Case Study

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Vrikka Vikara Chikitsa: A Case Study Of *Ayurvedic* Approach In Managing Ckd With A History Of *Prameha* And *Hridroga*

Acharya Manish [1], *Dr. Gitika Chaudhary [2], Dr. Richa[3], Dr. Suyash Pratap Singh[4], Dr. Shubham Badhan[5]

[1]Director, Meditation Guru, Jeena Sikho lifecare Limited, India
[2]Senior Consultant, General Surgeon, BAMS, PGDIP, PGDGS, MS (Ay.), Jeena Sikho lifecare Limited, India
[3]Senior Research officer, BAMS, PGDIP, CICR, CAIM, CMW, Jeena Sikho lifecare Limited, India
[4]Medical Superintendent, BAMS, PGDIP, DNYT, CCMC, Jeena Sikho Lifecare Limited Hospital, Derabassi, Punjab, India.
[5]Consultant, BAMS, MD (Kaya Chikitsa), Jeena Sikho Lifecare Limited Hospital, Derabassi, Punjab, India.

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ABSTRACT

Chronic kidney disease (CKD) is a progressive condition characterized by declining kidney function, often coexisting with hypertension, type 2 diabetes mellitus (T2DM), and coronary artery disease (CAD), amplifying cardiovascular risks. *Vrikka Vikar* often manifests as a result of *Prameha* and *Raktagata Vata*, which collectively aggravate *Hridroga*, forming a complex pathophysiological interplay requiring a holistic *Ayurvedic* approach involving *Shodhana* and *Shamana* therapies. This case report presents a 52-year-old male with CKD, hypertension, T2DM, and CAD who underwent *Ayurvedic* interventions alongside conventional treatments at Jeena Sikho Lifecare Limited Hospital, Derabassi, Punjab, India. The patient experienced symptoms such as weakness, fatigue, frothy urine, disturbed sleep, and lower back pain. Following a 13-day inpatient *Ayurvedic* treatment regimen, the patient's symptoms improved significantly. Laboratory investigations revealed a reduction in serum urea from 137.17 mg/dL to 75.44 mg/dL, serum creatinine from 6.88 mg/dL to 5.58 mg/dL, and uric acid from 7.30 mg/dL to 6.44 mg/dL. These outcomes suggest that *Ayurvedic* interventions may support improved kidney function and overall well-being. Further controlled studies are recommended to validate these findings and develop standardized treatment protocols.

INTRODUCTION

Chronic kidney disease (CKD) is a progressive condition marked by declining kidney function, impairing the filtration of waste and fluids. It is diagnosed when kidney damage persists for over three months or the glomerular filtration rate (GFR) drops below 60 mL/min per 1.73 m^2. In advanced stages, known as end-stage kidney disease (ESKD), dialysis or kidney transplantation becomes necessary [1]. CKD often progresses silently, with symptoms like hypertension, fluid retention, and bone pain emerging later [2,3]. It is a major global health concern due to its high cardiovascular mortality risk, especially among dialysis patients [4].

CKD commonly coexists with conditions such as

Corresponding author: Dr. Gitika Chaudhary
Email: : shuddhi.research@jeenasikho.co.in

hypertension, type 2 diabetes mellitus (T2DM), and coronary artery disease (CAD), which amplify cardiovascular risks. About 40% of diabetics develop CKD, which heightens cardiovascular disease (CVD) risk [5]. Uncontrolled hypertension accelerates CKD progression and increases ESKD risk, particularly in T2DM patients who have undergone PCI [6]. The coexistence of CKD and T2DM raises cardiovascular event risks significantly [7]. Obesity, hypertension, and anemia further worsen CKD outcomes [8]. Management strategies focus on controlling blood pressure and blood sugar, with SGLT2 inhibitors and GLP-1 receptor agonists showing promise in reducing CKD progression [5]. Regular renal and cardiovascular monitoring is crucial in preventing complications [7].

Ayurveda offers a holistic approach by addressing root causes rather than symptoms. CKD is seen as a disorder of *Srotas* and *Dosha* imbalances, with anemia resembling *Vataj Pandu* [9]. *Ayurvedic* therapies include nephroprotective herbs like *Punarnava*, *Arjuna*, and *Guduchi* [10], *Panchakarma* detox therapies such as *Virechana* and *Basti* [11-17], and lifestyle practices like yoga and meditation to manage metabolic imbalances. Emerging evidence supports *Ayurveda*'s potential as a complementary therapy for CKD management [18,19]. This study aims to assess the impact of *Ayurvedic* interventions combined with conventional treatments for CKD with hypertension, T2DM and CAD in a 52-year-old male patient.

MATERIALS AND METHODS

CASE REPORT

On February 14, 2025, a 52-year-old male visited Jeena Sikho Lifecare Limited Hospital in Derabassi, India, was diagnosed with Chronic Kidney Disease (CKD). A comprehensive medical history, family history, physical examination and diagnostic evaluations were all part of the methodical and thorough examination. He had a history hypertension since 5 years, Type 2 diabetes mellitus for 15 years and Coronary artery disease for 2 years. He had a history of cholecystectomy and his father had a history of T2DM. He experienced weakness, fatigue, intermittent left side chest pain, frothy urine, disturbed sleep, lower back pain, shortness of breath and overthinking. The vital signs (**Table 1**) along with *Ashta-vidh pareeksha* (**Table 2**) report during the first day of visit and discharge is detailed in following tables. The findings on examination is mentioned in **Table 3.**

Table 1 Vitals during the first day of the visit and discharge

Parameter	Findings	
Date	14-02-2025	26-02-2025
Blood Pressure	150/80 mm of Hg	140/80 mm of Hg
Pulse Rate	86/min	84/min
Weight	70 Kg	69 Kg

Table 2 *Ashta-vidh pareeksha* during first day of the visit and discharge

Parameter	Findings	
Date	14-02-2025	26-02-2025
***Naadi* (Pulse)**	*Vaataj pittaj*	*Vaataj Pittaj*
***Mala* (Stool)**	*Badha* (Constipated)	*Avikrit* (Normal)
***Mutra* (Urine)**	*Phenila* (Frothy)	*Avikrit* (Normal)
***Jiwha* (Tongue)**	*Saam* (Coated)	*Saam* (Mild coated)
***Shabda* (Voice)**	*Spashta* (Normal)	*Spashta* (Normal)
***Sparsha* (Touch)**	*Anushna Sheet* (Normal)	*Anushna Sheet* (Normal)
***Drik* (Eye)**	*Avikrit* (Normal)	*Avikrit* (Normal)
***Akriti* (Physique)**	*Madhyam*	*Madhyam*

Table 3 Findings on examination

Parameter	Condition
Appetite	Low
Sleep	Disturbed
Acid	Increased
Bowel	Constipation
Urine	Frothy
B/L chest	Clear

The patient was in IPD for 13 days, during that period he received consolidated *Ayurvedic* treatments. This treatment procedure encompassed *Panchakarma* therapies such as *Awagaha swedan* (up to navel), *Shiropichu* with *Brahmni oil, Shirodhara* with *Brahmi oil, Gokshur-Punarnava Siddha Sneha Basti, Gokshur-Punarnava kashaya Basti, Vrikk Basti* with *Punarnava* oil and *Neem Karela Therapy*. The laboratory investigations during the treatment period is mentioned in **Table 5.** Diabetic chart during IPD is mentioned in **Table 6.** The patient was discharged on February 26, 2025.

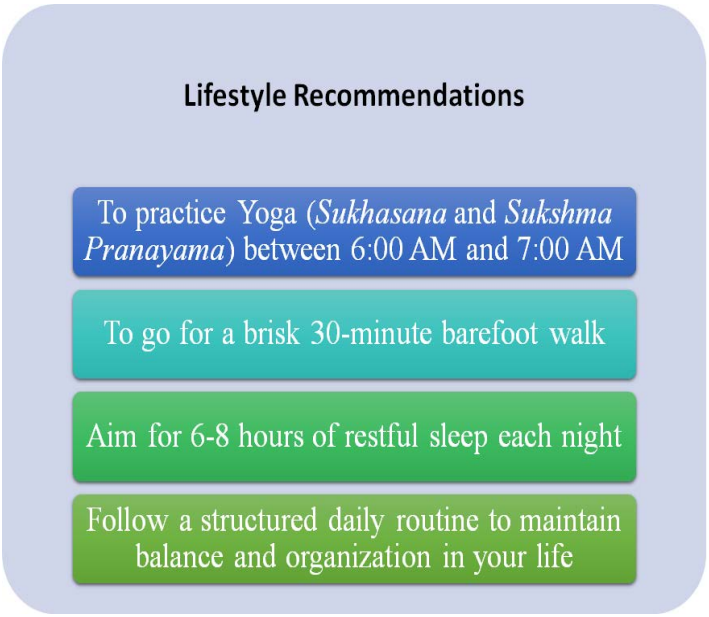
Table 5 The laboratory investigations during the treatment period (Fig 1)

Parameter	Findings		
Date	14-02-2025	17-02-2025	21-02-2025
Hemoglobin	10.1 gm/dl	9.4 gm/dl	-
Blood urea	137.17 mg/dL	116.34 mg/dL	75.44 mg/dL
Serum creatinine	6.88 mg/dL	6.00 mg/dL	5.58 mg/dL
Uric acid	7.30 mg/dL	7.20 mg/dL	6.44 mg/dL
BUN	64 mg/dL	54.29 mg/dL	35.21 mg/dL

Table 6. Diabetic chart during IPD

Date	Findings
15-02-2025	109 mg/dL
16-02-2025	126 mg/dL
17-02-2025	170 mg/dL
18-02-2025	232 mg/dL
19-02-2025	225 mg/dL
20-02-2025	193 mg/dL
21-02-2025	113 mg/dL
22-02-2025	108 mg/dL
23-02-2025	99 mg/dL
24-02-2025	101 mg/dL
25-02-2025	100 mg/dL
26-02-2025	105 mg/dL

Fig.4 Lifestyle Recommendations



Treatment Plan

Diet Plan (Fig 2):

A personalized *Ayurvedic* and (Disciplined and Intelligent Person's) DIP Diet was provided to the patient to complement the *Ayurvedic* treatments administered for CKD [18]. Dietary Guidelines from Jeena Sikho Lifecare Limited Hospital were as follows:

Fig.2 Key Recommendations

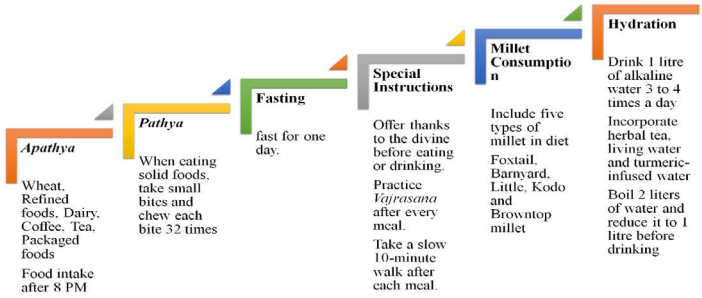


Fig.3 Meal Timing & Structure

Panchakarma procedures administered to patients

Awagah Swedan (Up to navel) [19]

The patient was submerged up to the navel in a tub of warm water.
The temperature of water was maintained at 42˚C.
The patient spent 40 minutes under the conditions provided.

