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Case Study

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MANAGEMENT OF CHRONIC KIDNEY DISEASE THROUGH AYURVEDA MEDICNE KF-7 & UROCID TABLETS

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ABSTRACT

Chronic kidney disease is progressive forms of renal disorders associated with reduced renal function having no well known etio-pathogenesis. The available treatment modalities in conventional system of medicine are still evolving but peritoneal and hemo-dialysis along with nutritional supplements and renal transplant is the final step. In this regard Ayurveda provides leads through its holistic line of management by incorporating dietary & lifestyle invention and bio-balancing effects of Ayurvedic drugs. The present case is totally treated through Ayurvedic approach and it seems to be effective and safe.

KEYWORD: Ayurvedic drugs, CKD, Mutraroga, Mutrakrichchra, Punarnawa.

INTRODUCTION

Chronic kidney disease (CKD) is progressive loss in renal function over a period of months or years. It is also called as chronic kidney failure. Signs and symptoms of kidney disease are often nonspecific, meaning they can also be caused by some other illnesses because kidneys are highly adaptable organ in the body and able to compensate for its lost function. The signs and symptoms may appear at the stage of irreversible damage, which include nausea, vomiting, loss of appetite, fatigue & weakness, sleep problems, changes in urine output, decreased mental sharpness, muscle twitches & cramps, hiccups, swelling of feet & ankles, persistent itching, shortness of breath, high blood pressure (hypertension) etc. [1] Often, it is diagnosed as a result of screening of people known to be at risk of kidney problems, such as those with high blood pressure or diabetes and those with a blood relative with renal disorders. It is considered as long term form of kidney disease and is differentiated from

acute kidney disease in that the reduction in kidney function must be present for over 3 months. It is an internationally recognized public health problem affecting 5-10% of world population. [2] CKD is identified by blood test for creatinine, which is a breakdown product of muscle metabolism. Higher level of creatinine indicate a lower glomerular filtration rate and as a result a decreased capability of the kidneys to excrete waste products. The modern management of CKD is not satisfactory and the ultimate goal is renal transplant. It seeks attention from nephrologists and researchers to find out suitable remedial measure from other alternative resources, Ayurveda is one of them. The management diseases in Ayurveda are based on its totalistic effect of drugs and measures with minimal unwanted and side effects. Ayurveda proclaims that naming of diseases is not necessary but the mainstay is to assess the *Dosha, dushya, adhishthana* along with strength of disease and patient, then incorporate the appropriate therapeutic interventions. The disease CKD is not fairly known in Ayurveda, but on the basis of pathogenetic events we can assess and plan the management. In this regard we share our clinical experience of a 60 years old female who was suffering from chronic kidney disease since last 10 months.

MEDICAL CASE HISTORY

The summarized form of medical case history of the patient was as follows:

Mrs laxmina devi, a 60 years old housewife, was brought to us at the Kayachikitsa OPD, S.S. Hospital, IMS, BHU with complaints of breathlessness, reduced appetite, swelling over face and reduced urinary output since last 10 months. According to patient before 10 months she had complaint of frequent onset of high grade fever with chills increased frequency of micturition and reduced appetite. She took treatment for this from local doctor as well as well equipped hospital but she got no any relief in clinical & laboratorial outcome and expenses lot money during this period. Nephrologists advised to the patient for dialysis and if the problems are under control then go for renal transplant at PGI Lucknow or AIIMS New Delhi. Due to worsening of clinical condition she takes hemodialysis twice. But her families could not wear the burden of dialysis and unable to arrange kidney for transplant due to poor socio-economic status. Gradually after 2 months her signs and symptoms get aggravated and she developed breathlessness, pedal and facial edema. She has taken treatment from local doctors and got little relief in clinical symptoms. For the search of better management and advice by someone she came S.S. Hospital, Kayachikitsa OPD, IMS, BHU.

Patient has H/O HTN since 3 years but she didn't take regular medicine.

Patient has no H/O DM, TB or any allergy, no H/O worm infestation, hemorrhoids or trauma. No H/O any chronic inflammatory condition likes RA, carcinoma. No H/O jaundice.

We carefully examined all the reports made available to us pertaining to the investigations and treatment done till date in this case. All the routine investigations were done. There was no place for diagnostic confusion as per the clinical picture and the investigation reports were in favor of diagnosis of chronic kidney disease. She was treated by allopathic nephrologist's doctors but she & families were no satisfied.

CHIEF COMPLAINTS

Difficulty in breathing, reduced appetite, swelling over face & lower limb, feverishness, incomplete evacuation of bowel, reduced urinary output and general weakness- since last 10 months.

