

1 Comprehensive Management of Chronic Kidney Disease: A Holistic Approach Integrating 2 Lifestyle Modifications and Ayurvedic Principles: A Case Report

3

4 ABSTRACT

5 In *Ayurveda*, CKD can be correlated with conditions such as *Mutrakrichchhra*, *Mutraghata*, and
6 *Prameha-janya Vrikka Vikara*, where vitiation of *Vata* and *Kapha Dosha*, impairment of *Agni*,
7 accumulation of *Ama*, and obstruction of *Mutravaha Srotas* lead to progressive deterioration of
8 renal structure and function. The present case report describes the clinical outcome of an
9 integrated *Ayurvedic* management approach in a 39-year-old male with CKD for 8 years,
10 hypertension for 8 years, and type 2 diabetes mellitus for 10 years, who presented to Jeena Sikho
11 Lifecare Clinic, Baltana, Zirakpur, Punjab, in July 2024. The patient exhibited multiple systemic
12 complaints including generalized weakness (*Daurbalya*), gastric disturbances (*Amlapitta*), fever
13 (*Jvara*), frothy urine (*Phenila Mutratā*), headache (*Shirashoola*), vomiting (*Chhardi*), and throat
14 infection (*Kanthashotha*), indicating multisystem involvement and *Mutravaha Srotas*
15 dysfunction. The patient was managed with an integrated *Ayurvedic* protocol consisting of
16 dietary and lifestyle modifications along with *Panchakarma* therapies along with supportive
17 *Ayurvedic* medications. Post-treatment evaluation revealed marked clinical improvement, with
18 complete resolution of major symptoms and significant relief in associated complaints.
19 Biochemical parameters showed substantial improvement, with blood urea levels reduced from
20 164.78 mg/dl to 76.60 mg/dl and serum creatinine from 7.60 mg/dl to 5.50 mg/dl, indicating
21 supportive enhancement in renal function. This case suggests that integrated *Ayurvedic*
22 interventions, including *Panchakarma*, may play a supportive role in improving clinical
23 symptoms and renal biochemical parameters in CKD patients.

24 **Keywords:** *Ayurveda*, Chronic Kidney Disease, Hypertension, Lifestyle Modifications,
25 *Panchkarma*, *Vrikka Vikar*.

26 INTRODUCTION

27 Chronic Kidney Disease (CKD) is a major global public health problem that has gained
28 increasing attention due to its rising prevalence, progressive nature, associated systemic
29 complications, and significant impact on quality of life. CKD is defined as a structural or

30 functional abnormality of the kidneys lasting for more than three months, with or without
31 decreased glomerular filtration rate (GFR), manifested by pathological abnormalities, markers of
32 kidney damage such as proteinuria, or imaging abnormalities.^[1] A progressive decline in GFR
33 ultimately leads to end-stage renal disease (ESRD), which requires renal replacement therapy
34 (RRT) in the form of dialysis or kidney transplantation for survival. According to global
35 epidemiological studies, CKD affects approximately 10–13% of the adult population worldwide,
36 making it one of the most common chronic diseases.^[2] The increasing burden of diabetes
37 mellitus, hypertension, obesity, aging populations, and lifestyle-related disorders has contributed
38 significantly to the rising incidence of CKD. The World Health Organization (WHO) and other
39 international health agencies have recognized CKD as a major non-communicable disease due to
40 its association with cardiovascular morbidity, increased mortality, disability, and high healthcare
41 expenditures.^[3] In developing countries like India, the prevalence of CKD is rising rapidly due to
42 epidemiological transition, urbanization, and lifestyle changes. Limited awareness, late
43 diagnosis, and inadequate access to specialized healthcare further worsen disease outcomes.
44 CKD is often asymptomatic in its early stages, and many patients remain undiagnosed until
45 significant kidney damage has occurred. As renal function deteriorates, patients may experience
46 symptoms such as fatigue, edema, shortness of breath, nocturia, pruritus, nausea, vomiting, and
47 cognitive impairment.^[4] Progressive CKD can lead to anemia, mineral and bone disorders,
48 cardiovascular complications, electrolyte imbalance, and ultimately ESRD. Conventional
49 management of CKD includes blood pressure control, glycemic management, dietary protein
50 restriction, and pharmacological interventions aimed at slowing disease progression. However,
51 these approaches are often associated with side effects, high costs, and limited efficacy in
52 advanced stages, prompting interest in complementary and integrative therapeutic systems such
53 as *Ayurveda*.^[5] *Ayurveda* is a traditional system of medicine that originated in India more than
54 5,000 years ago and is widely practiced across South Asia and globally. *Ayurveda* is based on the
55 holistic concept of maintaining balance among the three fundamental bio-energies or *Doshas*—
56 *Vata*, *Pitta*, and *Kapha*—to sustain health and prevent disease. It emphasizes individualized
57 treatment based on *Prakriti* (constitution), *Vikriti* (disease state), *Agni* (digestive fire), *Dhatu*
58 (tissues), and *Srotas* (body channels).^[6] Unlike conventional medicine, which often focuses on
59 symptom suppression, *Ayurveda* aims to correct the root cause of disease through dietary
60 regulation (*Ahara*), lifestyle modifications (*Vihara*), herbal formulations (*Aushadha*),