Punarnava and Gokshuru Siddha Sneha Basti [20]

A homogenous mixture of *Punarnava* and *Gokshuru* was prepared and mixed with water.

Abhyanga and *Swedana* were performed, and the patient was positioned in the left lateral posture.
90 ml of *Basti Dravya* was warmed to body temperature and introduced into the rectum using a *Basti Netra*, with proper retention ensured based on the type of *Basti.*
The patient was advised to follow a light diet (*Peya, Vilepi*), avoid incompatible foods, and the evacuation response was monitored for therapeutic effectiveness.

Punarnava and Gokshuru Kashaya Basti [21,22,23]

A decoction of *Punarnava* and *Gokshuru* was prepared by indirect boiling in water and reducing it to one-fourth.
The patient underwent *Abhyanga* and *Swedana* to relax muscles and facilitate Vata regulation. The patient was positioned in the left lateral posture for ease of administration.
380 ml of prepared *Kashaya Basti* was warmed to body temperature and introduced into the rectum using a *Basti Netra*. The patient was instructed to retain the *Basti* for an appropriate duration to allow absorption.

Shirodhara with *Brahmi oil*[24,25]

The patient lay down on a table with their head slightly elevated.

Warm *Brahmi oil* was poured in a continuous stream over the forehead, focusing on the third eye area, for about 80 minutes while the patient relaxed.

After the oil application, the patient rested briefly to absorb the effects.

Shiropichu with *Brahmi oil* [26,27]

Brahmi oil was warmed to a comfortable temperature.

40 ml of warmed *Brahmi oil* was gently applied to the forehead and scalp.

A cloth pad soaked in the oil was placed on the forehead, covering the *Ajna Chakra* and crown, and left in place for 20 minutes.

Vrikk Basti with *Punarnavadi Oil* [28]

The patient was positioned in a prone posture, and the lumbar region was cleaned. A leak-proof dough ring (*Basti Kunda*) was prepared and placed over the kidney region.

Warm *Punarnavadi* Oil was carefully poured into the reservoir, ensuring even coverage over the kidney area.

The oil was retained for 20 minutes, allowing deep absorption.

The oil was removed using sterile cotton pads, and the dough ring was dismantled.

Medicinal Interventions

The *Ayurvedic* treatment employed in this case GFR Powder, Dr. CKD Tablet, Divya Shakti Powder, Prameh Rog Har, Kidney Shuddhi Ark, Cough Har Powder, Dr. Sukoon, Sanjeevani vati capsule and Amal Pitt Har Powder. The medicines advised during the IPD and discharge is mentioned in **Table 7**. The details of the medicine administered during the IPD is described in **Table 8**.

Table 7 Medications taken during the treatment period

Date	Medicines	Dosage with *Anupana*
14-02-2025 (IPD)	GFR Powder	A teaspoon BD (*Adhobhakta* with *koshna jala*- After
	Dr. CKD Tablet	1 TAB TDS (*Adhobhakta* with *koshna jala*)
	Dr. Sukoon	2 TAB HS (*Nishikala* with *koshna jala*)
	Divya Shakti Powder	Half a teaspoon HS (*Nishikala* with *koshna jala*- Before bed with lukewarm water)
	GFR Powder	Half a teaspoon BD (*Adhobhakta* with *koshna jala*)
	Cough Har Powder	Half a teaspoon BD (*Adhobhakta* with *koshna jala*)
	Sanjeevani Capsule	2 TAB BD (*Adhobhakta* with *koshna jala*)
	Prameh Rog Har Powder	1 TSF BD (*Adhobhakta* with *koshna jala*)
	Amal Pitt Har Powder	1 TSF BD (*Adhobhakta* with *koshna jala*)
26-02-2025 (Discharge)	Dr. CKD Tablet	2 TAB BD (*Adhobhakta* with *koshna jala*)
	Kidney Shuddhi Ark	10 ml BD (*Adhobhakta* with *sama matra koshna jala*)
	GFR Powder	Half a teaspoon BD (*Adhobhakta* with *koshna jala*)
	Dr. Sukoon	2 TAB HS (*Nishikala* with *koshna jala*)
	Divya Shakti Powder	Half a teaspoon HS (*Nishikala* with *koshna jala*)

Table 8 Details of the medications taken during the treatment period

Medicine name	Ingredients	Therapeutic Effects
GFR Powder	**Bhoomi Amla** (*Phyllanthus niruri*), **Badi Harad** (*Terminalia chebula*), **Bahera** (*Terminalia bellirica*), **Kasni** (*Cichorium intybus*), **Makoy** (*Zea mays*), **Punarnava** (*Boerhavia diffusa*), **Gokshur** (*Tribulus terrestris*).	*Mutral* (Diuretic), *Shoth har* (Anti-inflammatory), *Virechana* (Purgation), *Raktaprasadana* (Blood purifier), *Vatanulomana (Vata* regulator), *Mutravirechana* (Urinary purgation), *Rasayana* (Rejuvenator), *Amapachan* (Toxin digestant), *Kledahara* (Moisture remover), *Vrikkadoshahara* (Kidney toxin eliminator)

Dr. CKD Tablet	**Pashanbhed** (*Bergenia ciliata*), **Varun** (*Crataeva nurvala*), **Punarnava** (*Boerhavia diffusa*), **Gokhru** (*Tribulus terrestris*), **Apamarg** (*Achyranthes aspera*), **Haldi** (*Curcuma longa*), **Charila** (*Embelia ribes*), **Kulthi** (*Dolichos biflorus*), **Harad** (*Terminalia chebula*), **Bhumiawla** (*Pyrrosia piloselloides*), **Giloy** (*Tinospora cordifolia*), **Shitalchini** (*Vernonia cinerea*), **Anantmool** (*Hemidesmus indicus*), **Khas** (*Vetiveria zizanoides*), **Yab Kshar** (Alkaline substance, botanical origin unclear), **Muli Kshar** (*Raphanus sativus*), **Kalmi Shora** (Sodium bicarbonate), **Sajji Kshar** (Traditional alkaline substance, botanical origin unclear), **Shilajeet** (*Asphaltum*), **Hajral Yahud** (*Silicon dioxide*), **Shwet Parpati** (Mercury-based preparation in Ayurvedic medicine).	*Raktashodhak (Blood purifier), Mutral (Diuretic), Vatanulomana (Vata regulator), Agnideepan (Digestive stimulant), Shoth har (Anti-inflammatory), Pitta Shaman (Pitta pacifier), Rasayana (Rejuvenator), Srotoshodhana (Channel cleanser), Vishagna (Detoxifier)*
Divya Shakti Powder	**Trikatu**, **Triphala**, **Nagarmotha** (*Cyperus rotundus*), **Vay Vidang** (*Embelia ribes*), **Chhoti Elaichi** (*Elettaria cardamomum*), **Tej Patta** (*Cinnamomum tamala*), **Laung** (*Syzygium aromaticum*), **Nishoth** (*Operculina turpethum*), **Sendha Namak**, **Dhaniya** (*Coriandrum sativum*), **Pipla Mool** (*Piper longum root*), **Jeera** (*Cuminum cyminum*), **Nagkesar** (*Mesua ferrea*), **Amarvati** (*Achyranthes aspera*), **Anardana** (*Punica granatum*), **Badi Elaichi** (*Amomum subulatum*), **Hing** (*Ferula assafoetida*), **Kachnar** (*Bauhinia variegata*), **Ajmod** (*Trachyspermum ammi*), **Sazzikhar**, **Pushkarmool** (*Inula racemosa*), **Mishri** (*Saccharum officinarum*).	*Ojakshaya* (Loss of vitality/immunity), *Agnimandya* (Low digestive fire), *Chakshukshaya* (Weak vision), *Deepan* (Appetizer), *Rasayana* (Rejuvenator)
Prameh Rog Har	**Kutki** (*Picrorhiza kurroa*), **Chiraita** (*Swertia chirata*), **Neem** (*Azadirachta indica*), **Karela** (*Momordica charantia*), **Rasonth** (*Berberis aristata*), **Imli Beej** (*Tamarindus indica*), **Kala Namak**, **Giloy** (*Tinospora cordifolia*), **Sonth** (*Zingiber officinale*), **Babool Chaal** (*Vachellia nilotica*), **Sarpgandha** (*Rauvolfia serpentina*), **Trivang Bhasam**, **Yashad Bhasam**, **Revend Chinni** (*Rheum emodi*), **Sodhit Guggulu** (*Commiphora mukul*), **Methi** (*Trigonella foenum-graecum*), **Jamun** (*Syzygium cumini*), **Babool Fruit** (*Vachellia nilotica*), **Karanj** (*Millettia pinnata*), **Shilajit**, **Haldi** (*Curcuma longa*), **Harad** (*Terminalia chebula*), **Inderjaun** (*Holarrhena antidysenterica*), **Banshlochan** (*Bambusa arundinacea*), **Bahera** (*Terminalia bellirica*), **Amla** (*Phyllanthus emblica*), **White Musli** (*Chlorophytum borivilianum*), **Gurmar** (*Gymnema sylvestre*).	*Pramehaghna* (Anti-diabetic), *Raktashodhak* (Blood purifier), *Deepan* (Appetizer), *Pachan* (Digestant), *Rasayana* (Rejuvenator), *Medohara* (Fat reducer), *Shoth har* (Anti-inflammatory), *Mutral* (Diuretic)
Kidney Shuddhi Ark	**Punarnava** (*Boerhavia diffusa*), **Varuna** (*Crataeva nurvala*), **Gokshura** (*Tribulus terrestris*), **Bhumyamalaki** (*Phyllanthus niruri*), **Palash Pushp** (*Butea monosperma*), and **Shigru** (*Moringa oleifera*).	*Kaphahara (Kapha* pacifier), *Shwasahara* (Respiratory reliever), *Vata-kapha Shaman (Vata-Kapha* pacifier), *Swasanirmulana* (Expectorant), *Utklesha nivaran* (Vomiting reliever), *Shoth har* (Anti-inflammatory), *Kanduhara (* Itch reliever), *Prana vardhan* (Life force enhancer)
Cough Har Powder	**Tvak Patra** (*Cinnamomum tamala*), **Sukshmaila** (*Elettaria cardamomum*), **Pippali** (*Piper longum*), **Vamsha** (*Bambusa arundinacea*), **Shitopala** (*Rock Candy / Khanda Sharkara*).	*Kaphahara (Kapha* pacifier), *Shwasahara* (Respiratory reliever), *Vata-kapha Shaman (Vata-Kapha* pacifier), *Swasanirmulana* (Expectorant), *Utklesha nivaran* (Vomiting reliever), *Shoth har* (Anti-inflammatory), *Kanduhara (* Itch reliever), *Prana vardhan* (Life force enhancer)
Dr. Sukoon	**Apamarga** (*Achyranthes aspera*), **Shatawar** (*Asparagus racemosus*), **Ashwagandha** (*Withania somnifera*), **Brahmi** (*Bacopa monnieri*), **Vacha** (*Acorus calamus*), **Shankh-pushpi** (*Convolvulus pluricaulis*), **Calcium** (*Ca*)	*Manonukulya* (Mind soothing), *Nidrajanana* (Sleep inducing), *Medhya* (Cognitive enhancer), *Vatanulomana* (Pacifier and regulator of Vata), *Rasayana* (Rejuvenation therapy)
Sanjeevani vati capsule	**Bhumiamla** (*Phyllanthus niruri*) and **Ajwain** (*Trachyspermum ammi*)	*Rasayana* (Rejuvenator), *Balya* (Strengthener), *Deepan (* Digestive stimulant), *Pachan* (Digestive/metabolism enhancer), *Vyadhi Kshamatva* (Disease resistance/immunity), *Ojas Vardhaka* (Enhancer of vitality/immune booster), *Vata-Pitta Shaman* (Pacifier of *Vata* and *Pitta doshas)*
Amal pitt Har Powder	**Shunti** (*Zingiber officinale*), **Maricha** (*Piper nigrum*), **Pippali** (*Piper longum*), **Amalki** (*Phyllanthus emblica*), **Bibhitaki** (*Terminalia belerica*), **Haritaki** (*Terminalia chebula*), **Musta** (*Cyperus rotundus*), **Sulshmaila** (*Sida cordifolia*), **Tvak patra** (*Cinnamomum verum*), **Vidanga** (*Embelia ribes*), **Bid lavana** (*Sodium chloride*), **Lavanga** (*Syzygium aromaticum*), **Trivita** (*Tribulus terrestris*), **Sharkara** (*Saccharum officinarum*).	*Deepan* (Appetizer), *Pachan* (Digestant), *Shoth har* (Anti-inflammatory), *Vata-kapha shamaka (Dosha-* balancer), *Rasayana* (Rejuvenator), *Ojovardhaka (* Immunity enhancer)

