerhavia diffusa)*	Supports *Shwasa Roga Shamana* (respiratory relief), promotes *Shariri*ka *Shodhana* (natural detoxification), and boosts *Ojas*
Nephron Plus Cap.	***Hazrool yahoo bhasma powder, Chandra Prabha powder, Pashanbheda, Mulakkshar powder, Yavakshar powder, Amalaki Rasayan, powder, Trivikrum Rasa powder, Navasra powder, Nimbu Stava powder, Gokshur****(Tribulus terrestris)****, Shila Pushpa, Black Salt powder, Hing powder.***	Supports *Koshtha Punarjanana*, enhances *Mutra Pravartan*a (urine outflow), and aids in *Mutravaha Srotas*
Dhatuposhak Cap.	***Chuna Shudh, Shankh bhasam, Mukta shukti, Prawal pishti, Kapardika, Loh Bhasam***	*Supports Madhumeha Shamana* and enhances *Ojas*&*Bala*
Arogyavati	***Kajan, Loh Bhasma, Abhrak bhasma, Tamra bhasma, Amalaki, Vibhitika, Haritaki, Chitrak, Katuka, Nimbu Patra***	*Supports Koshtha Punarjanana* acts as a *Rasayana*, and boosts *Ojas*

Renal support syrup	***Gokshur*** *(Tribulus terrestris),* ***Chirayata*** *(Swertia),* ***Harad*** *(Terminalia chebula),* ***Karanja*** *(Milletia pinnata),* ***Ashwagandha*** *(Withania somnifera),* ***Arjuna*** *(Terminalia arjuna),* ***Neem*** *(Azadirachta indica)*	Supports *Vrikka Poshana*, *Basti Shuddhi,* and *Mutravaha Srotas Shamana*
Dr. CKD Tablet	***Pashanbhed*** *(Saxifraga lingulata),* ***Varun*** *(Cartaeva nurvala),* ***Punarnava*** *(Boerhavaia diffusa),* ***Gokshur*** *(Tribulus terrestris),* ***Apamarg*** *(Achyranthes aspera),* ***Harad****(Termenalia chebula),****Chirayata*** *(Swertia chirayita),* ***Kulthi*** *(Dolichos biflorus),* ***Bhumi Amalaki*** *(Phyllanthus niruri),****Guduchi*** *(Tinospora cordifolia),* ***Shitalchini*** *(Piper cubeba),* ***Anantmool*** *(Hemidesmus indicus),* ***Khas*** *(Vetiveria zizaniodes),****Yab Kshar*** *(Hordeum vulgare),* ***Mooli kshar*** *(Raphanus sativus),* ***Kalmi shora****,****Sajjikhar,Shilajeet****,* ***Hajrul Yahud****,****Shwet Parpti***	It Improves Kidney Function *(Vrikka Shuddhi, Mutravaha Srotas Shodhana*)
MutraVardhak Vati	***Gokshur*** *(Tribulus terrestris),* ***Guggul*** *(Commiphora wightii),* ***Sonth*** *(Zingiber officinale),* ***Kalimirch*** *(Piper nigrum),* ***Peepal****(Ficus religiosa),* ***Bibhitaki*** *(Terminalia bellirica),* ***Haritaki*** *(Terminalia chebula),* ***Amalaki*** *(Phyllanthus emblica),* ***Motha*** *(Cyperus rotundus)*	*Mutravaha SrotasVikara Nashak* (helps in relieving disorders of the urinary system such as *Mutrakricha* painful urination and other urinary tract disorders).
Kidney Shuddhi Ark	***Sonth*** *(Zingiber officinale),* ***Kali mirch*** *(Piper nigrum),* ***Pippali*** *(Piper longum),* ***Badi Harad*** *(Terminalia chebula),* ***Baheda*** *(Terminalia bellirica),* ***Amla*** *(Phyllanthus emblica),* ***Nagarmotha*** *(Cyperus scariosus),* ***Varun Chhal*** *(Crataeva nurvula),* ***Gokhru*** *(Tribulus terrestris),* ***Pashanbhed*** *(Saxifraga ligulata),* ***Bhringraj*** *(Eclipta alba),* ***Shodit Guggul*** *(Commiphora wightii),* ***Bhavna Dravya-Gokharu Panchaang*** *(Tribulus terrestris),* ***Excipients- Sodium Methyl Paraben, Sodium Propyl Paraben, Gum Acacia*** *(Acacia arabica)*	Boosts *Ojas* and supports *Swasthya Poshana*
CKD syrup	***Kasani*** *(Cichorium intybus),* ***Gokhru*** *(Tribulus Terrestris),* ***Shatavari*** *(Asparagus racemosus),* ***Giloy*** *(Tinospora cordifolia,* ***Sorbitol,Shilajeet*** *(Asphaltum punjabicum)*	Supports *Vrikka Vikar Shamana* and *Mutravaha Srotas* Shuddhi