61 detoxification therapies (*Panchakarma*), and mental and spiritual practices.^[7] In *Ayurvedic*
62 literature, there is no direct term corresponding to CKD; however, renal disorders are described
63 under conditions such as *Mutravaha Srotas Vikara*, *Mutrakrichra*, *Mutraghata*, *Ashmari*, and
64 *Prameha*-related complications.^[8] The kidneys (*Vrikka*) are considered vital organs associated
65 with *Meda* and *Rakta Dhatus*, and their functional integrity is essential for maintaining systemic
66 homeostasis. Impairment of *Vrikka* function is believed to occur due to *Dosha* imbalance, *Agni*
67 dysfunction, accumulation of *Ama* (metabolic toxins), and obstruction of *Srotas*, leading to
68 impaired urine formation and excretion.^[9] In *Ayurveda*, kidney function is closely associated
69 with *Apana Vata*, a subtype of *Vata Dosha* responsible for excretory functions including
70 urination, defecation, and reproduction. Disturbance of *Apana Vata* leads to abnormalities in
71 urinary output and contributes to renal pathology.^[10] *Kapha Dosha* is associated with structural
72 integrity and fluid balance, while *Pitta* is responsible for metabolic and excretory processes. The
73 imbalance of these *Doshas*, particularly *Vata* and *Kapha*, plays a crucial role in the pathogenesis
74 of renal disorders.^[11] *Ayurvedic* management of CKD focuses on restoring *Dosha* balance,
75 improving *Agni*, eliminating *Ama*, clearing *Srotas* obstruction, and strengthening renal tissues.
76 Dietary and lifestyle interventions are considered fundamental in preventing disease progression.
77 Patients are advised to consume light, easily digestible, and *Vata*-pacifying foods while avoiding
78 heavy, oily, processed, and incompatible foods. Lifestyle modifications such as yoga, meditation,
79 pranayama, and adequate sleep are recommended to reduce stress and maintain systemic
80 balance.^[12] *Ayurvedic* medicines play a significant role in *Ayurvedic* nephroprotective therapy.
81 Several medicinal plants have been traditionally used to support kidney health and treat urinary
82 disorders. *Punarnava* (*Boerhavia diffusa*) is widely recognized for its diuretic, anti-
83 inflammatory, and nephroprotective properties. It is commonly used in conditions associated
84 with edema and renal dysfunction. *Gokshura* (*Tribulus terrestris*) is known for its *Mutrala*
85 (diuretic) and *Balya* (strengthening) properties and is used in urinary tract disorders and kidney
86 stones.^[13] *Shatavari* (*Asparagus racemosus*) is considered a *Rasayana* (rejuvenative) herb that
87 supports tissue nourishment and enhances immunity. Other herbs such as *Varuna* (*Crataeva*
88 *nurvala*), *Chandraprabha*, and *Dashamoola* formulations are also used in renal disorders.^[14]

89 ***Samprapti Ghatka of Vrikka vikara***^[15]

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

- 91 ● Predominant *Kapha* and *Pitta* involvement initially causing obstruction (*Srotorodha*).

92 • Secondary *Vata* aggravation occurs due to tissue depletion (*Dhatu Kshaya*).

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

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

96 ***Adhithana* (Site of Pathology):**

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

99 ***Samprapti* (Pathogenesis):**

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

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

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

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

109 • Fatigue, mild edema, pallor, anorexia, mild dyspnoea, and dizziness (*Shirashoola*,
110 *Bhrama*).

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

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



115

116 **CASE REPORT**

117 A 39-year-old male with a known case of CKD for 8 Years, hypertension for 8 years, and Type 2
 118 Diabetes Mellitus (T2DM) for 10 years, visited Jeena Sikho Lifecare Limited Clinic, Zirakpur,
 119 Punjab on 14 July 2024. At that time, the patient was on an insulin mixtard and not taking any
 120 hypertensive medicines. The patient suffered from generalized weakness (*Daurbalya*), gastric
 121 disturbances such as indigestion and acidity (*Amlapitta*), fever (*Jvara*), frothy urine (*Phenila*
 122 *Mutrata*), headache (*Shirashoola*), vomiting (*Chhardi*), and throat infection with irritation and
 123 inflammation (*Kanthashotha*).The patient was admitted to the IPD for treatment from
 124 14/07/2024 to 19/07/2024.

125 **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

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

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

127

128 INTERVENTIONS

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

131 1. Do's and Don'ts:

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

136 b. Jala Sevan (Water intake):

- 137 1. Take small sips of water.
- 138 2. Drink about 250ml of alkaline water 3 to 4 times a day.

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

159 **c. Aim to drink 1 liter of alkaline water daily (Procedure as follow):**

- 160 1. Setup the Glass Jug: Fill a clean jug with fresh drinking water.
- 161 2. Add Copper Vessel: Place a copper vessel or glass inside the jug.
- 162 3. Infuse Flavors: Add slices of carrot, cucumber, and lemon to the water.
- 163 4. Add Herbs: Include ginger slices, mint leaves, and coriander leaves.
- 164 5. Optional Spice: Add a slice of green chili for added flavor.
- 165 6. Let it Sit: Allow the mixture to sit for 12 hours.

166 7. Add *Amalaki (Emblica officinalis)* and Basil (*Ocimum tenuiflorum*): After 6 hours, add 3–4
167 pieces of *Amalaki* and a handful of Basil leaves. Let it infuse for 6 hours.

168 8. Ready to Drink: 3 to 4 times a day in divided portions

169 **d. Shooka Dhanya Sevan:**

170 1. Incorporate five types of millet into diet: (*Priyangava*) Foxtail (*Setaria italica*),
171 (*Śyāmākā*) Barnyard (*Echinochloa esculenta*), (*Kodrava*) (*Paspalum scrobiculatum*) and
172 Browntop (*Urochloa ramosa*).

173 2. Use only steel cookware for preparing the millets. Cook the millets only using mustard
174 oil.