RESULT

After 13 days of IPD, the patient experienced noteworthy development in symptoms, which denotes the interventions used in the study are effective against CKD, T2DM, CAD and hypertension. Also the relief from weakness, fatigue, frothy urine, disturbed sleep, lower back pain, shortness of breath shows that the *Ayurvedic* interventions used in the case study are effective for CKD. The conditions before and after treatment is mentioned in **Table 9**.

Table 9. The conditions before and after treatment

Conditions	Before treatment	After treatment
Weakness [29]	Moderate	Relief
Pain [30]	Intermittent left side chest and lower back (2/10)	Relief (1/10)
Urine	Frothy	Normal
Sleep [31]	4/10	8/10
Shortness of breath [32]	Grade 2 (Walks slower than people of the same age)	Grade 0 (No breathlessness)

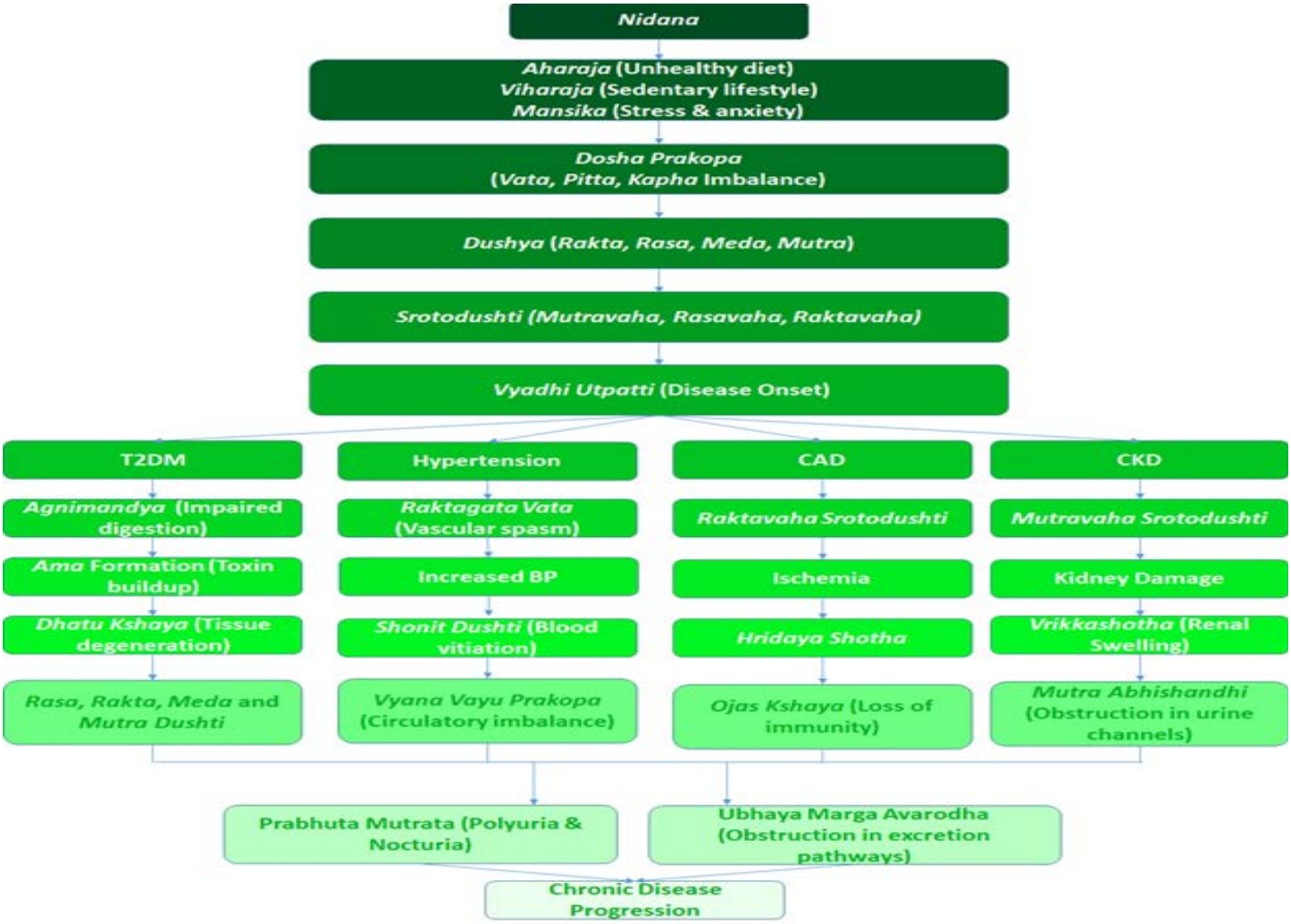
The 2D echocardiogram conducted on 28/01/2025 revealed a dilated left ventricle (LV), suggesting the heart is under strain. Mild LV systolic dysfunction was also noted. Moderate eccentric left ventricular hypertrophy (LVH) was observed. The presence of Grade 1 LV diastolic dysfunction further indicates impaired relaxation of the heart during the filling phase (**Fig 5**). The chest X-ray performed on 16/02/2025 revealed an area of inhomogeneous haziness in the left lower lung zone (**Fig 6**).

Future Research perspectives: This study was conducted on a 52-year-old male patient with CKD, hypertension, T2DM and CAD. While the results were promising, thorough evaluation and further investigation are necessary as the study involved only a single patient. Larger randomized controlled trials are essential to validate the reliability, efficacy, and safety of the integrated *Ayurvedic* therapies used in this study, ultimately aiming to establish standardized protocols and guidelines for clinical practice.

DISCUSSION

Managing CKD with *Ayurvedic* interventions for the treatment of CKD assures a promising alternative for conventionally practicing expensive treatment methods. This case report is about the procedure of *Ayurvedic* therapies and medications works in a 52-year-old male, diagnosed with CKD, T2DM, CAD and hypertension. The patient presented symptoms such as weakness, fatigue, intermittent left side chest pain, frothy urine, disturbed sleep, lower back pain, shortness of breath and overthinking. The *Samprapti*[32-37] for this study is depicted in **Fig 4**.

Fig 4 The *Samprapti* for this study



The *Samprapti* and *Nidan Parivarjan*

In CKD with T2DM, CAD, and Hypertension, the primary *Ayurvedic* involvement begins with *Madhumeha* (T2DM) due to *Kapha-Meda Dushti* and *Agni Mandya*, leading to *Ama* formation and *Rakta-Meda Vaha Srotas Dushti*. This produces *Ati-Madhurya* in *Rasa* and *Rakta Dhatus*, impairing microcirculation and damaging the *Vrikka* (kidneys). Simultaneously, *Uccharaktachapa* (Hypertension), arising from *Rakta Dushti, Vata-Prakopa*, and *Rasa-Rakta Stambhana*, causes endothelial dysfunction and *Siragranthi* (vascular rigidity). CAD develops due to *Kapha-Meda-Rakta Dushti,* resulting in *Dhamani Pratichaya* (atherosclerosis), further aggravating *Vyana Vata* and impairing *Hridaya Karma*. The cumulative effect leads to *Vrikka Srotas Avarodha* and *Dhatu Kshaya*, manifesting as reduced *Mutra Nirmiti Shakti* (GFR decline), fluid overload, and progressive renal damage, while systemic *Vata-Kapha-Pitta Dushti* perpetuates multi-organ dysfunction [32-37].

Management emphasizes avoidance of causative and aggravating factors (*Hetu Sevana*) such as *Atimadhura, Amla, Lavana Ahara* (excess sugar, sour, and salty foods), *Guru-Snigdha Ahara* (heavy, oily foods), sedentary lifestyle, stress, day-sleeping, alcohol, and smoking [38]. Dietary discipline (*Pathya Ahara*) with *Laghu, Tikta, Kashaya Rasa Yukta Ahara* (light, bitter, astringent foods), regulated fluid intake, and avoidance of nephrotoxic substances is essential [39]. Lifestyle corrections (*Vihara*) include regular mild exercise, yoga, meditation, proper sleep cycle, and stress reduction to balance *Vata-Kapha*. Avoiding irregular eating habits, late-night waking, and suppression of natural urges prevents further *Agni Dushti* and *Srotorodha* [40]. Thus, strict *Nidan Parivarjan* slows down progression of CKD, improves glycemic and blood pressure control, protects *Hridaya* and *Vrikka*, and restores *Dosha-Dhatu Samya*. The *Ayurvedic* treatment involved following *Panchakarma* procedures:

The effects of *Ahar-Vihar*

The combination of appropriate *Ahara* (diet) and *Vihara* (lifestyle) plays a pivotal role in preventing progression and supporting management of chronic conditions like CKD with T2DM, CAD, and Hypertension. A diet based on millets, sprouts, fruits, raw salads, and fermented preparations is *Laghu* (light), *Rasayana* (rejuvenative), and rich in antioxidants, which helps in reducing *Ama* and balancing *Kapha* and *Meda Dhatu*. These foods support healthy Agni, regulate blood sugar, and protect vascular health by minimizing *Rakta-Meda Dushti* that underlies CAD and hypertension [39]. Herbal tea, green juices, and limited intake of oil, salt, and heavy foods prevent *Kapha-Pitta* aggravation, improve circulation, and reduce stress on the kidneys [41]. Regular and structured mealtimes further stabilize *Agni* and metabolic rhythms, preventing fluctuations in blood glucose, blood pressure, and cardiac load.