PHYSICA	L EXA	MINA 7	ΓΙΟΝ
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General condition- Ill looking

B.P.:122/80mm of Hg. PR:85 regular, full bound Temprature:98.4° F

Respiration: 18/min

Tonsils: Normal (not enlarged)

Tongue: Uncoated Thyroid: Not enlarged

Jugular venous pressure: Not raised

Pallor: *Present*(++) Icterus: Absent Clubbing: Absent Cyanosis: Absent

Lymph node: Not palpable

Edema: Pedal edema, eyelids & facial

swelling present

Lymphadenopathy: Not noticeable

Local lesion: Absent

PERSONAL DETAILS:

Build - lean Height - 5.3" Weight - 45 kg

Personal history: Diet: mixed

Appetite: reduced

Bowel habits: constipated & off and on

mucoid stool

Menstruation history- normal & regular Menstrual cycle- 15 to 20 days, lasting for 3-5 days, No abnormal vaginal bleeding and

discharge.

Micturition habit: reduced frequency, quantity and presence of sediments.

Sleep: disturbed

Marital status: married Addiction: no addiction

Family history: no any history present

Systemic examination:

CNS: Well oriented to person, place and time with intact higher mental function (memory, speech & intelligence)

Motor- Normal DTR, Plantar-flexion

Sensory- Intact sensory function (touch, pain, temp. pressure)

CVS: Normal apex beat in 5th ICS, no murmur found.

R/S: Inspection-B/l symmetry with normal movement of chest having no any scar. No

abnormal pulsation

Palpation-Not any tenderness

Percussion- Normal resonating note.

Auscultation- b/l equal air entry. b/l basal crepts present.

P/A: Normal scaphoid shape of abdomen with no any scar mark or venous engorgement. Abdomen is Soft, non-tender no organomegaly.

Investigation at the time of admission

CBC:

Hb- 7.5g/dl

TLC- 6,900/cu.mm DLC- N₇₃ L₁₈ E₁ M₅

RBC: 256000/µl

HCT: 23.2%

MCV: 90fl

MCH: 29.7pg

PLT: 160000/µl

GBP: anisopoikilocytosis +, microcytosis ++++, hypochromia++++, no haemoparasites

seen

Serum iron: 52μg/dl TIBC: 292 μg/dl RBS: 91.7mg/dl

Lipid profile: within normal range.

LFT:

Total bilirubin: 0.9mg/dl Direct bilirubin:0.6mg/dl Total protein: 5.5 gm/dl Albumin: 2.7 gm/dl

AST: 30 u/l ALT: 44 u/l ALP: 300 u/l **RFT**: Na⁺ -142.2meq/l

 K^+ -4.8meq/l

Cl -107.1meq/l

Creat-7.1 mg/dl

urea- 225 mg/dl

Serum Calcium: 11mg/dl Serum Phosphate: 3.1 mg/dl

Stool R & M: ova and cyst-negative &

occult blood- absent.

Urine (R/M):

Reaction- Acidic

Albumin-++

Sugar- Nil

Cast- Granular

Pus cell- 4-6/hpf

RBCs-8-10/hpf

Epithelial cell- 2-4/hpf

24 hr urinary protein: Total volume-

1000ml & total protein- 44mg% ECG: *left ventricular hypertrophy*

X ray chest: cardiomegaly **US abdomen**: (23/11/2015)

s/o of b/l diffuse renal parenchymal disease

Treatment history: H/O iron supplements, multivitamins and antibiotics and two times hemodialysis (1sttime- December 2015 and 2nd time February 2016).

Treatment given at the time of admission: After thorough physical & systemic examination along with laboratorial investigations, the patient was admitted in Female Kayachikitsa ward (bed no-20) and the following Ayurvedic medicines were given after meal with water.

- KF-7 (Biosrum) 2000 mg) 1 TDS
- UROCI (BiosrumD 1000 mg BD,
- Syp. Green Punarnawa- 20 ml BD
- Tab *Abhra lauh* (125mg)- 1 BD
- Haritaki Churna- 1tsf/HS with warm water.

Diet

Patient was advised to restrict salty, fried, spicy, heavy and oily food items. She was restricted for fluid intake & take fluid as per 24 hours urine output and protein rich diet.

The treatment response was assessed on the basis of clinical symptomatology after a course of medicines for 15 days and significant improvement was found in the associated symptoms. The patient was then discharged and advised to continue the following medicine for 15 days and asked to report.