175 **e. 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), <i>mugda yusha</i> , fermented millet shake (4–5 types)
11:00 AM	Morning Snack	Red juice (150 ml), ingredients include Carrot (<i>Daucus carota</i>), Beetroot (<i>Beta vulgaris</i>)
12:30 – 2:00 PM	Lunch	Plate 1: Steamed salad (weight × 5 grams) Plate 2: Millet recipe

<p style="text-align: center;">4:00 – 4:20 PM</p>	<p style="text-align: center;">Evening Snack</p>	<p style="text-align: center;">Green juice (100–150 ml), ingredients include Coriander leaves (<i>Coriandrum sativum</i>), Mint leaves (<i>Mentha spicata</i>), Spinach leaves (<i>Spinacia oleracea</i>), Curry leaves (<i>Murraya koenigii</i>), Tulsi leaves (<i>Ocimum tenuiflorum</i>)</p>
<p style="text-align: center;">6:15 – 7:30 PM</p>	<p style="text-align: center;">Dinner</p>	<p style="text-align: center;">Plate 1: Steamed salad (weight × 5 grams), chutney, soup Plate 2: Millet khichdi</p>

176 **f. Fasting:**

- 177 1. One-day fasting per week.

178 **g. Special Instructions:**

- 179 1. Express gratitude to the divine before consuming food or drinks.
180 2. Sit in *Vajrasana* (a yoga posture) after each meal.
181 3. 10-minute slow walk after every meal.

182 **h. Diet Types:**

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

186 **II. Lifestyle Recommendations**

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

192

193 **II. Panchkarma procedures were administered to patients.**

194 **1. Avagha Swedana** ^[17]

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

198

199 **2. Gokshur Punarnava Siddha Sneha Basti (90ml)** ^[18]

200 **Procedure:** 90ml of this *Gokshur punarnava* oil was inserted with the patient laying in the left
201 lateral Position. The *Gokshur* and *Punarnava Siddha Sneha* were gently introduced into the
202 rectum using an enema tube. The patient usually does this *sneha basti* for 8-12 hours.

203

204 **3. Kashaya Basti with Punarnava and Gokshur** ^[19]

205 **Procedure:** The roots of *Gokshur (Tribulus terrestris)* and *Punarnava (Boerhavia diffusa)*, were
206 taken in quantity of 50gm each and 20 gms of *fennel (Foeniculum vulgare)* *Kalka* boiled with
207 1600 ml of water, reduced to 400ml, and filtered. Rock salt :10gm was mixed with Honey: 40
208 ml, & stirred hard till frothing. 30 ml of *Ksheerbala Taila* was taken and the mixture of Honey
209 and Rock salt mixed with The decoction of *Gokshur* and *Punarnava*, totaling a volume of 480
210 ml. The patient was positioned on his left side with his right knee flexed to his abdominal wall
211 and the left knee fully extended. The enema apparatus was sterilized; the enema tube was
212 lubricated for easy administration. The lukewarm *Gokshur* and *Punarnava Niruha Basti* (480 ml)
213 was gently introduced into the rectum using the enema tube. The patient was asked to retain the
214 liquid as long as comfortably possible.

215

216 **4. Shirodhara with Ksheerabala oil** ^[20]

217 **Procedure:** The procedure began with the patient lying in a supine position, followed by the
218 continuous pouring of warm *Ksheerabala* oil over the forehead from a *Shirodhara* pot from a
219 height of 6 inches. The oil flowed in a rhythmic stream over the *Ajna* (third eye) *chakra* for 45
220 minutes. This procedure was administered on alternate days, using 1 litre of oil maintained at
221 40°C.

222

223 **5. Shiropichu with Brahmi Tail**^[21]

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

228

229 **2. Sarvanga Abhyanga with Bala oil**^[22]

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

234 **6. Vrikka Basti with Punarnava Taila**^[23]

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

238 **III. Shaman Chikitsa**

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

241 **Table 3: Medicine Name, Ingredients, Therapeutic Effect**

Medicine Name	Ingredients	Therapeutic Effects
GFR Powder	<i>Varun</i> (<i>Crateva nurvala</i>), <i>Punarnava</i> (<i>Boerhavia diffusa</i>), <i>Gokshur</i> (<i>Tribulus terrestris</i>), <i>Kaasni</i> (<i>Cichorium intybus</i>), <i>Bhumi</i> <i>Amla</i> (<i>Phyllanthus niruri</i>), <i>Shirish</i> (<i>Albizia lebbek</i>), <i>Shigru</i> (<i>Moringa</i> <i>oleifera</i>), <i>Apamarg</i> (<i>Achyranthes</i> <i>aspera</i>)	Supports <i>Vrikka Karya</i> (kidney function) and acts as <i>Shothahara</i> (anti-inflammatory), helping alleviate renal symptoms.