Lifestyle measures (*Vihara*) such as daily yoga, pranayama, and brisk walking help in balancing *Vata*, calming the mind, enhancing *Vyana Vata* (circulatory function), and improving insulin sensitivity [42]. Proper sleep of 6–8 hours ensures restoration of *Dhatus*, pacifies aggravated *Vata-Pitta*, and supports hormonal and metabolic balance. Following *Dinacharya* (daily routine) brings order to digestion and circulation, preventing *Ama* accumulation and *Srotorodha* (obstruction of channels) [42]. By avoiding *Nidana* such as irregular meals, late-night waking, alcohol, stress, and heavy or incompatible foods, the risk factors aggravating CKD, diabetes, hypertension, and CAD can be minimized. Thus, adopting this integrative approach of *Ahara-Vihara* not only maintains *Dosha-Dhatu Samya* but also slows disease progression and enhances overall quality of life [44].

The effects of *Panchkarma*

Awagaha Swedana (up to navel) creates local *Swedana* (sudation) effect, improving peripheral circulation, reducing *Shotha* (edema), relieving stiffness, and facilitating *Avarana Mukti* of *Vata* by liquefying and mobilizing *Ama* and excess *Kapha* [19]. *Punarnava* and *Gokshuru Siddha Sneha Basti* provides a *Mutral* (diuretic), *Shothahara* (anti-inflammatory), and *Vata-anulomana* action. By rectal route, *Basti* directly influences *Pakvashaya* (colon), the seat of *Vata*, normalizing *Apana Vata* and thereby regulating urination, fluid excretion, and kidney function. The unctuous quality nourishes tissues, prevents degeneration, and helps detoxify *Vrikkas* (kidneys), reducing progression of CKD [20]. *Punarnava* and *Gokshuru Kashaya Basti* works as a *Lekhana* and *Shodhana Basti*, clearing *Mala*, *Kleda*, and *Ama* from channels. Its *Tikta-Kashaya Rasa, Laghu-Ruksha Guna* facilitate *Srotoshodhana* (channel cleansing), diuresis, and reduction of *Shotha*. This *Basti* is especially effective in chronic renal disorders with associated fluid overload and metabolic derangements [21,22,23]. *Shirodhara* with *Brahmi* oil pacifies *Prana Vata* and *Sadhaka Pitta*, producing *Manonukulya* (mental calmness), *Nidrajanana* (inducing sleep), and *Medhya* (cognitive enhancement). Continuous oil stream stimulates the hypothalamic-pituitary axis, reduces stress, anxiety, and hypertension, while improving autonomic balance [24,25]. *Shiropichu* with *Brahmi* oil offers localized *Shiro-Rasayana* effect by nourishing the brain tissues, stabilizing *Vata-Pitta,* and reducing stress-induced sympathetic overdrive. Its cooling, soothing property supports mental relaxation, improves sleep, and reduces vascular stress, indirectly benefiting blood pressure and cardiac rhythm [26,27]. *Vrikk Basti* with *Punarnavadi* Oil provides direct local action over the renal region, enhancing absorption of *Punarnava's Shothahara*, *Mutral*, and *Vrikkadoshahara* properties. By sustaining warmth and unctuousness at the kidneys, it improves local circulation, supports renal detoxification, reduces inflammation, and helps in maintaining renal tissue vitality [28].

The effects of *Ayurvedic* medication

Ayurvedic formulations for chronic conditions such as CKD, T2DM, CAD, and Hypertension work through a multidimensional approach guided by the *Rasapanchaka* of their ingredients. For instance, herbs in GFR Powder like *Punarnava* [45], *Gokshura* [46], *Bhoomi Amla* [47], and *Haritaki* [48] are predominantly *Tikta-Kashaya* (bitter-astringent) in *Rasa, Laghu-Ruksha in Guna, Ushna in Virya*, *Katu* in *Vipaka*, and act with *Prabhava* of *Mutral* and *Vrikkadoshahara*, thereby reducing fluid overload, inflammation, and supporting kidney function. Dr. CKD Tablet contains *Varuna, Pashanbhed* [49], *Apamarg* [50], and *Shilajit* [51], which are *Tikta-Kashaya*, *Laghu-Ruksha*, *Ushna Virya, Katu Vipaka*, with *Srotoshodhana* and *Ashmarihara Prabhava*, helping in diuresis, lithotriptic action, and detoxification while balancing *Vata-Pitta*. Divya Shakti Powder with *Trikatu* [52], *Triphala* [53], *Jeera* [54], and *Nagkesar* [55] primarily exhibit *Katu-Tikta-Kashaya Rasa, Laghu-Tikshna Guna, Ushna Virya, Katu Vipaka,* with a special *Agnideepana-Rasayana Prabhava*, improving *Agni*, reducing *Ama*, and rejuvenating *Ojas*. Prameh Rog Har contains bitter antidiabetic herbs like *Neem* [56], *Karela* [57], *Kutki* [58], *Chirayata* [59], *Jamun* [60], and *Gudmar* [61] with *Tikta-Kashaya Rasa, Laghu-Ruksha Guna, Sheeta Virya, Katu Vipaka*, and a special *Pramehaghna* and *Medohara Prabhava*, making it highly effective in *Prameha* (Diabetes) by reducing *Kapha-Meda* and improving insulin sensitivity. Kidney Shuddhi Ark and Cough Har Powder are dominated by herbs with *Tikta-Kashaya-Katu Rasa, Laghu-Ruksha Guna, Ushna Virya, Katu Vipaka,* having *Mutral, Shothahara, Kapha-Vata Shamaka Prabhava*, helping in kidney cleansing, reducing edema, and relieving respiratory burden. Nervine tonics like Dr. Sukoon with *Ashwagandha* [62], *Brahmi* [63], *Shankhapushpi* [64], and *Vacha* [65] are *Madhura-Tikta Rasa, Snigdha Guna*, *Sheeta Virya, Madhura Vipaka*, with *Medhya-Rasayana* and *Nidrajanana Prabhava*, which pacify *Vata*, reduce stress, improve cognition, and promote restful sleep. Sanjeevani Vati Capsule and Amalpitt Har Powder enhance digestion and immunity through herbs like *Ajwain* [66], *Bhoomi Amla*, *Pippali* [67], *Amalaki*, and *Haritaki* with *Katu-Tikta-Amla Rasa, Laghu-Tikshna Guna, Ushna Virya*, *Katu Vipaka*, having *Agnideepana*, *Rasayana*, and *Ojovardhaka Prabhava*, useful in balancing *Pitta-Kapha* and preventing complications.

CONCLUSION

The following conclusions can be drawn from this case study on treating CKD, T2DM, CAD with hypertension using *Ayurvedic* interventions:

Symptoms: The patient showed significant improvement after treatment when compared to the baseline condition. Weakness, which was initially moderate, was relieved completely. Pain that was intermittent in the left side of the chest and lower back with an intensity of 2/10 was reduced to 1/10, indicating near relief. Urinary changes such as frothiness normalized, reflecting improved renal function. Sleep quality improved remarkably from 4/10 before treatment to 8/10 after treatment, suggesting better rest and recovery. Shortness of breath, which was initially grade 2 (walking slower than peers of the same age), was completely relieved to grade 0, with no breathlessness. Overall, these outcomes demonstrate substantial symptomatic improvement and enhanced quality of life following treatment.

Investigations: Laboratory tests conducted during the treatment period represented the overall health improvement. The Serum urea level before treatment was 137.17 mg/dL and it reduced to 75.44 mg/dL after IPD, indicating enhanced kidney function. The serum creatinine level also reduced from 6.88 mg/dL to 5.58 mg/dL and uric acid was reduced from 7.30 mg/dl to 6.44 mg/dl. These investigation supports the reliability of *Ayurvedic* treatment methods for CKD.

This study concludes that *Ayurvedic* treatments for CKD yielded positive outcomes, including symptom alleviation, improved vital signs, and better laboratory test results. This approach seems to support kidney function and enhance overall patient health. However, additional research with larger, controlled trials is necessary to confirm these findings and develop standardized treatment guidelines.

Reference

National Kidney Foundation. K/DOQI Clinical Practice Guidelines for Chronic Kidney Disease: Evaluation, Classification and Stratification. Am J Kidney Dis. 2002;39:S1-S266.

Chen TK, Knicely DH, Grams ME. Chronic kidney disease diagnosis and management: a review. JAMA. 2019 Oct 1;322(13):1294-304.

Sharma S, Kalra D, Rashid I, Mehta S, Maity MK, Wazir K, Gupta S, Ansari SA, Alruqi OS, Khan R, Khan I. Assessment of health-related quality of life in chronic kidney disease patients: A hospital-based cross-sectional study. Medicina. 2023 Oct 8;59(10):1788.

Fletcher BR, Damery S, Aiyegbusi OL, Anderson N, Calvert M, Cockwell P, et al. Symptom burden and health-related quality of life in chronic kidney disease: A global systematic review and meta-analysis. PLoS Med. 2022 Apr 6;19(4):e1003954.

Swamy S, Noor SM, Mathew RO. Cardiovascular disease in diabetes and chronic kidney disease. J Clin Med. 2023 Nov 8;12(22):6984.

Kim H, Park YM, Ko SH, Cho YJ, Kim HW, Kim YK, et al. Uncontrolled hypertension is associated with an increased risk of end-stage renal disease in patients with type 2 diabetes who underwent post-percutaneous coronary intervention:

A nationwide population-based study. medRxiv. 2024 Apr 22:2024-04.

Schnetzer L, Leiherer A, Festa A, Mündlein A, Plattner T, Mayer G, et al. Type 2 diabetes and chronic kidney disease as long-term predictors of cardiovascular events in patients with coronary artery disease. Eur J Clin Invest. 2025 Mar;55(3):e14374. doi: 10.1111/eci.14374.

Kefale B, Alebachew M, Tadesse Y, Engidawork E. Quality of life and its predictors among patients with chronic kidney disease: A hospital-based cross-sectional study. PLoS One. 2019 Feb 27;14(2):e0212184.

Kumar V, Yadav AK, Sethi J, Ghosh A, Sahay M, Prasad N, et al. The Indian chronic kidney disease (ICKD) study: baseline characteristics. Clin Kidney J. 2022 Jan;15(1):60-9.