In first follow up (after 15 days) it was found that patient got 50% improvement. The improvement in term of the patient's view in clinical symptoms was as follows:

- Reduction in breathlessness
- Reduction in facial and pedal edema
- Improvement in desire of intake of food
- Improvement in bowel function
- Improvement in weakness

Relevant investigations

CBC: Hb-8.0g/dl	<u>RFT</u> : Na ⁺ -135.2meq/l
TC-7030/µl	K^+ -4.1 meg/l

DC- N₆₈, L₂₂, E₄, M₆ Cl⁻ -108.1meq/l

RBC: 257000/µl Sr. Creat-5.8 mg/dl

HCT: 24.4% Sr. Cal: 10.4 mg/dl

MCV: 94.0fl Blood urea- 202 mg/dl

MCH: 31.0pg Phosphate-3.7mg/dl

After thorough interrogation and physical and systemic examination the following medicines advised for another 15 days:

Treatment advised: *Gokshuradi gugglu* (125mg)-2 BD, *Punarnawastaka kwath* -40 ml BD, *Prawal pishti*(125mg)-1TDS, *Punarnawa mandoor* (500mg) 1TDS & *Haritaki Churna*-1tsf/HS with warm water.

Phosphate-3.9mg/dl

In Second follow up (after 15 days) it was found that patient got 70% improvement in clinical symptoms. The improvement in term of the patient's view in clinical symptoms was as follows:

- Reduction in breathlessness
- Reduction in facial and pedal edema
- Improvement in desire of intake of food
- Improvement in bowel function
- Improvement in weakness

MCH: 30.0pg

CBC: Hb-9.2g/dl	<u>RFT</u> : Na^+ -140.2meq/l
TLC-6570/ μ l	K^+ -3.8meq/l
DLC- N_{59} , L_{25} , E_2 , M_4	Cl ⁻ -105.1meq/l
RBC: 267000/µl	Sr. Creat-4.5 mg/dl
HCT: 29.4%	Sr. Cal: 11.0 mg/dl
MCV: 95.0fl	Blood urea- 187 mg/dl

After physical and systemic examination the following medicines were advised for 15 days: Treatment advised: Syp. *Green Punarnava-20* ml BD, *Trin Panchamool kwath -40* ml BD, *Prawal pishti* (125mg)-1TDS, Tab. *Chandraprabha vati* (125mg) 2BD, *Haritaki Churna-1tsf/HS* with warm water and also advised to the patient attendant to take consultation from Nephrology Department, IMS, BHU.

DISCUSSION

It would be right to say that modern system of medicine is capable of offering reasonably effective treatment for so many diseases. The diagnostic tools to find out disease causing factors are also equally good. But here in this case neither the investigations nor the treatment helped much for considerable period of time. Patient was not satisfied by modern management. In this case we observed that the given Ayurvedic drugs were significantly reduced the blood urea, sr. creatinine level and improved the hemoglobin level. This is probably due to reno-protective and nephro-genetic effect of *Punarnawa*^[3-7], which is the major part of current Ayurvedic prescription. The hemoglobin level was also improved from 7.5 gm/dl to 9.2 gm/dl, without any conventional hemetinic drugs and blood transfusion because of using Tab. *Abhralauha* and *punaranawa mandoor*, which provides sufficient nutrition at the level of *Saptadhatus* and helps in the blood formation by directly or indirectly

interfering to the hemopoetic system. The Tab. *UROCID* is also worked as cardiotonic and cardioprotective. Further, it along with *Gokshuradi guggulu*, *trinpanchamoola kwatha* and *KF-7Biosrum* not only reduced the fluid overload due to renal impairment by diuretic action but also strengthen the renal and cardiac systems.^[8-10] The *Haritaki churna* stabilizes the gut system by improving the gut musculature and purgative action.^[11-12] Thus, we can say that the given Ayurvedic drugs are effective and completely safe. It warrants such type of therapeutic intervention on large sample of population.

CONCLUSION

Effectively these Ayurvedic drugs have capacity to normalize associated clinical symptoms and laboratorial parameters pertaining to CKD patients. It provides leads for further research based on scientific parameters.

Drug Sources

- 1. Punarnavastaka kwath (Bhaishajyaratnawali)
- 2. Punarnava mandoor (Bhaishajyaratnawali)
- 3. KF-7 Biosrum tab
- 4. Urocid Biosrum
- 5. Gokshuradi gugglu (Bhaishajyaratnawali)
- 6. Haritaki Churna (Bhaishajyaratnawali)

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