<p>Chandervati</p>	<p>Kapoor (<i>Hedychium spicatum</i>), Kachri (<i>Acorus calamus</i>), Vach (<i>Cyperus rotundus</i>), Motha (<i>Tinospora cordifolia</i>), Giloy (<i>Cedrus deodara</i>), Devadaru (<i>Curcuma longa</i>), Daru Haldi (<i>Aconitum Heterophyllum</i>), Atees (<i>Piper longum</i>), Pippali Mūla (<i>Phyllanthus emblica</i>), Chitrak (<i>Plumbago Zeylancia</i>), Dhaniya (<i>Coriandrum sativum</i>), Haritaki (<i>Terminalia chebula</i>), Vayavidang (<i>Embelia ribes</i>), Peepal (<i>Ficus religiosa</i>), Kalimirsch (<i>Piper nigrum</i>), Sonth (<i>Zingiber officinale</i>), Gajapippali (<i>Scindapus Officinalis</i>), Swarn (<i>Makshik Bhasma</i>), Sajjikshar, Sendha Namak, Kala Namak, Choti Elaichi (<i>Elettaria cardamomum</i>), Dalchini (<i>Cinnamomum verum</i>), Tejpatta (<i>Cinnamomum tamala</i>), Danti (<i>Baliospermum montanum</i>), Nisoth (<i>Operculina turpethum</i>), Banslochan (<i>Bambusa arundinacea</i>), Loh bhasma, Shilajeet (<i>Asphaltum punjabianum</i>), Guggul (<i>Commiphora wightii</i>)</p>	<p>Helps relieve <i>Mutravaha Srotas Vikara</i> (urinary tract symptoms) and supports <i>Mutra Pravartana</i> (healthy urine flow).</p>
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<p>Divya Shakti Powder</p>	<p>Trikatu (<i>Piper nigrum</i> (Kali Mirch), <i>Piper longum</i> (Pippali), and dried <i>Zingiber officinale</i> (Saunth)), Triphala (<i>Haritaki</i> (<i>Terminalia chebula</i>), <i>Bibhitaki</i>, (<i>Terminalia bellirica</i>) and Bhumi Amalaki(<i>Phyllanthus niruri</i>),Nagarmotha (<i>Cyperus rotundus</i>), Vay Vidang (<i>Embelia ribes</i>), Chhoti Elaichi (<i>Elettaria cardamomum</i>), Tej Patta (<i>Cinnamomum tamala</i>), Laung (<i>Syzygium aromaticum</i>), Nisoth (<i>Operculina turpethum</i>), Sendha Namak, Dhaniya (<i>Coriandrum sativum</i>), Pippali Mūla(<i>Piper longum</i> root), Jeera (<i>Cuminum cyminum</i>), Nagkesar (<i>Mesua ferrea</i>), Amarvati (<i>Achyranthes aspera</i>), Anardana (<i>Punica granatum</i>), Badi Elaichi (<i>Amomum subulatum</i>), Hing (<i>Ferula assafoetida</i>), Kachnar (<i>Bauhinia variegata</i>), Ajmod (<i>Trachyspermum ammi</i>), Sazzikshar, Pushkarmool</p>	<p>It improves digestive function and metabolism of the body through its <i>deepan-pachan</i> properties. Helps in body detoxification via <i>virechan</i> (purgation).</p>
<p>Raktchapvati</p>	<p>Jatamansi (<i>Nardostachys jatamansi</i>), Ajwain Khurasani (<i>Hyoscyamus niger</i>), Sarpgandha (<i>Rauwolf serpentineina</i>), Bhang (<i>Cannabis sativa</i>), Pippali Mool (<i>Piper longum</i>), Moti Pishti (Pearl calcium), Mukta sukti Pisti</p>	<p>Supports <i>Hrid Poshana</i> and enhances <i>Agni</i></p>
<p>Vish Har Ras Syrup</p>	<p>Neem (<i>Azadirachta indica</i>), Giloy (<i>Tinospora cordifolia</i>), Kalmegh (<i>Andrographis paniculata</i>),Papaya (<i>Carica papaya</i>),Wheatgrass (<i>Triticum aestivum</i> Linn.), Punarnava (<i>Boerhavia diffusa</i>)</p>	<p>Supports <i>Shwasa Roga Shamana</i> (respiratory relief), promotes <i>Sharirika Shodhana</i> (natural detoxification), and boosts <i>Ojas</i></p>

<p>Nephron Plus Cap.</p>	<p><i>Hazool 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.</i></p>	<p>Supports <i>Koshtha Punarjanana</i>, enhances <i>Mutra Pravartana</i> (urine outflow), and aids in <i>Mutravaha Srotas</i></p>
<p>Dhatuposhak Cap.</p>	<p><i>Chuna Shudh, Shankh bhasam, Mukta shukti, Prawal pishti, Kapardika, Loh Bhasam</i></p>	<p>Supports <i>Madhumeha Shamana</i> and enhances <i>Ojas&Bala</i></p>
<p>Arogyavati</p>	<p><i>Kajan, Loh Bhasma, Abhrak bhasma, Tamra bhasma, Amalaki, Vibhitika, Haritaki, Chitrak, Katuka, Nimbu Patra</i></p>	<p>Supports <i>Koshtha Punarjanana</i> acts as a <i>Rasayana</i>, and boosts <i>Ojas</i></p>
<p>Renal support syrup</p>	<p><i>Gokshur (Tribulus terrestris), Chirayata (Swertia), Harad (Terminalia chebula), Karanja (Milletia pinnata), Ashwagandha (Withania somnifera), Arjuna (Terminalia arjuna), Neem (Azadirachta indica)</i></p>	<p>Supports <i>Vrikka Poshana, Basti Shuddhi</i>, and <i>Mutravaha Srotas Shamana</i></p>
<p>Dr. CKD Tablet</p>	<p><i>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</i></p>	<p>It Improves Kidney Function (<i>Vrikka Shuddhi, Mutravaha Srotas Shodhana</i>)</p>