Dr. Immune Tablet	***Kesar*** *(Crocus sativus),* ***Shudh Kuchla*** *(Strychnos Nuxvomica),* ***Ashwagandha*** *(Withania somnifera),* ***Shatavari*** *(Asparagus racemosus),* ***Pippali*** *(Piper longum),* ***Tulsi*** *(Ocimum tenuiflorum),* ***Laung*** *(Syzygium aromaticum),* ***Choti Elaichi*** *(Elettaria cardamomum),* ***Sonth*** *(Zingiber officinale),* ***Haldi*** *(Curcuma longa),* ***Shankpushpi*** *(Convolvulus prostratus),* ***Papaya Satva*** *(Carica papaya),* ***Pudina*** *(Mentha piperita),* ***Dalchini*** *(Cinnamomum verum),* ***Tej Patta*** *(Cinnamomum tamala),* ***Ajwain*** *(Trachyspermum ammi), Giloy(Tinospora cordifolia),* ***Amla*** *(Phyllanthus emblica),* ***Haritaki*** *(Terminalia chebula)*	Boosts *Ojas* and enhances *Bala*
Fe Capsule	***Makoy*** *(Solanum nigrum),* ***Shilajeet*** *(Asphaltum punjabianum),* ***Yasad Bhasam, Swarn Makshik Bhasam, Mukta Shukti Pishti***	Enhances *Rakta Dhatu Poshana* and boosts *Ojas*

Table 4: Medicine advised during Treatment

IPD Medicine 14/7/24 from 19/7/24	Follow-up Medicine's 12/8/ 2024	Follow-up Medicine's 6/9/2024	Follow-up Medicine's 8/10/2024	Follow-up Medicine's 12/11/2024	Follow-up Medicine's 10/12/2024
GFR Powder Half a teaspoon BD (*Adhobhakta with koshna jala)* (After meal with lukewarm water)	**GFR Powder** Half a teaspoon BD *(Adhobhakta with koshna jala)*	**GFR Powder** Half a teaspoon BD *(Adhobhakta with koshna jala)*	**GFR Powder** Half a teaspoon BD *(Adhobhakta with koshna jala)*	**GFR Powder** Half a teaspoon BD *(Adhobhakta with koshna jala)*	**GFR Powder** Half a teaspoon BD *(Adhobhakta with matra koshna jala)*
Nephron Plus CAP 1 Cap. BD (*Adhobhakta with koshna jala)*	**Nephron Plus Cap.** 1 Cap. BD (*Adhobhakta with koshna jala)*	**Nephron Plus Cap.**1 Cap. BD (*Adhobhakta with koshna jala)*	**Nephron Plus Cap.**1 Cap. BD (*Adhobhakta with koshna jala)*	**Kidney shuddhi** 1 Cap. BD (*Adhobhakta with koshna jala)*	**CKD Syrup** 20 ml BD (*Adhobhakta* with *sama matrakoshna jala)*
Rakt chap Vati 1 Tablet BD (*Adhobhakta with koshna jala)*	**Dhatuposhak Cap.** 1 Cap. BD (*Adhobhakta with koshna jala)*	**II. AROGY AVATI** 1 TABLET BD (*ADHOBHAKTA WITH KOSHNA JALA)*	**Kidney shuddhi Ark** 15ml BD (*Adhobhakta with sama matra koshna jala)*	**Chander vati** 1 Tablet BD (*Adhobhakta with koshna jala)*	**Mutravardhak vati** 2 Tablet BD (*Adhobhakta with koshna jala)*
Chandervati 1 Tablet BD (*Adhobhakta with koshna jala)*	**Fe capsule** 1Cap.BD (*Adhobhakta with koshna jala)*	**Divya Shakti Powder** Half a teaspoon HS (*Nishikala with koshna jala)* (At bed time)	**Divya Shakti Powder** Half a teaspoon HS (*Nishikala with koshna jala)* (At bed time)	**Arogyavati** 1 Tablet BD (*Adhobhakta with koshna jala)*	**III. AROGYAVATI** 1 TABLET BD (*ADHOBHAKTA WITH KOSHNA JALA)*
Divya Shakti Powder Half a teaspoon HS (*Nishikala with koshna jala)* (At bed	**Renal support syrup** 15ml BD *(Adhobhakta with sama matra*	**Renal support syrup** 15ml BD *(Adhobhakta*	**Renal support syrup** 15ml BD *(Adhobhakta with sama matra*	**Renal support syrup** 15ml BD *(Adhobhakta with sama matra koshna jala)*	**IV. DR. CKD TABLET** 1 TABLET BD (*ADHOBHAKTA WITH KOSHNA JALA)*