Aggarwal A, Sokiya G, Sharma G. Management of chronic kidney disease—an Ayurveda case study. J Ayurveda Integr Med Sci. 2023 Sep 2;8(7):250-6.

Sharma B, Shukla GD, Sharma P. Management of chronic kidney disease by Ayurveda with special reference to Basti. Int Ayurvedic Med J. 2020;8(9):4426-30.

Kuchewar V. Management of chronic renal failure with Ayurvedic therapy – a case study. Int Ayurvedic Med J. 2014;2(1):151-4.

Singh AP, Grover M, Gautam A. Effective management of chronic kidney disease by using Ayurvedic interventions: a case report. Int J Ayurveda Pharma Res. 2021;9(7):26-30.

Iyer R. Ayurvedic pathogenesis of chronic kidney disease: a critical review. Int J Crit Rev. 2022;3(2):45-52.

AlAhmad MM, Al Namer Y, Palaian S, Alomar MJ. A nephrological perspective of herbal remedies on the progression of chronic kidney disease: A systematic review. J Appl Pharm Sci. 2024;14(3):011-25.

Chate SB, Ranade A. Ayurvedic pathogenesis of chronic kidney disease: a critical review. Int J Crit Rev. 2022;3(2):45-52.

Chand GM, Chand TA. Critical review on commonly used herbal drugs in CKD. J Med Plants Stud. 2015;3(4):44-7.

Manish, Chaudhary G, Singh SP, Singh M, Richa. Clinical evaluation of chronic kidney disease management: integrating lifestyle modification and Ayurveda. Int J AYUSH. 2024 Oct;2013(10):1-6. doi: 10.22159/prl.ijayush.v2013i10.1152.

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

Ramteke RS, Thakar AB, Trivedi AH, Patil PD. Clinical efficacy of Gokshura-Punarnava Basti in the management of microalbuminuria in diabetes mellitus. AYU. 2012 Oct 1;33(4):537-41.

Singh L, Khanna C. Textual relook on classical therapeutic applications of an indigenous herb: Gokshura (Tribulus terrestris), a potential Vaajikarana herb. Think India J. 2019 Aug 22;22(16):1434-49.

Kalal P, Surya S, Desai AS. A comprehensive Ayurvedic management of Amavata. AYUSHDHARA. 2024;11(1):62-6. doi: 10.47070/ayushdhara.v11i1.1492.

Chaudhary I, Parveen N, Pushpanjali, Shukla M. Basti Chikitsa. Int J Res Public Rev. 2023;4(7):885-7.

Divya K, Tripathi JS, Tiwari SK. An appraisal of the mechanism of action of Shirodhara. Ann Ayurvedic Med. 2013 Jul;2(3):114-7.

Sharma R, Rai GN, Parida A. A therapeutic efficacy of Shirodhara in Ayurveda: a review study. Int Res J Ayurveda Yoga. 2022 Sep 30;5(9):172-6.

Gupta AK, Gupta T. Standard operative procedure & probable mode of action Shiropichu.

Fatima U, Roy S, Ahmad S, Ali S, Elkady WM, Khan I, et al. Pharmacological attributes of Bacopa monnieri extract: current updates and clinical manifestation. Front Nutr. 2022 Aug 18;9:972379.

Kumawat AR, Mangal G. Patra Pinda Swedana (A unique method of massage with fomentation): a review.

Naqvi U, Margetis K, Sherman AL. Muscle Strength Grading. [Updated 2025 Apr 27]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK436008/

Bakshi SG, Rathod A, Salunkhe S. Influence of interpretation of pain scores on patients' perception of pain: A prospective study. Indian J Anaesth. 2021 Mar;65(3):216-220. doi: 10.4103/ija.IJA_130_21. Epub 2021 Mar 13. PMID: 33776112; PMCID: PMC7989498.

Doos Ali Vand H, Ahmadian Vargahan F, Birashk B, Habibi M, Sadeghniiat Haghighi K, et al. Validity and Reliability of the Dysfunctional Beliefs and Attitudes about Sleep Scale-10 in Iranian Clinical Population.Iran J Psychiatry Behav Sci.2018;12(2):e12288.https://doi.org/10.5812/ijpbs.12288.

Mahler DA, Wells CK. Evaluation of clinical methods for rating dyspnea. Chest. 1988 Mar 1;93(3):580-6.

Das T, Chakraborty SK. Conceptual study of Nidana and Samprapti of Hridroga (heart diseases) in Ayurveda. J Emerg Technol Innov Res (JETIR). 2018;5(11):334.

Salim B, et al. Diabetes induced microalbuminuria - a critical review. Int Ayurvedic Med J. 2020.

Dang P, et al. Chronic kidney disease (CKD) pathogenesis in Ayurveda parlance - a review! Int Ayurvedic Med J. 2024.

Kulkarni AN, Kulkarni RA. Applying Ayurvedic principles for diagnosis and treatment of chronic kidney diseases: an integrative approach. Int J Sci Res (IJSR). 2023;12(7).

Gangwal VA, Neralkar UK. Role of Dosha, Dushya, Strotas in Samprapti of Hypertension with an Ayurvedic perspective. Int Ayurvedic Med J. 2017.

Sakshi C, Rupali, Sonali T, Indu, Importance of Pathya-Apathya in

Ayurveda : A Review Article. J Ayu Int Med Sci. 2023;8(12):125-129. Available From https://jaims.in/jaims/article/view/2846

Rhee CM, Wang AY, Biruete A, Kistler B, Kovesdy CP, Zarantonello D, Ko GJ, Piccoli GB, Garibotto G, Brunori G, Sumida K. Nutritional and dietary management of chronic kidney disease under conservative and preservative kidney care without dialysis. Journal of Renal Nutrition. 2023 Nov 1;33(6):S56-66.

Schrauben, Sarah J.1; Apple, Benjamin J.2; Chang, Alex R.3. Modifiable Lifestyle Behaviors and CKD Progression: A Narrative Review. Kidney360 3(4):p 752-778, April 28, 2022. | DOI: 10.34067/KID.0003122021

Clark WF, Sontrop JM, Huang SH, Moist L, Bouby N, Bankir L. Hydration and Chronic Kidney Disease Progression: A Critical Review of the Evidence. Am J Nephrol. 2016;43(4):281-92. doi: 10.1159/000445959. Epub 2016 May 3. PMID: 27161565.

Gautam S, Kiran UV. Clinical Effects of Yoga and Meditational Practices on the Holistic Health of Chronic Kidney Disease Patients: A Systematic Review. Cureus. 2024 Apr 3;16(4):e57546. doi: 10.7759/cureus.57546. PMID: 38707181; PMCID: PMC11068214.

Maung SC, El Sara A, Chapman C, Cohen D, Cukor D. Sleep disorders and chronic kidney disease. World J Nephrol. 2016 May 6;5(3):224-32. doi: 10.5527/wjn.v5.i3.224. PMID: 27152260; PMCID: PMC4848147.

Bhuvnesh Sharma et al: Management Of Chronic Kidney Disease By Ayurveda w.s.r. To Basti. International Ayurvedic Medical Journal {online} 2020 {cited September, 2020} Available from: http://www.iamj.in/posts/images/upload/4426_4430.pdf

Patel M, Ramanuj P, Patani P. Punarnava: A natural remedy for management of chronic kidney disease. J Cardiovasc Dis Res. 2024;15(11):2500.

Sudhanshu Kumar Meher, P K Mukherjee, S K Banarjee Chaudhury, Bani Marjit, B PShaw. Experimental studies on the Renal Protective effect of Gokshura (Tribulus terrestris Linn) and Varuna (Crataeva nurvala Buch-Ham). Research J. Pharmacology & Pharmacodynamics. 2016; 8(2): 75-82. doi: 10.5958/2321-5836.2016.00014.8

Kakade AB, Kale MS. The review on medicinal use of "Bhumi Amla". Int J Novel Res Dev. 2022 Nov;7(11):b365.

Babar, Tejaswini & Gokhale, Vivek. (2021). "HARITAKI-AN AYURVEDIC LITERATURE REVIEW". International Journal of Scientific Research. 10. 22.

Verma P, Gauttam V, Kalia AN. Comparative pharmacognosy of Pashanbhed. J Ayurveda Integr Med. 2014 Apr;5(2):104-8. doi: 10.4103/0975-9476.131728. PMID: 24948861; PMCID: PMC4061584.

Gupta V, Mahadik R, Asthana S, Asthana M. Apamarga: A concise Ayurvedic review. World J Pharm Med Res. 2023 Aug;9(8):128-35.

Jambi EJ, Alshubaily FA. Shilajit potentiates the effect of chemotherapeutic drugs and mitigates metastasis induced liver and kidney damages in osteosarcoma rats. Saudi J Biol Sci. 2022 Sep 1;29(9):103393.

Sahu S. Ayurvedic Management of Chronic Kidney Disease: a case study. World J Pharm Res. 2021;5:946-53.

Peterson CT, Denniston K, Chopra D. Therapeutic Uses of Triphala in Ayurvedic Medicine. J Altern Complement Med. 2017 Aug;23(8):607-14. doi: 10.1089/acm.2017.0083. Epub 2017 Jul 11. PMID: 28696777; PMCID: PMC5567597.

Hannan MA, Zahan MS, Sarker PP, Moni A, Ha H, Uddin MJ. Protective Effects of Black Cumin (Nigella sativa) and Its Bioactive Constituent, Thymoquinone against Kidney Injury: An Aspect on Pharmacological Insights. Int J Mol Sci. 2021 Aug 23;22(16):9078. doi: 10.3390/ijms22169078. PMID: 34445781; PMCID: PMC8396533.

Thakur S, Kaurav H, Chaudhary G. Mesua ferrea Linn. (Nagkesar): A potent antimicrobial plant species. Int J Curr Pharm Res. 2021;13:6-13. doi: 10.22159/ijcpr.2021v13i4.42734.

Seriana I, Akmal M, Darusman D, Wahyuni S, Khairan K, Sugito S. Neem Leaf (Azadirachta indica A. Juss) Ethanolic Extract on the Liver and Kidney Function of Rats. Sci World J. 2021 Mar 30;2021:7970424. doi: 10.1155/2021/7970424. PMID: 33859543; PMCID: PMC8026305.

Mardani S, Nasri H, Hajian S, Ahmadi A, Kazemi R, Rafieian-Kopaei M. Impact of Momordica charantia extract on kidney function and structure in mice. J Nephropathol. 2014 Jan;3(1):35-40. doi: 10.12860/jnp.2014.08. Epub 2014 Jan 1. PMID: 24644542; PMCID: PMC3956906.

Raut A, Dhami-Shah H, Phadke A, Shindikar A, Udipi S, Joshi J, Vaidya R, Vaidya ADB. Picrorhiza kurroa, Royle ex Benth: Traditional uses, phytopharmacology, and translational potential in therapy of fatty liver disease. J Ayurveda Integr Med. 2023 Jan-Feb;14(1):100558. doi: 10.1016/j.jaim.2022.100558. Epub 2022 Jun 2. PMID: 35659739; PMCID: PMC10105242.