	<i>shora, Sajjikhhar, Shilajeet, Hajrul Yahud, Shwet Parpti</i>	
Mutra Vardhak Vati	Gokshur (<i>Tribulus terrestris</i>), Guggul (<i>Commiphora wightii</i>), Sonth (<i>Zingiber officinale</i>), Kalimirch (<i>Piper nigrum</i>), Peepal (<i>Ficus religiosa</i>), Bibhitaki (<i>Terminalia bellirica</i>), Haritaki (<i>Terminalia chebula</i>), Amalaki (<i>Phyllanthus emblica</i>), Motha (<i>Cyperus rotundus</i>)	Mutravaha Srotas Vikara Nashak (helps in relieving disorders of the urinary system such as <i>Mutrakricha</i> painful urination and other urinary tract disorders).
Kidney Shuddhi Ark	Sonth (<i>Zingiber officinale</i>), Kalimirch (<i>Piper nigrum</i>), Pippali (<i>Piper longum</i>), Badi Harad (<i>Terminalia chebula</i>), Baheda (<i>Terminalia bellirica</i>), Amla (<i>Phyllanthus emblica</i>), Nagarmotha (<i>Cyperus scariosus</i>), Varun Chhal (<i>Crataeva nurvula</i>), Gokhru (<i>Tribulus terrestris</i>), Pashanbhed (<i>Saxifraga ligulata</i>), Bhringraj (<i>Eclipta alba</i>), Shodit Guggul (<i>Commiphora wightii</i>), Bhavna Dravya-Gokharu Panchaang (<i>Tribulus terrestris</i>), Excipients-Sodium Methyl Paraben, Sodium Propyl Paraben, Gum Acacia (<i>Acacia arabica</i>)	Boosts <i>Ojas</i> and supports <i>Swasthya Poshana</i>
CKD syrup	Kasani (<i>Cichorium intybus</i>), Gokhru (<i>Tribulus Terrestris</i>), Shatavari (<i>Asparagus racemosus</i>), Giloy (<i>Tinospora cordifolia</i>), Sorbitol, Shilajeet (<i>Asphaltum punjabicum</i>)	Supports <i>Vrikka Vikar Shamana</i> and <i>Mutravaha Srotas Shuddhi</i>

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

242

243 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
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GFR Powder Half a teaspoon BD (<i>Adhobhakta with koshna jala</i>) (After meal with lukewarm water)	GFR Powder Half a teaspoon BD (<i>Adhobhakta with koshna jala</i>)	GFR Powder Half a teaspoon BD (<i>Adhobhakta with koshna jala</i>)	GFR Powder Half a teaspoon BD (<i>Adhobhakta with koshna jala</i>)	GFR Powder Half a teaspoon BD (<i>Adhobhakta with koshna jala</i>)	GFR Powder Half a teaspoon BD (<i>Adhobhakta with matra koshna jala</i>)
Nephron Plus CAP 1 Cap. BD (<i>Adhobhakta with koshna jala</i>)	Nephron Plus Cap. 1 Cap. BD (<i>Adhobhakta with koshna jala</i>)	Nephron Plus Cap. 1 Cap. BD (<i>Adhobhakta with koshna jala</i>)	Nephron Plus Cap. 1 Cap. BD (<i>Adhobhakta with koshna jala</i>)	Kidney shuddhi 1 Cap. BD (<i>Adhobhakta with koshna jala</i>)	CKD Syrup 20 ml BD (<i>Adhobhakta with sama matrakoshna jala</i>)
Rakt chap Vati 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)	Dhatuposhak Cap. 1 Cap. BD (<i>Adhobhakta with koshna jala</i>)	Arogyavati 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)	Kidney shuddhi Ark 15ml BD (<i>Adhobhakta with sama matra koshna jala</i>)	Chander vati 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)	Mutravardhak vati 2 Tablet BD (<i>Adhobhakta with koshna jala</i>)
Chandervati 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)	Fe capsule 1Cap.BD (<i>Adhobhakta with koshna jala</i>)	Divya Shakti Powder Half a teaspoon HS (<i>Nishikala with koshna jala</i>) (At bed time)	Divya Shakti Powder Half a teaspoon HS (<i>Nishikala with koshna jala</i>) (At bed time)	Arogyavati 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)	Arogyavati 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)
Divya Shakti Powder Half a teaspoon HS (<i>Nishikala with koshna jala</i>) (At bed time)	Renal support syrup 15ml BD (<i>Adhobhakta with sama matra koshna jala</i>)	Renal support syrup 15ml BD (<i>Adhobhakta with sama matra koshna jala</i>)	Renal support syrup 15ml BD (<i>Adhobhakta with sama matra koshna jala</i>)	Renal support syrup 15ml BD (<i>Adhobhakta with sama matra koshna jala</i>)	Dr. CKD Tablet 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)

Dr. Immune Tablet 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)	Chandervati 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)	Chandervati 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)	Chandervati 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)		
Renal support syrup 15 ml BD (<i>Adhobhakta with sama matra koshna jala</i>)			Arogyavati 1 Tablet BD (<i>Adhobhakta with koshna jala</i>)		
Vish Har Ras Syrup 15ml BD (<i>Adhobhakta with sama matra koshna jala</i>)					

244

245 **RESULTS**

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

254 **Table 5: Before and After Treatment Assessment of the Patient**

Before Treatment	After Treatment

Generalized Weakness (<i>Daurbalya</i>) (4/10)^[24]	Absent / Markedly improved
Gastric issues (Indigestion/Acidity) (<i>Amlapitta</i>)^[25]	Relieved
Fever (<i>Jvara</i>)^[26]	Absent (0)
Frothy urine (<i>Phenila Mutratā</i>)^[27]	Absent
Headache (<i>Shirashoola</i>)^[28]	Absent
Vomiting (<i>Chhardi</i>)^[29]	Absent
Throat infection/irritation (<i>Kanhashohta/Galashohta</i>)^[30]	Relieved

255 The table 6 shows the pre- and post-intervention biochemical assessment of the patient recorded
256 on 12/07/2024 and 09/12/2024. Blood urea levels markedly decreased from 164.78 mg/dl to
257 76.60 mg/dl, indicating a significant reduction in uremic toxin load and improved metabolic
258 clearance. Serum creatinine levels also decreased from 7.60 mg/dl to 5.50 mg/dl, suggesting
259 partial improvement in renal filtration function. These biochemical changes reflect a positive
260 therapeutic response to the intervention, demonstrating supportive improvement in kidney
261 function parameters. However, persistently elevated creatinine values indicate underlying
262 chronic renal impairment, requiring continued long-term management and monitoring.