time)	*koshna jala)*	*with sama matra koshna jala)*	*koshna jala)*		
Dr. Immune Tablet 1 Tablet BD (*Adhobhakta with koshna jala)*	**Chandervati** 1 Tablet BD (*Adhobhakta with koshna jala)*	**Chandervati** 1 Tablet BD (*Adhobhakta with koshna jala)*	**Chandervati** 1 Tablet BD (*Adhobhakta with koshna jala)*		
Renal support syrup 15 ml BD *(Adhobhakta with sama matra koshna jala)*			*V.* **AROGYA VATI** 1 TABLET BD (*ADHOBHAKTA WITH KOSHNA JALA)*		
VI. VISH HAR RAS SYRUP 15ML BD *(ADHOBHAKTA WITH SAMA MATRA KOSHNA JALA)*					

Results:-

Table 6 shows a marked improvement in the patient's clinical symptoms following the integrated *Ayurvedic* intervention. Generalized weakness *(Daurbalya),* fever *(Jvara),* headache *(Shirashoola*), vomiting *(Chhardi),* and frothy urine (*Phenila Mutratā)* were completely resolved after treatment, indicating correction of *Vata–Kapha* imbalance and restoration of *Mutravaha Srotas* function. Gastric disturbances *(Amlapitta)* and throat infection (*Kanthashotha)* also showed significant relief, suggesting improved*Agni* and reduced *Ama* accumulation. Overall, the findings reflect effective *Dosha Samya* and systemic recovery achieved through *Ayurvedic* therapy.

Table 5: Before and After Treatment Assessment of the Patient

Before Treatment	**After Treatment**
Generalized Weakness *(Daurbalya) (4/10)*[24]	Absent / Markedly improved
Gastric issues (Indigestion/Acidity) *(Amlapitta)*[25]	Relieved
Fever *(Jvara)*[26]	Absent (0)
Frothy urine *(Phenila Mutratā)*[27]	Absent
Headache *(Shirashoola)*[28]	Absent
Vomiting *(Chhardi)*[29]	Absent
Throat infection/irritation *(Kanthashotha/ Galashotha)*[30]	Relieved