Kumar V, Van Staden J. A Review of Swertia chirayita (Gentianaceae) as a Traditional Medicinal Plant. Front Pharmacol. 2016 Jan 12;6:308. doi: 10.3389/fphar.2015.00308. PMID: 26793105; PMCID: PMC4709473.

Rizvi MK, Rabail R, Munir S, Inam-Ur-Raheem M, Qayyum MMN, Kieliszek M, Hassoun A, Aadil RM. Astounding Health Benefits of Jamun (Syzygium cumini) toward Metabolic Syndrome. Molecules. 2022 Oct 24;27(21):7184. doi: 10.3390/molecules27217184. PMID: 36364010; PMCID: PMC9654918.

Tiwari P, Mishra BN, Sangwan NS. Phytochemical and pharmacological properties of Gymnema sylvestre: an important medicinal plant. Biomed Res Int. 2014;2014:830285. doi: 10.1155/2014/830285. Epub 2014 Jan 6. PMID: 24511547; PMCID: PMC3912882.

Grunz-Borgmann E, Mossine V, Fritsche K, Parrish AR. Ashwagandha attenuates TNF-α- and LPS-induced NF-κB activation and CCL2 and CCL5 gene expression in NRK-52E cells. BMC Complement Altern Med. 2015 Dec 15;15:434. doi: 10.1186/

s12906-015-0958-z. PMID: 26667305; PMCID: PMC4678649.

Mathur D, Goyal K, Koul V, Anand A. The Molecular Links of Re-Emerging Therapy: A Review of Evidence of Brahmi (Bacopa monniera). Front Pharmacol. 2016 Mar 4;7:44. doi: 10.3389/fphar.2016.00044. PMID: 26973531; PMCID: PMC4778428.

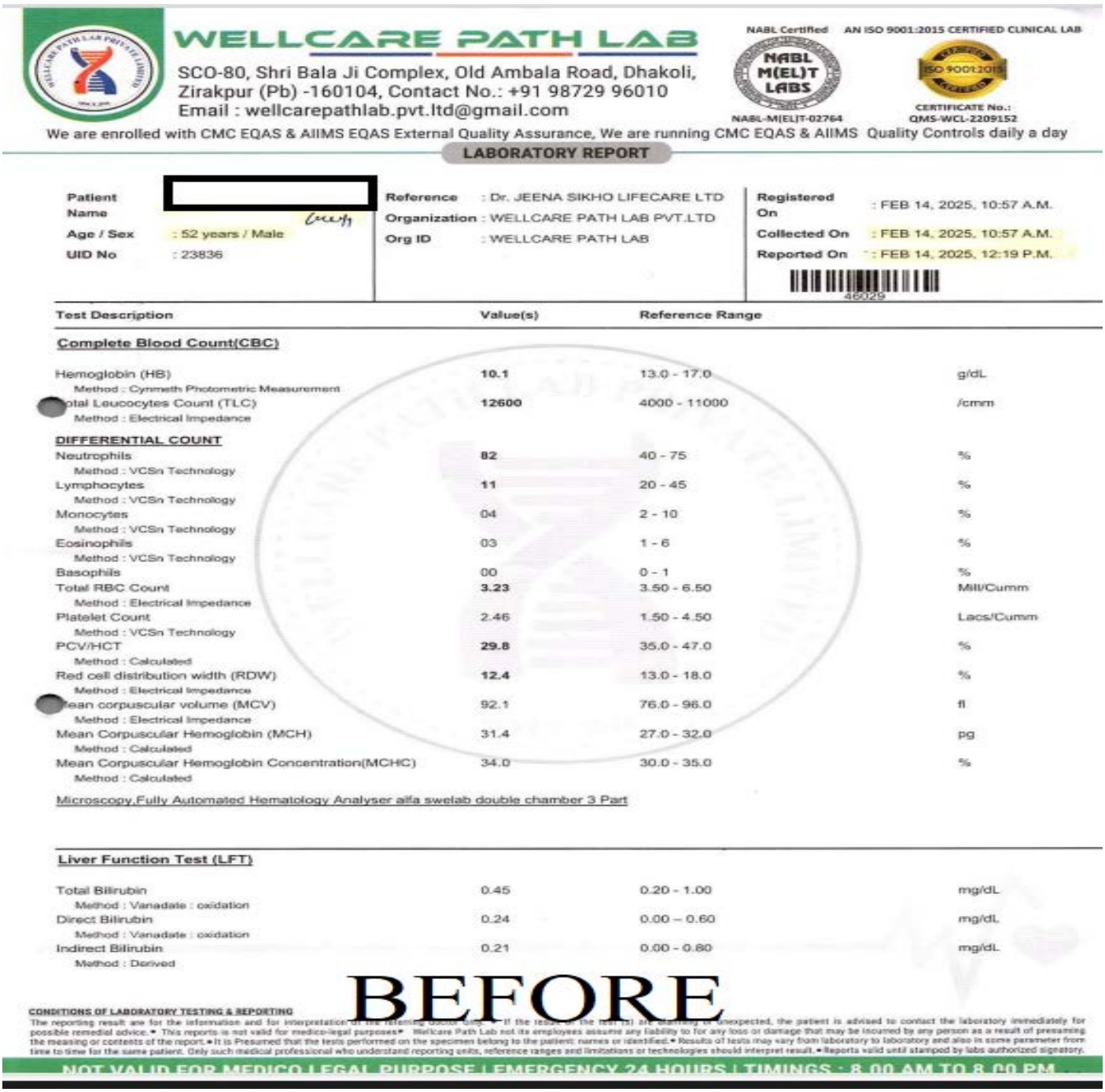
Thakur S, Kaurav H. Ayurvedic Medicinal Importance of Shankhpushpi (Convolvulus pluricaulis): Potential Cognition Boosting Herb. Int J Pharm Sci Health Care. 2021;4. doi: 10.26808/rs.ph.i11v4.01.

Sharma V, Sharma R, Gautam DS, Kuca K, Nepovimova E, Martins N. Role of Vacha (Acorus calamus Linn.) in Neurological and Metabolic Disorders: Evidence from Ethnopharmacology, Phytochemistry, Pharmacology and Clinical Study. J Clin Med. 2020 Apr 19;9(4):1176. doi: 10.3390/jcm9041176. PMID: 32325895; PMCID: PMC7230970.

Yadav R, Pradhan C, Gupta D, Kaushik R. Health benefits of Indian aromatic plant Ajwain (Trachycpermum ammi). Int J Pharm Technol. 2011;3:1356-66.

Pathak M, Vyas H, Vyas MK. A clinical trial of Pippali (Piper longum Linn.) with special reference to Abheshaja. Ayu. 2010 Oct;31(4):442-6. doi: 10.4103/0974-8520.82038. PMID: 22048536; PMCID: PMC3202257.

Fig 1. The laboratory reports before and after treatment



WELLCARE PATH LAB

SCO-80, Shri Bala Ji Complex, Old Ambala Road, Dhakoli, Zirakpur (Pb) -160104, Contact No.: +91 98729 96010
Email : wellcarepathlab.pvt.ltd@gmail.com

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We are enrolled with CMC EQAS & AIIMS EQAS External Quality Assurance, We are running CMC EQAS & AIIMS Quality Controls daily a day

LABORATORY REPORT

Patient Name	[redacted]	Reference	: Dr. JEENA SIKHO LIFECARE LTD	Registered On	: FEB 14, 2025, 10:57 A.M.
Age / Sex	: 52 years / Male	Organization	: WELLCARE PATH LAB PVT.LTD	Collected On	: FEB 14, 2025, 10:57 A.M.
UID No	: 23836	Org ID	: WELLCARE PATH LAB	Reported On	: FEB 14, 2025, 12:19 P.M.

46029

Test Description	Value(s)	Reference Range	
Complete Blood Count(CBC)			
Hemoglobin (HB)	**10.1**	13.0 - 17.0	g/dL
Method : Cynmeth Photometric Measurement			
Total Leucocytes Count (TLC)	**12600**	4000 - 11000	/cmm
Method : Electrical Impedance			
DIFFERENTIAL COUNT			
Neutrophils	**82**	40 - 75	%
Method : VCSn Technology			
Lymphocytes	**11**	20 - 45	%
Method : VCSn Technology			
Monocytes	04	2 - 10	%
Method : VCSn Technology			
Eosinophils	03	1 - 6	%
Method : VCSn Technology			
Basophils	00	0 - 1	%
Total RBC Count	**3.23**	3.50 - 6.50	Mill/Cumm
Method : Electrical Impedance			
Platelet Count	2.46	1.50 - 4.50	Lacs/Cumm
Method : VCSn Technology			
PCV/HCT	**29.8**	35.0 - 47.0	%
Method : Calculated			
Red cell distribution width (RDW)	**12.4**	13.0 - 18.0	%
Method : Electrical Impedance			
Mean corpuscular volume (MCV)	92.1	76.0 - 96.0	fl
Method : Electrical Impedance			
Mean Corpuscular Hemoglobin (MCH)	31.4	27.0 - 32.0	pg
Method : Calculated			
Mean Corpuscular Hemoglobin Concentration(MCHC)	34.0	30.0 - 35.0	%
Method : Calculated			