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

Parameters	Findings	
	12/7/24	9/12/24
Blood Urea	164.78mg/dl	76.60mg

Serum Creatinine	7.60mg/dl	5.50mg/dl
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264 **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

265

266

267



ASHN371

Patient Name : [REDACTED]
Age/Gender : [REDACTED]
UAI/Oth.Lab Ref. : ASHN.000003687/
SIN No. : AEW19667

Sample Collection Time : 12/Jul/2024 01:14PM
Sample Received in Lab Time : 12/Jul/2024 09:16PM
Reported Time : 12/Jul/2024 10:12PM
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-GLDW
CREATININE	7.60	mg/dL	0.4 - 1.5	JAFFE'S
GFR, ESTIMATED	9.00	ml/min/1.73m2		Calculated
URIC 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

AGE IN YEARS	GFR (in mL/min/1.73m2)
20 - 29	115
30 - 39	107
40 - 49	99
50 - 59	91
60 - 69	83
70 - 79	75
80 - 89	67
90 - 99	59
≥100	51

Normal GFR = >90
Mild decrease in GFR = 90 - 89
Moderate decrease in GFR = 75 - 89
Severe decrease in GFR = 60 - 89
E-Grav 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. Precision of 8% established as per laboratory policy.
4. Reference value of Creatinine established as per laboratory policy.
5. Each result value of laboratory tests represent individual activities.

COUNCIL'S 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.



TECHNICAL ANALYSIS REPORT

PATIENT'S NAME :- [REDACTED] LABNO :- 12069
AGE :- 39 YEAR SEX :- MALE
REF.BY :- SELF DATE :- 09-12-2024

INVESTIGATION	C.B.C RESULT	NORMAL VALUE
Hemoglobin	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%
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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, M=5-7.2 mg%

ELECTROLYTES

Sodium (Na ⁺)	144.2	135-155 mmol/L
Potassium (K ⁺)	5.71 H	3.5-5.5 mmol/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
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-----END OF REPORT-----

Suresh Kumar
SIGNATURE

268

269 **DISCUSSION**

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

279

280 **Nidana (Causative Factors) of Vrikka Vikara**

281 In *Ayurvedic* literature, the causative factors (*Nidana*) of *Vrikka Vikara* (renal disorders) are
282 described as multifactorial, involving dietary, behavioral, and psychological components that
283 predominantly aggravate *Vata* and *Kapha Doshas*, with occasional involvement of *Pitta*.

284 *Habitual* intake of *guru* (heavy), *snigdha* (unctuous), *madhura* (sweet), and *abishyandi* (channel-
285 obstructing) foods, excessive alcohol consumption, exposure to cold conditions, suppression of
286 natural urges (*Vega Dharana*), and chronic mental stress are considered important etiological
287 factors.^[31] These factors impair *Agni* (digestive and metabolic fire), resulting in the formation
288 and accumulation of *Ama* (metabolic toxins). The combined effect of vitiated *Doshas* and *Ama*
289 leads to obstruction of the *Mutravaha Srotas* (urinary channels), ultimately contributing to the
290 development of *Vrikka Vikara*.

291

292 ***Samprapti (Pathogenesis) of Vrikka Vikara***

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

301

302 ***Ahara and Vihara Chikitsa (Dietary and Lifestyle Management)***

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

313

314 ***Panchkarma Mode of Action***

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

327

328 **Treatment Result**

329 The clinical assessment demonstrated substantial symptomatic improvement following the
330 integrated *Ayurvedic* intervention. Symptoms such as generalized weakness (*Daurbalya*), fever
331 (*Jvara*), headache (*Shirashoola*), vomiting (*Chhardi*), and frothy urine (*Phenila Mutratā*) were
332 completely resolved, suggesting normalization of *Vata–Kapha Dosha* imbalance and restoration
333 of *Mutravaha Srotas* function. Gastric disturbances (*Amlapitta*) and throat infection
334 (*Kanthashotha*) showed significant relief, indicating enhanced *Agni* and reduced *Ama*
335 accumulation. These findings collectively reflect *Dosha Samya* and overall systemic recovery
336 achieved through *Ayurvedic* therapeutic measures. Biochemical evaluation further supported the
337 clinical improvement. Blood urea levels showed a marked reduction from 164.78 mg/dl on
338 12/07/2024 to 76.60 mg/dl on 09/12/2024, indicating a substantial decrease in uremic toxin
339 burden and improved metabolic clearance. Serum creatinine levels also decreased from 7.60
340 mg/dl to 5.50 mg/dl, suggesting partial improvement in renal filtration capacity. Although these
341 changes indicate a favorable therapeutic response, persistently elevated creatinine values reflect
342 ongoing chronic renal pathology, highlighting the need for continued long-term *Ayurvedic*
343 management and regular renal function monitoring.