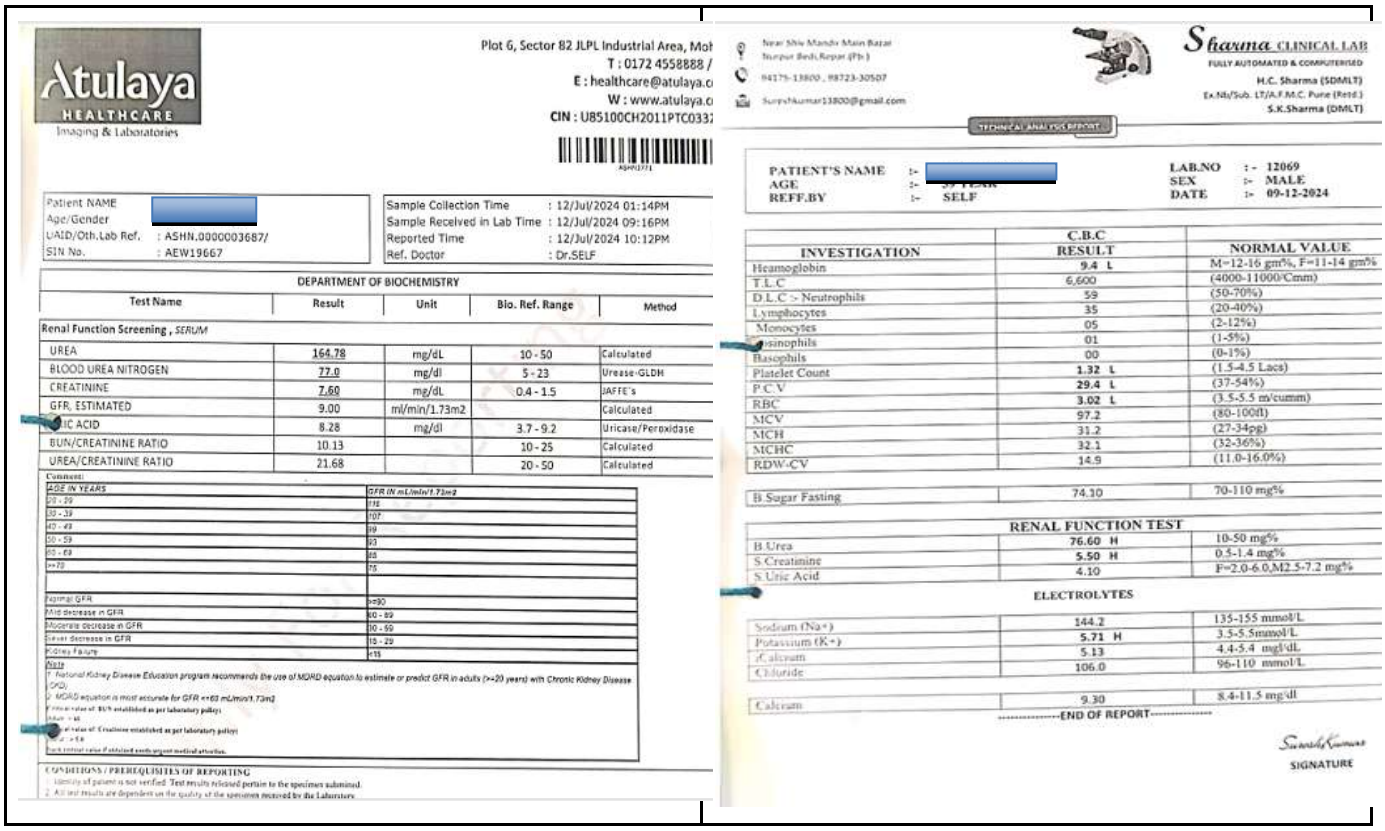
The table 6 shows the pre- and post-intervention biochemical assessment of the patient recorded on 12/07/2024 and 09/12/2024. Blood urea levels markedly decreased from 164.78 mg/dl to 76.60 mg/dl, indicating a significant reduction in uremic toxin load and improved metabolic clearance. Serum creatinine levels also decreased from 7.60 mg/dl to 5.50 mg/dl, suggesting partial improvement in renal filtration function. These biochemical changes reflect a positive therapeutic response to the intervention, demonstrating supportive improvement in kidney function parameters. However, persistently elevated creatinine values indicate underlying chronic renal impairment, requiring continued long-term management and monitoring.