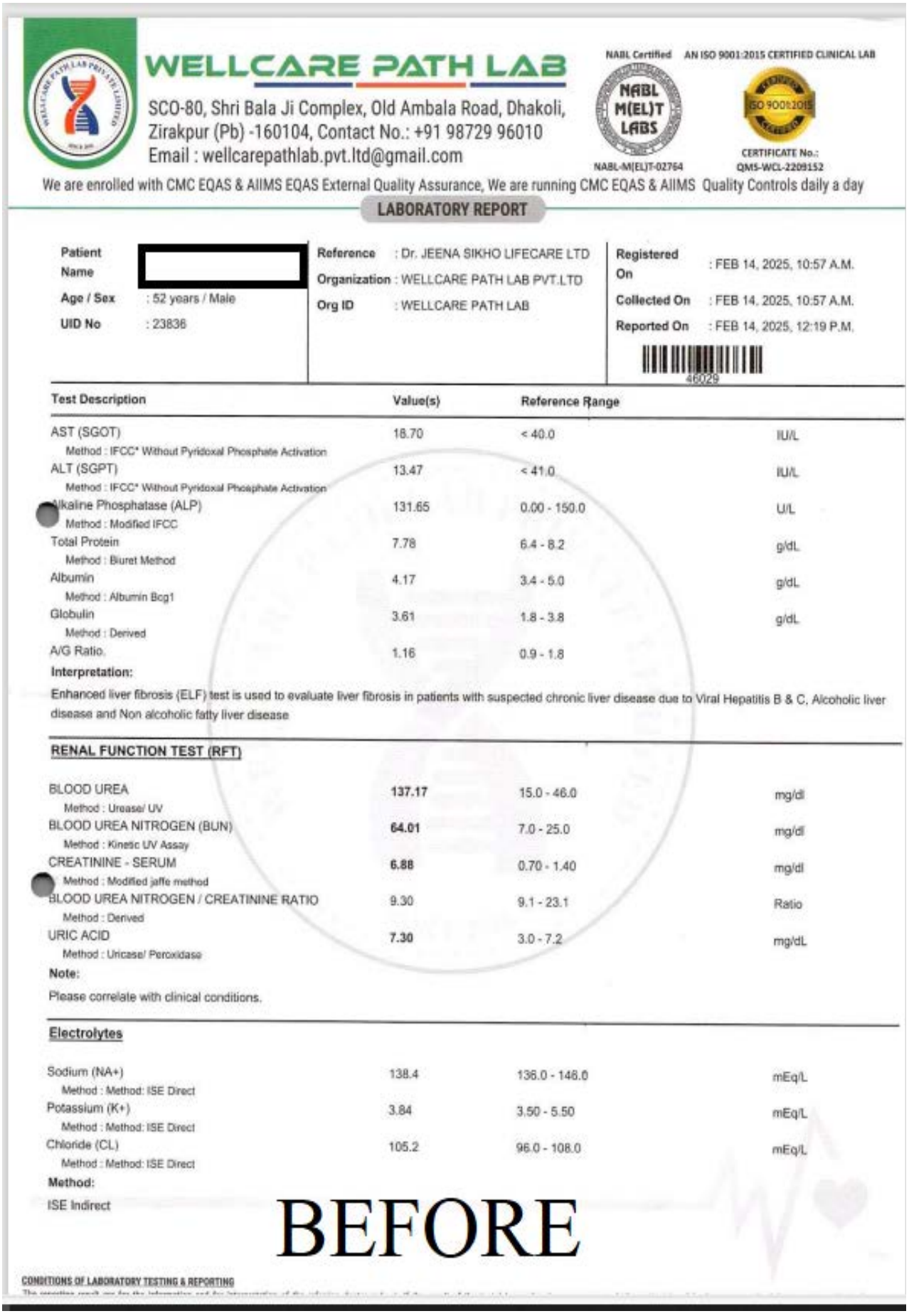
Microscopy,Fully Automated Hematology Analyser alfa swelab double chamber 3 Part

Liver Function Test (LFT)			
Total Bilirubin	0.45	0.20 - 1.00	mg/dL
Method : Vanadate : oxidation			
Direct Bilirubin	0.24	0.00 – 0.60	mg/dL
Method : Vanadate : oxidation			
Indirect Bilirubin	0.21	0.00 - 0.80	mg/dL
Method : Derived			

BEFORE

CONDITIONS OF LABORATORY TESTING & REPORTING
The reporting result are for the information and for interpretation of the referring doctor only. • If the results of the test (s) are alarming or unexpected, the patient is advised to contact the laboratory immediately for possible remedial advice. • This reports is not valid for medico-legal purposes • Wellcare Path Lab not its employees assume any liability to for any loss or damage that may be incurred by any person as a result of presuming the meaning or contents of the report. • It is Presumed that the tests performed on the specimen belong to the patient: names or identified. • Results of tests may vary from laboratory to laboratory and also in some parameter from time to time for the same patient. Only such medical professional who understand reporting units, reference ranges and limitations or technologies should interpret result. • Reports valid until stamped by labs authorized signatory.

NOT VALID FOR MEDICO LEGAL PURPOSE | EMERGENCY 24 HOURS | TIMINGS - 8.00 AM TO 8.00 PM



WELLCARE PATH LAB

SCO-80, Shri Bala Ji Complex, Old Ambala Road, Dhakoli,
Zirakpur (Pb) -160104, Contact No.: +91 98729 96010
Email : wellcarepathlab.pvt.ltd@gmail.com

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NABL M(EL)T LABS
NABL-M(EL)T-02764
CERTIFICATE No.: QMS-WCL-2209152

We are enrolled with CMC EQAS & AIIMS EQAS External Quality Assurance, We are running CMC EQAS & AIIMS Quality Controls daily a day

LABORATORY REPORT

Patient Name	[redacted]	Reference	: Dr. JEENA SIKHO LIFECARE LTD	Registered On	: FEB 14, 2025, 10:57 A.M.
Age / Sex	: 52 years / Male	Organization	: WELLCARE PATH LAB PVT.LTD	Collected On	: FEB 14, 2025, 10:57 A.M.
UID No	: 23836	Org ID	: WELLCARE PATH LAB	Reported On	: FEB 14, 2025, 12:19 P.M.

46029

Test Description	Value(s)	Reference Range	
AST (SGOT) Method : IFCC* Without Pyridoxal Phosphate Activation	18.70	< 40.0	IU/L
ALT (SGPT) Method : IFCC* Without Pyridoxal Phosphate Activation	13.47	< 41.0	IU/L
Alkaline Phosphatase (ALP) Method : Modified IFCC	131.65	0.00 - 150.0	U/L
Total Protein Method : Biuret Method	7.78	6.4 - 8.2	g/dL
Albumin Method : Albumin Bcg1	4.17	3.4 - 5.0	g/dL
Globulin Method : Derived	3.61	1.8 - 3.8	g/dL
A/G Ratio.	1.16	0.9 - 1.8	

Interpretation:

Enhanced liver fibrosis (ELF) test is used to evaluate liver fibrosis in patients with suspected chronic liver disease due to Viral Hepatitis B & C, Alcoholic liver disease and Non alcoholic fatty liver disease

RENAL FUNCTION TEST (RFT)

BLOOD UREA Method : Urease/ UV	**137.17**	15.0 - 46.0	mg/dl
BLOOD UREA NITROGEN (BUN) Method : Kinetic UV Assay	**64.01**	7.0 - 25.0	mg/dl
CREATININE - SERUM Method : Modified jaffe method	**6.88**	0.70 - 1.40	mg/dl
BLOOD UREA NITROGEN / CREATININE RATIO Method : Derived	9.30	9.1 - 23.1	Ratio
URIC ACID Method : Uricase/ Peroxidase	**7.30**	3.0 - 7.2	mg/dL

Note:

Please correlate with clinical conditions.

Electrolytes

Sodium (NA+) Method : Method: ISE Direct	138.4	136.0 - 146.0	mEq/L
Potassium (K+) Method : Method: ISE Direct	3.84	3.50 - 5.50	mEq/L
Chloride (CL) Method : Method: ISE Direct	105.2	96.0 - 108.0	mEq/L

Method:

ISE Indirect

BEFORE

CONDITIONS OF LABORATORY TESTING & REPORTING

WELLCARE PATH LAB

SCO-80, Shri Bala Ji Complex, Old Ambala Road, Dhakoli,
Zirakpur (Pb) -160104, Contact No.: +91 98729 96010
Email : wellcarepathlab.pvt.ltd@gmail.com

NABL Certified NABL M(EL)T LABS NABL-M(EL)T-02764

AN ISO 9001:2015 CERTIFIED CLINICAL LAB
CERTIFICATE No.: QMS-WCL-2209152

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LABORATORY REPORT

Patient Name	[redacted]	Reference	: Dr. JEENA SIKHO LIFECARE LTD	Registered On	: FEB 21, 2025, 12:55 P.M.
Age / Sex	: 52 years / Male	Organization	: WELLCARE PATH LAB PVT.LTD	Collected On	: FEB 21, 2025, 12:55 P.M.
UID No	: 23836	Org ID	: WELLCARE PATH LAB	Reported On	: FEB 21, 2025, 01:06 P.M.

46828

Test Description	Value(s)	Reference Range	
RENAL FUNCTION TEST (RFT)			
BLOOD UREA	75.44	15.0 - 46.0	mg/dl
Method : Urease/ UV			
BLOOD UREA NITROGEN (BUN)	35.21	7.0 - 25.0	mg/dl
Method : Kinetic UV Assay			
CREATININE - SERUM	5.58	0.70 - 1.40	mg/dl
Method : Modified jaffe method			
BLOOD UREA NITROGEN / CREATININE RATIO	6.31	9.1 - 23.1	Ratio
Method : Derived			
URIC ACID	6.44	3.0 - 7.2	mg/dL
Method : Uricase/ Peroxidase			
Note:			
Please correlate with clinical conditions.			
Electrolytes			
Sodium (NA+)	135.2	136.0 - 146.0	mEq/L
Method : Method: ISE Direct			
Potassium (K+)	4.47	3.50 - 5.50	mEq/L
Method : Method: ISE Direct			
Chloride (CL)	105.1	96.0 - 108.0	mEq/L
Method : Method: ISE Direct			
Method:			
[redacted]E Indirect			
Interpretation			

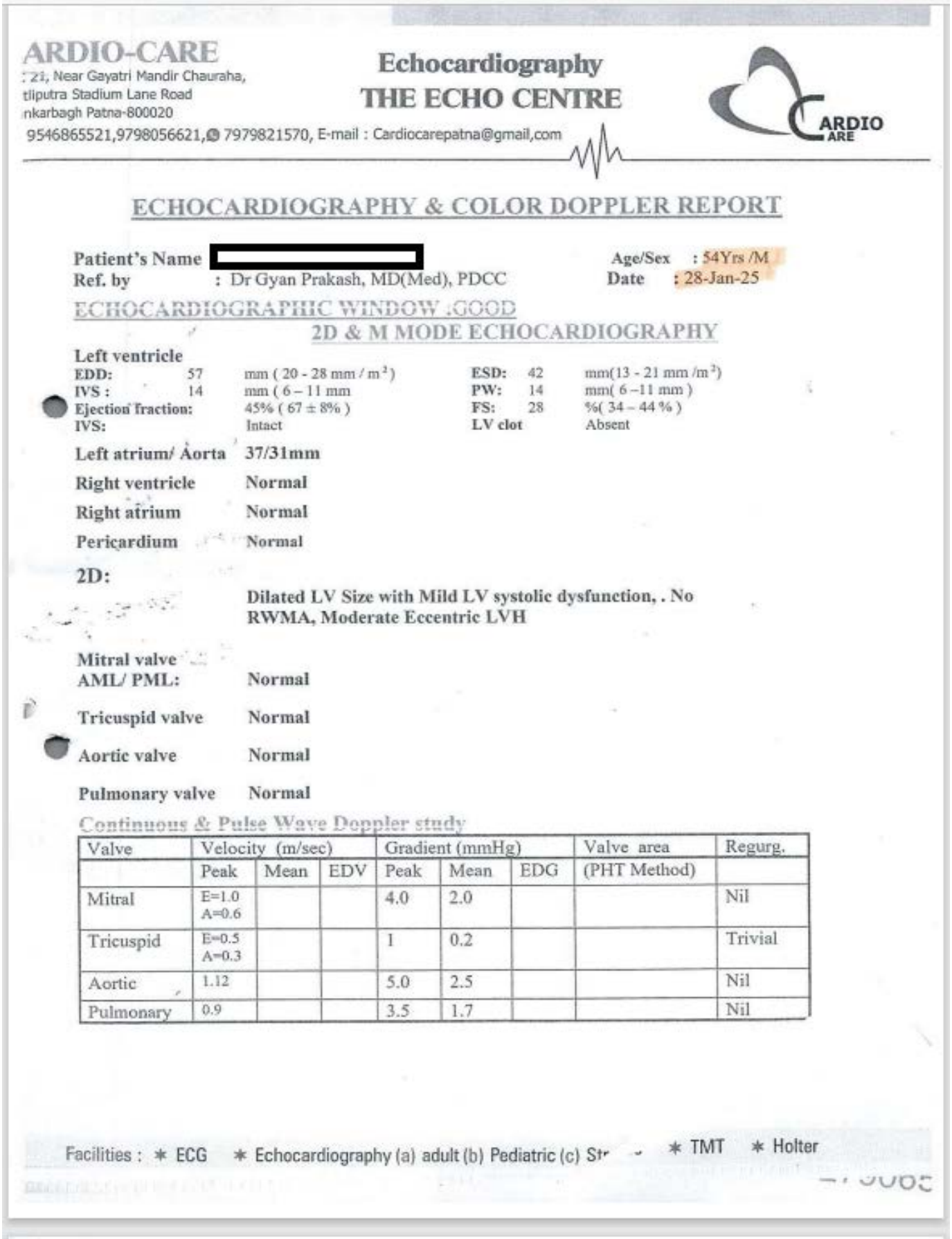
Sodium measurements are used in the diagnosis and treatment of aldosteronism (excessive secretion of the hormone aldosterone), diabetes insipidus (chronic excretion of large amounts of dilute urine, accompanied by extreme thirst), adrenal hypertension, Addison's disease (caused by destruction of the adrenal glands), dehydration, inappropriate antidiuretic hormone secretion, or other diseases involving electrolyte imbalance. Potassium measurements are used to monitor electrolyte balance in the diagnosis and treatment of disease conditions characterized by low or high blood potassium levels. Chloride measurements are used in the diagnosis and treatment of electrolyte and metabolic disorders such as cystic fibrosis and diabetic acidosis