344

345 **NEED FOR FURTHER RESEARCH**

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

352 CONCLUSION

353 This case report highlights the potential role of integrated *Ayurvedic* management in a 39-year-
354 old male with long-standing chronic kidney disease (CKD) for 8 years, hypertension for 8 years,
355 and type 2 diabetes mellitus for 10 years, who presented to Jeena Sikho Lifecare Clinic,
356 Zirakpur, Punjab, on 14 July 2024. At presentation, the patient exhibited multiple systemic
357 complaints including generalized weakness (*Daurbalya*), gastric disturbances (*Amlapitta*), fever
358 (*Jvara*), frothy urine (*Phenila Mutratā*), headache (*Shirashoola*), vomiting (*Chhardi*), and throat
359 infection (*Kanthashotha*), indicating multisystem involvement and *Mutravaha Srotas*
360 dysfunction. Following an integrated *Ayurvedic* treatment protocol comprising dietary and
361 lifestyle modifications along with *Panchkarma* therapies such as *Avagha Swedana*, *Sarvanga*
362 *Abhyanga*, *Sneha Basti*, *Kashaya Basti*, *Shirodhara*, *Shiropichu*, and *Vrikka Basti*, marked
363 clinical improvement was observed. All major symptoms including *Daurbalya*, *Jvara*,
364 *Shirashoola*, *Chhardi*, and *Phenila Mutratā* were completely resolved, while *Amlapitta* and
365 *Kanthashotha* showed significant relief. Biochemical parameters demonstrated improvement,
366 with blood urea decreasing from 164.78 mg/dl to 76.60 mg/dl and serum creatinine from 7.60
367 mg/dl to 5.50 mg/dl, indicating supportive enhancement in renal function. Overall, this case
368 suggests that integrated *Ayurvedic* therapy, including *Panchakarma*, may contribute to
369 symptomatic relief, metabolic balance, and supportive renal function improvement in CKD
370 patients, warranting further controlled clinical studies for validation.

371 REFERENCES

- 372 1. Kovesdy CP. Epidemiology of chronic kidney disease: an update 2022. *Kidney*
373 *international supplements*. 2022 Apr 1;12(1):7-11.

- 374 2. Shlipak MG, Tummalapalli SL, Boulware LE, Grams ME, Ix JH, Jha V, Kengne AP,
375 Madero M, Mihaylova B, Tangri N, Cheung M. The case for early identification and
376 intervention of chronic kidney disease: conclusions from a Kidney Disease: Improving
377 Global Outcomes (KDIGO) Controversies Conference. *Kidney international*. 2021 Jan
378 1;99(1):34-47.
- 379 3. Kovesdy CP, Davis JR, Duling I, Little DJ. Prevalence of anemia in adults with chronic
380 kidney disease in a representative sample of the United States population: analysis of the
381 1999–2018 National Health and Nutrition Examination Survey. *Clinical Kidney Journal*.
382 2023 Feb;16(2):303-11.
- 383 4. Kalantar-Zadeh K, Jafar TH, Nitsch D, Neuen BL, Perkovic V. Chronic kidney disease.
384 *The Lancet*. 2021 Aug 28;398(10302):786-802.
- 385 5. Verma P, Mahajan J, Kumar S, Acharya S. Lifestyle modification and nutrition: halt the
386 progression to end-stage renal disease. *International Journal of Nutrition, Pharmacology,
387 Neurological Diseases*. 2022 Jul 1;12(3):105-11.
- 388 6. Manish A, Chaudhary G, Singh SP, Singh M, Richa. Clinical evaluation of chronic
389 kidney disease management: integrating lifestyle modification and Ayurveda. *Int J*
390 *AYUSH*. 2024 Oct;2013(10). doi: 10.22159/prl.ijayush.v2013i10.1152.
- 391 7. Chen CH, Teitelbaum I. Physiology of Peritoneal Dialysis. *Applied Peritoneal Dialysis:
392 Improving Patient Outcomes*. 2021:11-23.
- 393 8. Shafiee MA, Hosseini SF, Mortazavi M, Emami A, Zadeh MM, Moradi S, Shaker P.
394 Anticoagulation therapy in COVID-19 patients with chronic kidney disease. *Journal of
395 Research in Medical Sciences*. 2021 Jan 1;26(1):63.
- 396 9. Kalantar-Zadeh K, Jafar TH, Nitsch D, Neuen BL, Perkovic V. Chronic kidney disease.
397 *The Lancet*. 2021 Aug 28;398(10302):786-802.
- 398 10. Purushothaman V, Santhanam R, Ravi P, Kuppusamy M. Development and Validation of
399 Yoga Program for Patients with Chronic Kidney Disease. *Indian Journal of Palliative
400 Care*. 2024 Nov 15;30(4):380.
- 401 11. Quimby JM, Brock WT, Moses K, Bolotin D, Patricelli K. Chronic use of maropitant for
402 the management of vomiting and inappetence in cats with chronic kidney disease: a
403 blinded, placebo-controlled clinical trial. *Journal of feline medicine and surgery*. 2015
404 Aug;17(8):692-7.