Table 6: Pre and Post-Intervention Assessment of the Patient

ters	**s**	
rea	g/dl	
Creatinine	dl	dl

Table 7: Vitals During (IPD)

Date	**B.P (mmHg)**
14/7/24	120/80
15/7/24	100/70
16/7/24	110/80
17/7/24	120/80
18/7/24	110/70
19/7/24	120/80



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Plot 6, Sector 82 JLPL Industrial Area, Moh
T : 0172 4558888 /
E : healthcare@atulaya.c
W : www.atulaya.c
CIN : U85100CH2011PTC033

Patient NAME	[redacted]	Sample Collection Time	: 12/Jul/2024 01:14PM
Age/Gender		Sample Received in Lab Time	: 12/Jul/2024 09:16PM
UAID/Oth.Lab Ref.	: ASHN.0000003687/	Reported Time	: 12/Jul/2024 10:12PM
SIN No.	: AEW19667	Ref. Doctor	: Dr.SELF

DEPARTMENT OF BIOCHEMISTRY

Test Name	Result	Unit	Bio. Ref. Range	Method
Renal Function Screening , SERUM				
UREA	164.78	mg/dL	10 - 50	Calculated
BLOOD UREA NITROGEN	77.0	mg/dl	5 - 23	Urease-GLDH
CREATININE	7.60	mg/dL	0.4 - 1.5	JAFFE's
GFR, ESTIMATED	9.00	ml/min/1.73m2		Calculated
IC ACID	8.28	mg/dl	3.7 - 9.2	Uricase/Peroxidase
BUN/CREATININE RATIO	10.13		10 - 25	Calculated
UREA/CREATININE RATIO	21.68		20 - 50	Calculated

Comment:

AGE IN YEARS	GFR IN mL/min/1.73m2
20 - 29	116
30 - 39	107
40 - 49	99
50 - 59	93
60 - 69	85
>=70	75
Normal GFR	>=90
Mild decrease in GFR	60 - 89
Moderate decrease in GFR	30 - 59
Severe decrease in GFR	15 - 29
Kidney Failure	<15

Note
1. National Kidney Disease Education program recommends the use of MDRD equation to estimate or predict GFR in adults (>=20 years) with Chronic Kidney Disease (CKD).
2. MDRD equation is most accurate for GFR <=60 mL/min/1.73m2
3. Normal value of BUN established as per laboratory policy.
4. Normal value of Creatinine established as per laboratory policy.
5. Each critical value if obtained needs urgent medical attention.

CONDITIONS / PREREQUISITES OF REPORTING
1. Identity of patient is not verified. Test results released pertain to the specimen submitted.
2. All test results are dependent on the quality of the specimen received by the Laboratory.

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S.K.Sharma (DMLT)

TECHNICAL ANALYSIS REPORT

PATIENT'S NAME	[redacted]	LAB.NO	: 12069
AGE		SEX	: MALE
REFF.BY	: SELF	DATE	: 09-12-2024

INVESTIGATION	C.B.C RESULT	NORMAL VALUE
Heamoglobin	9.4 L	M=12-16 gm%, F=11-14 gm%
T.L.C	6,600	(4000-11000/Cmm)
D.L.C :- Neutrophils	59	(50-70%)
Lymphocytes	35	(20-40%)
Monocytes	05	(2-12%)
Eosinophils	01	(1-5%)
Basophils	00	(0-1%)
Platelet Count	1.32 L	(1.5-4.5 Lacs)
P.C.V	29.4 L	(37-54%)
RBC	3.02 L	(3.5-5.5 m/cumm)
MCV	97.2	(80-100fl)
MCH	31.2	(27-34pg)
MCHC	32.1	(32-36%)
RDW-CV	14.9	(11.0-16.0%)
B.Sugar Fasting	74.10	70-110 mg%

RENAL FUNCTION TEST		
B.Urea	76.60 H	10-50 mg%
S.Creatinine	5.50 H	0.5-1.4 mg%
S.Uric Acid	4.10	F=2.0-6.0,M2.5-7.2 mg%
ELECTROLYTES		
Sodium (Na+)	144.2	135-155 mmol/L
Potassium (K+)	5.71 H	3.5-5.5mmol/L
Calcium	5.13	4.4-5.4 mg/dL
Chloride	106.0	96-110 mmol/L
Calcium	9.30	8.4-11.5 mg/dl