END OF REPORT

AFTER

Dr. Ankit Aggarwal
(Consultant Pathologist)

Fig 5. The 2D Echocardiogram



ARDIO-CARE
721, Near Gayatri Mandir Chauraha,
tliputra Stadium Lane Road
nkarbagh Patna-800020
9546865521,9798056621, 7979821570, E-mail : Cardiocarepatna@gmail,com

Echocardiography
THE ECHO CENTRE

ARDIO CARE

ECHOCARDIOGRAPHY & COLOR DOPPLER REPORT

Patient's Name [redacted] Age/Sex : 54Yrs /M
Ref. by : Dr Gyan Prakash, MD(Med), PDCC Date : 28-Jan-25

ECHOCARDIOGRAPHIC WINDOW :GOOD

2D & M MODE ECHOCARDIOGRAPHY

Left ventricle

EDD:	57	mm (20 - 28 mm / m^2)	ESD:	42	mm(13 - 21 mm /m^2)
IVS :	14	mm (6 – 11 mm	PW:	14	mm(6 –11 mm)
Ejection fraction:		45% (67 ± 8%)	FS:	28	%(34 – 44 %)
IVS:		Intact	LV clot		Absent

Left atrium/ Aorta 37/31mm

Right ventricle Normal

Right atrium Normal

Pericardium Normal

2D:

Dilated LV Size with Mild LV systolic dysfunction, . No RWMA, Moderate Eccentric LVH

Mitral valve
AML/ PML: Normal

Tricuspid valve Normal

Aortic valve Normal

Pulmonary valve Normal

Continuous & Pulse Wave Doppler study

Valve	Velocity (m/sec)			Gradient (mmHg)			Valve area	Regurg.
	Peak	Mean	EDV	Peak	Mean	EDG	(PHT Method)	
Mitral	E=1.0 A=0.6			4.0	2.0			Nil
Tricuspid	E=0.5 A=0.3			1	0.2			Trivial
Aortic	1.12			5.0	2.5			Nil
Pulmonary	0.9			3.5	1.7			Nil

Facilities : * ECG * Echocardiography (a) adult (b) Pediatric (c) St- * TMT * Holter

DIO-CARE
ear Gayatri Mandir Chauraha,
Stadium Lane Road
gh Patna-800020
365521,9798056621, 7979821570, E-mail : Cardiocarepatna@gmail,com

Echocardiography
THE ECHO CENTRE

CARDIO CARE

COLOUR FLOW IMAGING

Trivial TR, No MR, No PR/AR
No shunt flow

COMMENTS :

- Dilated LV and normal LA Cavity
- Moderate Eccentric LVH
- No RWMA , Global LVEF = 45%
- No MR, Trivial TR, No PAH
- Mild LV systolic dysfunction
- Grade I LV diastolic Dysfunction
- All cardiac valves are normal
- No MS / TS / PS / PR/AR
- No clot / vegetation /pericardial effusion.

IMPRESSION:

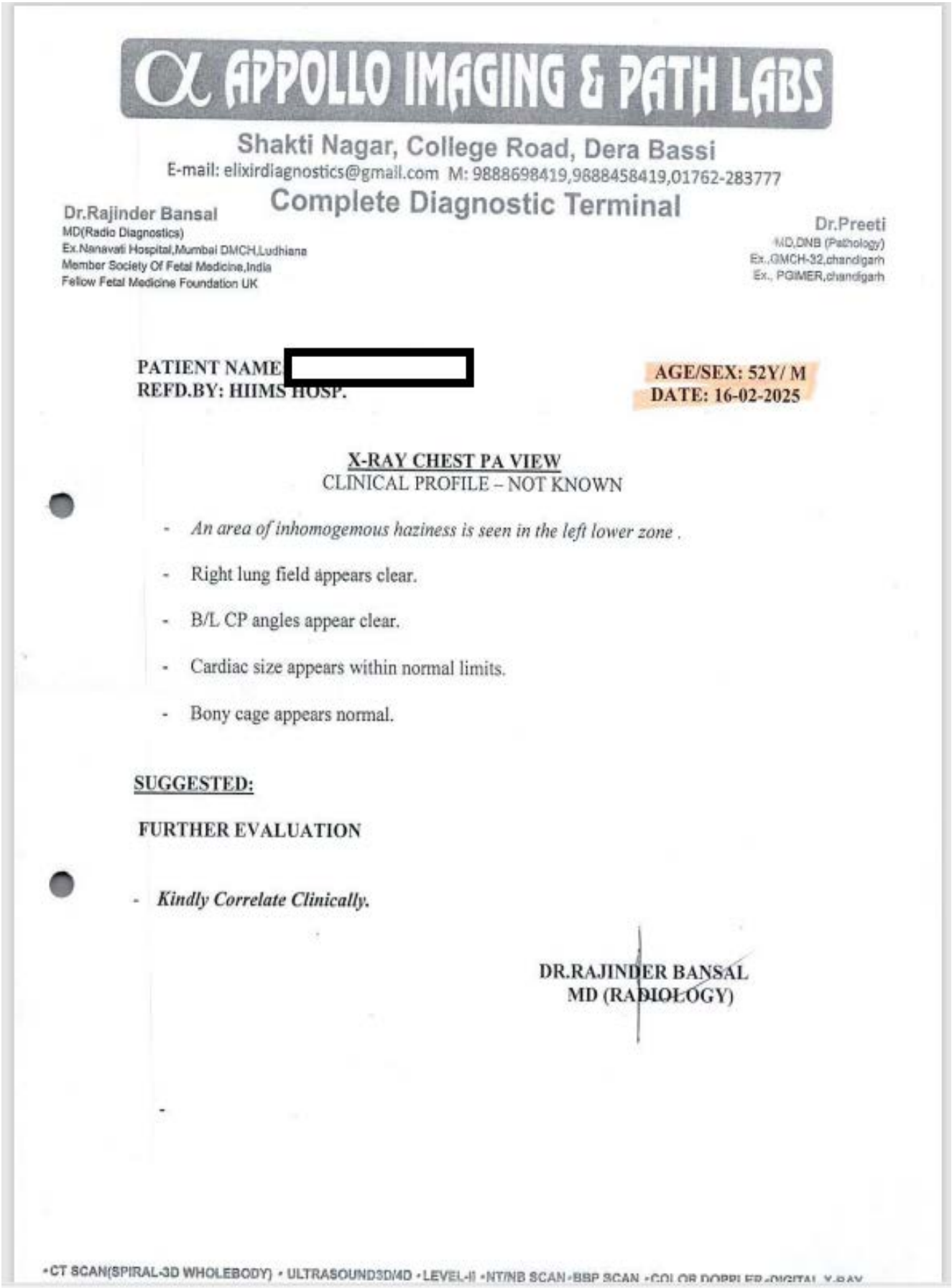
Moderate Eccentric LVH
Dilated LV and normal LA Cavity
No MR, Trivial TR, No PAH
Grade I LV diastolic Dysfunction
Mild LV systolic dysfunction, LVEF – 45%
No clot / vegetation /pericardial effusion.

DR. U.N. SINGH
MD (Medicine), Gold Medalist.
DM (Cardiology) SGPGIMS
Asst. Proff.(Cardio) PMCH & IGIC Patna

Facilities : * ECG * Echocardiography (a) adult (b) Pediatric (c) Stress * TMT * Holter

Please correlate clinically. Not valid for medico-legal purposes.

Fig 6. Chest X-Ray



APPOLLO IMAGING & PATH LABS

Shakti Nagar, College Road, Dera Bassi

E-mail: elixirdiagnostics@gmail.com M: 9888698419,9888458419,01762-283777

Complete Diagnostic Terminal

Dr.Rajinder Bansal
MD(Radio Diagnostics)
Ex.Nanavati Hospital,Mumbai DMCH,Ludhiana
Member Society Of Fetal Medicine,India
Fellow Fetal Medicine Foundation UK

Dr.Preeti
MD,DNB (Pathology)
Ex.,GMCH-32,chandigarh
Ex., PGIMER,chandigarh

PATIENT NAME [redacted]
REFD.BY: HIIMS HOSP.

AGE/SEX: 52Y/ M
DATE: 16-02-2025

X-RAY CHEST PA VIEW

CLINICAL PROFILE – NOT KNOWN

- *An area of inhomogemous haziness is seen in the left lower zone .*
- Right lung field appears clear.
- B/L CP angles appear clear.
- Cardiac size appears within normal limits.
- Bony cage appears normal.

SUGGESTED:

FURTHER EVALUATION

- ***Kindly Correlate Clinically.***

DR.RAJINDER BANSAL
MD (RADIOLOGY)

•CT SCAN(SPIRAL-3D WHOLEBODY) • ULTRASOUND3D/4D •LEVEL-II •NT/NB SCAN •BSP SCAN •COLOR DOPPLER •DIGITAL X-RAY