- 405 12. Latham-Mintus K, Doshi S, Moorthi R. Chronic Kidney Disease, Muscle Weakness, and
406 Mobility Limitation. *Innovation in Aging*. 2019 Nov 8;3(Suppl 1):S523.
- 407 13. Shrinvas KS, Deshmukh RA, Tenahalli RM, Baragi JA, Bagali SS, Haiyalkar M. A
408 conceptual study on Charakokta Nidana of Visarpa with special reference to present day
409 Ahara and Vihara. *Journal of Ayurveda and Integrated Medical Sciences*. 2022 Nov
410 3;7(9):115-21.
- 411 14. Ramteke RS, Patil PD, Thakar AB. Microalbuminuria in Ayurveda. *International Journal*
412 *of Ayurvedic Medicine*. 2014;5(4):297-306.
- 413 15. Shrinvas KS, Deshmukh RA, Tenahalli RM, Baragi JA, Bagali SS, Haiyalkar M. A
414 conceptual study on Charakokta Nidana of Visarpa with special reference to present day
415 Ahara and Vihara. *Journal of Ayurveda and Integrated Medical Sciences*. 2022 Nov
416 3;7(9):115-21.
- 417 16. Bhoyar K, Mhaiskar B, Pusadkar S, Bhoyar S, Salankar H. A Review Article on Ahar
418 Vihar According to Ritus in Ayurveda. *Indian Journal of Forensic Medicine &*
419 *Toxicology*. 2021 Apr 1;15(2):4383.
- 420 17. Tamrakar U, Chouhan M, Soni K. A case study on Gridhasi wsr to Sciatica. *Journal of*
421 *Ayurveda and Integrated Medical Sciences*. 2024 Feb 25;9(1):294-7.
- 422 18. Das A, Sharma R. Ayurvedic Management of Vrikka Ashmari (Kidney Stones) through
423 Yoga Basti: A Case Study. *IJCRT Research Journal| UGC Approved and UGC Care*
424 *Journal| Scopus Indexed Journal Norms*. 2025 Aug 14;15(3):50997-1000.
- 425 19. Bhargavi M, Chaithanya K. A Comparative clinical evaluation of Sirodhara with
426 Sukhosnajala, Tila Tailam and Brahmi Tailam in the management of mild to moderate
427 essential hypertension. *Journal of Ayurveda and Integrated Medical Sciences*. 2018 Jun
428 30;3(03):13-20.
- 429 20. Dudhamal TS. Wound Healing Effect of Humri (*Securinega leucopyrus*) and Supportive
430 Ayurveda Therapy in Beurger's Ulcer. *Annals of Ayurvedic Medicine*. 2016 Oct
431 25;5(1):37-.
- 432 21. Singh E, Sharma S, Pareek A, Dwivedi J, Yadav S, Sharma S. Phytochemistry, traditional
433 uses and cancer chemopreventive activity of Amla (*Phyllanthus emblica*): The Sustainer.
434 *Journal of Applied Pharmaceutical Science*. 2012 Jan 30(Issue):176-83.

- 435 22. Soni S, Sharma HK, Kaushal P, Singh C. Effect of process parameters on the antioxidant
436 activities of bioactive compounds from Harad (*Terminalia chebula* retz.). *Agricultural*
437 *Engineering International: CIGR Journal*. 2015 Jun 1;17(2).
- 438 23. Kumar P, Kamle M, Mahato DK, Bora H, Sharma B, Rasane P, Bajpai VK. *Tinospora*
439 *cordifolia* (Giloy): phytochemistry, ethnopharmacology, clinical application and
440 conservation strategies. *Current pharmaceutical biotechnology*. 2020 Oct 1;21(12):1165-
441 75.
- 442 24. Ahmed K, Shaheen G, Asif HM. *Zingiber officinale* Roscoe (pharmacological activity).
443 *J. Med. Plants Res*. 2011 Feb 4;5(3):344-8.
- 444 25. Thorat DB, Narwane S, Kunkulol R, Bhawar SB. Pharmacognostic, Physicochemical and
445 Phytochemical analysis of *Hibiscus cannabinus* Leaves. *Research Journal of*
446 *Pharmacognosy and Phytochemistry*. 2024 Apr 1;16(2):89-94.
- 447 26. Decker E, Kendrick J. Research in the CKD clinic: highs and lows. *Advances in chronic*
448 *kidney disease*. 2014 Jul 1;21(4):344-8.
- 449 27. Aggarwal A, Sokiya G, Sharma G. Management of Chronic Kidney Disease-An
450 Ayurveda Case Study. *Journal of Ayurveda and Integrated Medical Sciences*. 2023 Sep
451 2;8(7):250-6.
- 452 28. Bhujbal S, Malawade G. Therapeutic Nutrition in Ayurveda for Chronic Kidney Disease.
453 *In Therapeutic Nutrition in Ayurveda* (pp. 283-298). CRC Press.
- 454 29. Rathi S, Rathi M. A Clinical Study of Yashtimadhu & Guduchi with special reference to
455 Amlapitta. *Journal of Ayurveda and Integrated Medical Sciences*. 2024 Feb 22;9(1):54-9.
- 456 30. Vaidya M, Upadhyay A, Kumar S, Sharma K. Exploration of therapeutic potential and
457 evidence-based applications of Shwaskuthar Rasa: A scoping review. *Journal of Drug*
458 *Research in Ayurvedic Sciences*. 2024 Mar 1;9(2):75-85.
- 459 31. Sharma R, Maurya A, Yadav H, Shukla AC, Tangjang S. Pippali (*Piper longum* L.): A
460 Plant with Versatile Pharmaceutical Uses. *In Advances in Medicinal and Aromatic Plants*
461 2024 (pp. vol2-163). Apple Academic Press.
- 462 32. Chauhan M, Katiyar P, Gupta H, Antal S. A role of evidence-based Ayurvedic medicines.
463 *In Integrated Pathy* 2025 Jan 1 (pp. 107-147). Academic Press.

- 464 33. Sushma TJ, Gomare JM, Warad V, Binorkar SV, Lavanya L. Ritu Haritaki (Seasonal
465 Regimen with Indian Rhubarb)–A Boon to Seasonal Health. Journal of Neonatal Surgery.
466 2025;14(15s):1273.
- 467 34. Tak S, Sharma MC. CLINICAL STUDY OF “GOKSHURADI YOGA” FOR THE
468 MANAGEMENT OF CHRONIC RENAL FAILURE.
- 469 35. Pandey A, Azad AS, Bhardwaj A, Thakur G, Prakash GM. SHRIDHAR UNIVERSITY
470 Dayanand Ayurvedic College
- 471 36. Manpreet K, Anita S, Piyush G. Phytochemical and pharmacological study of dhatura: A
472 review. International Journal of Research in AYUSH and Pharmaceutical Sciences.
473 2017:113-8.
- 474 37. M. Bhujbal Swarupa Vd. The Aetiopathological Study of Chronic Renal Failure with
475 Ayurveda Perspective. PhD Thesis 2009-2012. Tilak Maharashtra Vidyapeeth,
476 Maharashtra.

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