----------END OF REPORT----------

SIGNATURE

Discussion:-

A 39-year-old male with a long-standing history of chronic kidney disease (CKD) for 8 years, hypertension for 8 years, and type 2 diabetes mellitus (T2DM) for 10 years, presented to Jeena Sikho Lifecare Clinic, Zirakpur, Punjab, on 14 July 2024. At the time of presentation, the patient was receiving insulin Mixtard for glycemic control and was not on any antihypertensive medication. Clinically, he reported multiple systemic complaints including generalized weakness (*Daurbalya*), gastric disturbances such as indigestion and hyperacidity (*Amlapitta)*, fever *(Jvara), fr*othy urine (*Phenila Mutratā),* headache (*Shirashoola),* vomiting *(Chhardi),* and throat irritation and infection *(Kanthashotha),* reflecting multisystem involvement and underlying metabolic and renal dysfunction.

Nidana (Causative Factors) of Vrikka Vikara:-

In Ayurvedic literature, the causative factors (Nidana) of Vrikka Vikara (renal disorders) are described as multifactorial, involving dietary, behavioral, and psychological components that predominantly aggravate Vata and Kapha Doshas, with occasional involvement of Pitta. Habitual intake of guru (heavy), snigdha (unctuous), madhura (sweet), and abishyandi (channel-obstructing) foods, excessive alcohol consumption, exposure to cold conditions, suppression of natural urges (Vega Dharana), and chronic mental stress are considered important etiological factors.[31] These factors impair Agni (digestive and metabolic fire), resulting in the formation and accumulation of Ama (metabolic toxins). The combined effect of vitiated Doshas and Ama leads to obstruction of the Mutravaha Srotas (urinary channels), ultimately contributing to the development of Vrikka Vikara.

Samprapti (Pathogenesis) of Vrikka Vikara:-

The pathogenesis of *Vrikka Vikara* involves the accumulation and aggravation of *Kapha* and *VataDoshas* within the *Mutravaha Srotas*. *Ama* further contributes to *Srotorodha* (channel obstruction), disrupting normal urine formation and excretion, thereby causing progressive deterioration of renal function. Clinically, this condition manifests as *Mutrakrichra (*dysuria), *Mutraghata* (urinary retention or obstruction), *Shotha* (edema), and *Daurbalya* (generalized weakness).[32] As the disease progresses, disturbances in *Dhatu* metabolism—particularly *Rasa*, *Rakta,* and *Meda Dhatus*—occur, leading to systemic complications and gradual organ dysfunction.

Ahara and Vihara Chikitsa (Dietary and Lifestyle Management):-

The patient was advised to follow a Vata-pacifying and renal-supportive diet comprising light, easily digestible, and nutritionally balanced foods. The dietary regimen included millets such as foxtail, barnyard, kodrava, and browntop, along with fresh fruit and vegetable juices, alkaline water, and herbal infusions. Wheat, refined and processed foods, milk, coffee, tea, and late-night meals were restricted to reduce metabolic burden. Additional dietary recommendations included thorough mastication, cooking with mustard oil, and using steel utensils to enhance digestion and nutrient assimilation.[33] Lifestyle modifications included early morning meditation (Dhyāna), Sukhasana, gentle Prāṇāyāma (Sūkṣma Prāṇāyāma), and 30 minutes of barefoot brisk walking. Adequate sleep of 6–8 hours and adherence to a structured daily routine were emphasized to maintain digestive efficiency, systemic balance, and musculoskeletal health.

