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ROLE OF *AYURVEDA* IN THE MANAGEMENT OF CHRONIC KIDNEY DISEASE W.S.R *MUTRAGHATA*: A CASE STUDY

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ABSTRACT

Chronic kidney disease (CKD) is progressive form of renal disorders associated with reduced renal function. It reduces the productive years of life and life expectancy, increases health expenditure and socioeconomic burden on individual as well as on society. Patients of CKD have to undergo treatment modalities such as dialysis, kidney transplantation that are not easily affordable to all. Hence, there is a need to establish affordable and safe medical treatment for such patients. Chronic kidney disease can be managed with lifestyle modification and early *Ayurveda* intervention thus It is possible to reduce morbidity and mortality, which occurs due to CKD. In *Ayurveda*, CKD may be compared with the subtypes of *Mutraghata* (~obstructive and suppressive uropathies), for which extensive treatment modalities have been described in ayurvedic classics. In present study, a 28 year old female patient with CKD stage III diagnosed in a government hospital of Delhi was advised renal transplant and dialysis. She visited kayachikitsa opd for treatment. She was treated for around 2 months with ayurvedic medicines and showed marked improvement in subjective and objective parameters post treatment.

KEYWORDS: *Ayurveda*, Chronic kidney disease, *Mutraghata*.

INTRODUCTION

CKD is characterised with abnormal kidney function for more than 3 months or, it may be defined as the kidney condition with glomerular filtration rate (GFR) <60 mL/min per 1.73 m2, abnormal biochemical changes with histological and structural abnormalities of kidney.[1]

Diabetes and hypertension constitute the major risk factors of CKD. As the patient remains asymptomatic for long time or have nonspecific signs and symptoms such as lethargy, fatigue, and generalized bodyache etc. which is many times left unnoticed during early stages and generally diagnosed at later stages.[2] Confirmed diagnosis is made after the routine investigations of USG, urine and blood, i.e., proteinuria, elevated serum creatinine levels, GFR, serum electrolyte level, reduced size of kidney in USG etc. Proteinuria, serum creatinine levels are indicator of disease progression. Renal biopsy confirms CKD and its underlying cause, depicting changes histologically. Abnormal renal function is seen in CKD, but over the period of time, disease manifests in five stages and is finally progresses as the end-stage renal disease.In Ayurveda CKD is nearly comparable to *mutrakshaya*(~Oligouria), one of the subtype of *Mutraghata* mentioned by ancient seers [3]. According to *Sushruta samhita Mutrakshaya* occurs in *Ruksha* and *Klanta* (~rough and exhausted) person, when vitiated *Pitta* and *Vata* (~bodily humour) located in the urinary bladder causes decreased urine production with burning sensation and pain.[4] General treatment is adopted considering *Doshas(~humour),dhatus(~Tissue), agni(~digestive and metabolic capacity),aushadhi* (~drug) and *roga* (~disease).Various *Kwatha* (~decoctions), *Ghrita* (~clarified butter), *Ahara*(~meal), *asava* (~edibles, and fermented decoction,), etc., are useful as prescribed in classical ayurvedic texts.

MATERIAL AND METHODS

Case presentation

A 28 years old non-diabetic, hypertensive female patient came to out -patient department with complains of headache, shortness of breath, pedal edema, anorexia and frothy urination. Patient was normal 3 years back and then during 3rd trimester of her gestation She developed Systemic Hypertension. After that in a regular screening her CKD stage III has been diagnosed in a govt. allopathic Hospital, Delhi. Progressively she developed Fatigue, shortness of breath, frothy urination and pedal edema. She came with her reports with abmormal KFT and lost Cortico-medullary differentiation in USG. Her Blood urea level was 52 mg/dl, serum creatinine 3.2 mg/dl, uric acid 7.2 mg/dl. There was no significant history of past illness.

Clinical findings

General condition – Fair

Edema – Present

Pallor – ++

Icterus – Absent

Lymphadenopathy – Absent

BP- 130/100 mmHg

RR- 20/ MIN

PR- 93/ min

Diagnostic assessment

It was done with the help of blood examination, i.e., hemoglobin, Blood urea, serum creatinine, serum uric acid levels.

TIMELINE

Treatment was given for around 2 months.

THERAPEUTIC INTERVENTION

As per table 1 with follow ups and assessment through blood test has been performed.

Table 1: Treatment Given To Patient.

S. NO.	NAME OF DRUG	DOSE OF DRUG	KALA	FREQUENCY AND ANUPAN
1.	***Gokshuradi gugullu***	2x250mg Tabs	After meals	Two times a day with normal water
2.	**Cap *Punarnava***	2x150mg caps	After meals	Two times a day with normal water
3.	***Shweta Parpati***	125 mg	After meals	Two times a day with normal water
4.	***Ashwagandha churna***	3gms	After meals	Three times a day with milk

RESULT

Significant improvement both in subjective and objective parameters seen with advancing duration of treatment as per Table 2 & Table 3.

Table 2: Changes In Subjective Parameter.

S.no.	Subjective Parameter	Basal visit	Ist follow-up (after 20 days)	IInd follow-up (after 40 days)	IIIrd follow-up (after 60 days)
1	Headache	+++	+++	++	-
2	Dyspnea	+++	++	+	+
3	Pedal edema	+++	++	++	+
4	Frothy urine	++++	+++	+	-
5	Anorexia	++	+	-	-

Table 3: Changes In Objective Parameter.

S. No.	Investigation	Basal visit	Ist follow-up (after 20 days)	IInd follow-up (after 40 days)	IIIrd follow-up (after 60 days)
1	Hb	8.6 gm%	9.0gm %	9.4gm %	10.2gm %
2	Sr. Urea	52 mg /dl	41 mg /dl	34 mg /dl	29 mg /dl
3	Sr. Creatinine	3.2 mg/dl	2.2 mg/dl	1.4 mg/dl	0.63mg/dl
4	Sr. Uric acid	7.0 mg/dl	6.5 mg/dl	5.9 mg/dl	5.0 mg /dl

DISCUSSION

The principle of ayurvedic treatment in CKD lies in balancing the vitiated doshas and improving the GFR which gets reflected as normalization of KFT. CKD is a disease of *mutravaha srotas*(~urinary tract) and adhishthan(~abode) are *Vrikka*(~kidney) and *Basti*(~urinary bladder) which is a natural *adhishthan* of *vata*. To treat CKD on Ayurvedic principles, it is necessary to identify the nature of disease in terms of its component *Dosha* (~humour), *Dushya* (~part which is affected), and *Adhishtana* (~abode). It is essential to break the pathogenesis to get the desired results. In this study, *Gokshuradi guggulu* was given to patient which is indicated in *mutraghat* and *mutrakrichha(~dysuria).*[5] It increases GFR, and is a *mutral (*~diuretic), normalises KFT and thus improves the overall condition associated with CKD. *Punarnava* increases renal perfusion and also useful in reducing *shotha (*~edema*)*. It is anti-proteinuric and nephroprotective drug.[6] Shweta parpati is an *kshar (*~alkalising agent*)* and diuretic drug which increases GFR and is used in *Mutraghat*. Its diuretic property is useful in reducing edema and controlling Blood pressure.

CONCLUSION

All these ayurvedic drugs by their properties and actions improves renal perfusion, increases GFR, decreases blood urea, serum creatinine and uric acid levels. Thus improves Renal function and decreases proteinuria. These are nephroprotective drugs also improves anaemia and edema and so can be used for the management of Chronic Kidney Disease cases.

FINANCIAL SUPPORT

Nil.

CONFLICT OF INTEREST

There is no conflict of interest.

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