***Panchkarma* Mode of Action:-**

According to *Ayurvedic* principles, the *Panchakarma* therapies administered in this case act through *Dosha Shodhana* (bio-purification), *Srotoshodhana* (channel cleansing), and *Agni Deepana* (enhancement of metabolic fire) mechanisms. *Avagha Swedana* and *Sarvanga Abhyanga* facilitate liquefaction and mobilization of aggravated *Doshas* and *Ama,* promoting their elimination and improving systemic circulation.[34]*Sneha Basti* and *Kashaya Basti* with *Gokshur* and *Punarnava* regulate *Apana Vata*, enhance renal excretory function, and support detoxification through the *Mutravaha Srotas. Shirodhara a*nd *Shiropichu* exert calming effects on the central nervous system, reducing stress-induced *Vata* aggravation and improving neuroendocrine balance.[35]*Vrikka Basti* provides localized nourishment and improves renal tissue perfusion, thereby supporting kidney function. Overall, these therapies collectively restore *Dosha* balance, improve microcirculation, and enhance metabolic and renal functional integrity.[36]

Treatment Result:-

The clinical assessment demonstrated substantial symptomatic improvement following the integrated *Ayurvedic* intervention. Symptoms such as generalized weakness *(Daurbalya),* fever *(Jvara)*, headache (*Shirashoola),* vomiting (*Chhardi),* and frothy urine *(Phenila Mutratā)* were completely resolved, suggesting normalization of *Vata–Kapha Dosha* imbalance and restoration of *Mutravaha Srotas* function. Gastric disturbances *(Amlapitta)* and throat infection (*Kanthashotha)* showed significant relief, indicating enhanced *Agni* and reduced *Ama* accumulation. These findings collectively reflect *Dosha Samya* and overall systemic recovery achieved through *Ayurvedic* therapeutic measures. Biochemical evaluation further supported the clinical improvement. Blood urea levels showed a marked reduction from 164.78 mg/dl on 12/07/2024 to 76.60 mg/dl on 09/12/2024, indicating a substantial decrease in uremic toxin burden and improved metabolic clearance. Serum creatinine levels also decreased from 7.60 mg/dl to 5.50 mg/dl, suggesting partial improvement in renal filtration capacity. Although these changes indicate a favorable therapeutic response, persistently elevated creatinine values reflect ongoing chronic renal pathology, highlighting the need for continued long-term *Ayurvedic* management and regular renal function monitoring.

Need For Further Research:-

Chronic Kidney Disease (CKD) is a complex condition requiring a multifaceted management approach. Combining *Ayurvedic* principles with lifestyle changes has demonstrated the potential to improve patient outcomes, more research is required to validate and standardize these approaches.[37] To assess the effectiveness, safety, and long-term advantages of *Ayurvedic* treatments such as *Ayurveda* formulations, *Panchkarma* procedures, and dietary regimens in the management of chronic kidney disease, clinical trials are required.

Conclusion:-

This case report highlights the potential role of integrated *Ayurvedic* management in a 39-year-old male with long-standing chronic kidney disease (CKD) for 8 years, hypertension for 8 years, and type 2 diabetes mellitus for 10 years, who presented to Jeena Sikho Lifecare Clinic, Zirakpur, Punjab, on 14 July 2024. At presentation, the patient exhibited multiple systemic complaints including generalized weakness *(Daurbalya)*, gastric disturbances *(Amlapitta)*, fever *(Jvara)*, frothy urine *(Phenila Mutratā)*, headache *(Shirashoola),* vomiting *(Chhardi)*, and throat infection *(Kanthashotha),* indicating multisystem involvement and *Mutravaha Srotas* dysfunction. Following an integrated *Ayurvedic* treatment protocol comprising dietary and lifestyle modifications along with *Panchkarma* therapies such as *Avagha Swedana, Sarvanga Abhyanga, Sneha Basti, Kashaya Basti, Shirodhara, Shiropichu,* and *Vrikka Basti,* marked clinical improvement was observed. All major symptoms including *Daurbalya, Jvara, Shirashoola, Chhardi, and Phenila Mutratā* were completely resolved, while *Amlapitta* and *Kanthashotha* showed significant relief. Biochemical parameters demonstrated improvement, with blood urea decreasing from 164.78

mg/dl to 76.60 mg/dl and serum creatinine from 7.60 mg/dl to 5.50 mg/dl, indicating supportive enhancement in renal function. Overall, this case suggests that integrated *Ayurvedic* therapy, including *Panchakarma,* may contribute to symptomatic relief, metabolic balance, and supportive renal function improvement in CKD patients, warranting further controlled clinical studies for validation.

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