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CASE REPORT

A CASE STUDY OF CHRONIC RENAL FAILURE SUCCESSFULLY MANAGED WITH AYURVEDIC TREATMENT

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Abstract:

A 38 years old male patient of chronic renal failure (CRF) came to P D Patel Ayurveda Hospital, Nadiad with the complaints of periorbital puffiness on face, pedal edema, hyper tension, oliguria, massive proteinuria and high level of serum creatinine since 4 months. Patient was on regular hemodialysis twice a week. Patient was treated for 40 days as indoor patient with oral medicaments including *gokṣurādiguggulu, varuṇādi kvātha, bhūmyāmalakī* and *rasāyana cūrṇa* along with *basti* therapy. Patient responded well with *Ayurvedic* treatment. Hemodialysis was done only for one time initially during the commencement of the therapy. Serum creatinine level was significantly reduced from 6.6 mg/dl to 5.7 mg/dl during hospitalized period. Serum creatinine reduced up to 3.9 mg/dl after the 2 months of follow up period. Total urine output was gained up to normal level. After completion of basti, oral drug was continued. And dialysis is not needed even after completion of the 10 months of follow-up, eGFR was increased up to 16 ml/min/1.73m^2 from 8ml/min/1.73m^2 which clearly indicates that patient is shifted to stage 5 chronic kidney disease to stage 4 kidney disease.

Key words: *Bastikarma, kvātha, rasāyana,* hemodialysis,

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INTRODUCTION:

Chronic renal failure is a condition in which normal kidney functions are hampered. The most common form of treatment in conventional medicine is haemodialysis[1] which replaces some functions of kidney but does not replace its endocrine and metabolic functions. Another option is renal transplant, which may offer the endurance of some years in patients with end stage renal failure. Though both these treatments are effective, they are not affordable and approachable, and hence not well acceptable by Indian population. Patients of chronic kidney disease are being treated successfully at P.D. Patel Ayurveda Hospital since long time and it is a very famous hospital in the subject of management of chronic kidney disorders [2],[3],[4],[5].

In Ayurveda, CRF is a disease of *mūtravahasrotas*. All the three *doṣas* as well as all the *Dūṣyas* are involved in the disease. Morbid changes in the srotas due to accumulation or impact of *doṣas* on them are responsible for blockage which can lead to reduce kidney functions like filtration, reabsorption and secretion depending on the involvement of glomeruli and/ or renal tubules. Involvement of *dūṣyas* can be understood by analysis of clinical picture of CRF. Fluid and electrolyte imbalance, reduced immunity and cardiovascular complication of CRF can be taken as *rasa duṣṭi*. Anemia and bleeding tendencies are caused by *raktaduṣṭi*, myopathy due to *māṁsaduṣṭi*, dyslipidaemia due to involvement of *medas*, osteodystrophy due to *asthiduṣṭi*, neuropathy due to *majjā* and *snāyu*as well as loss of libido and sexual dysfunction indicating *śukraduṣṭi*. *Mūtra*, *udaka* and *sveda* are common and most affected *dūṣya* in this disease condition.

Case Report

In February 2016, patient developed pedal edema, headache and breathlessness with oliguria. He consulted nephrologist at his nearest town. Nephrologists advised him to go through haemogram, blood biochemistry, urine analysis and ultra-sonography. In Investigations low hemoglobin, High level of serum creatinine 8.14 mg/dl and proteinuria (++) was found. eGFR of the patient was 8 ml/min/1.73m^{2}which suggest the end stage renal disease (ESRD). Moreover, patient's blood pressure was found significantly elevated i.e. 260/150 mmHg.

Patient was referred to Ahmedabad where he was advised for hemodialysis along with anti-hypertensive therapy. However, in spite of continuous dialysis, Serum creatinine level could not be achieved normal range. Then patient was advised to go through dialysis twice a week regularly.

Patient came to Mulajibhai Patel urological hospital Nadiad for further opinion where he

was advised for renal transplantation. At last he came to P.D.Patel Ayurveda Hospital Nadiad on 7th May, 2016. For initial 15 days he was on oral medication. On oral therapy, he found relief in symptoms like pedal edema. So further treatment, he was admitted in hospital on 31st may, 2016.

Clinical findings:

Subjective: Patient was conscious with intact mental status but an anxious look. Periorbital puffiness and bilateral pedal edema was present.

Objective findings:

A) Ultrasonography of KUB:13th April, 2016

Right kidney: size 8.7*4.1 cm, Echo pattern increased; C.M. differential was preserved; Hydronephrosis- no; Calculus: no; Cyst: 3.0 cm cyst at upper pole.

Left kidney: size: 9.0* 3.8 cm, Echo pattern increased; C.M. differential was preserved; Hydronephrosis- no; Calculus no; Cyst no

Urinary bladder: empty

Blood &urine report: Dt.31/05/2016

B) Hemoglobin: 14.4 gm%
C) Serum creatinine: 5.1 mg/dl (dialysis was done just 2 days back)
D) Blood urea: 40.0 mg/dl
E) Electrolytes: Na+ 143.0; K+ 4.3; Cl- 104.0; S.ca+ 7.0
F) Urine: Colour- pale yellow; Appearance – clear; reaction- acidic; Albumin 2+; Sugar-Nil; pus cells- 2-4/hpf; RBC- absent; epithelial cells. 0-2; casts- absent; crystals- absent; Sp. gravity- 1.020

Therapeutic intervention:

Patient was admitted in IPD where he was treated with *nirūhabasti* along with oral drug therapy.

Oral drug regimen:

1. *Varuṇādikvātha* 40 ml two times per day empty stomach
2. *Gokṣurādiguggulu* 3 tablet 3times/day
3. *Rasāyanacūrṇa* 3 gm+ *Bhūmyāmalakīcūrṇa* 2 gm - 3times/day
4. *Īkṣumūlakvātha* 40 ml 2 time/ day
5. *Arjunacūrṇa* 3 gm 2times/day

Nirūhabasti:

Punarnavādikvāthanirūhabasti was given daily in total 320 ml quantity before lunch.

Nādīsvedana – Lumbar region

Diet:

1. Rice, boiled *mung dal*, Rice flour thin bread.
2. Avoidance: salt, wheat, pulse other than *mung*, fermented food, spicy deeply fried food, chilled/ refrigerated food, sleep during daytime, awake at late night.

Outcomes:

Patient was treated with above treatment from 31stMay, 2016 to 6thJuly, 2016. Patients hematological and biochemical investigations

were carried out periodically as mentioned here:

Investigation	6/6/16	8/6/16	10/6/16	14/6/16	20/6/16	25/6/16	29/6/16	6/7/16
Hb%	13.5			13.7	--	14.0	13.7	13.0
Blood uria	49.0			39.0	--	48.0	68.0	50.0
S.creatinine	6.6	6.9*	4.7**	6.2	5.5	6.9	6.5	5.7
Na+	139.0			142.0	--	138.0	139.0	143.0
K+	3.5			3.8	--	3.4	3.8	4.3
Cl-	100.0			98.0	--	94.0	95.0	99.0
Ca+	7.2			7.4	--	9.9	9.2	8.6
U.albumin	+			+	--	Trace	+	Trace
U. sugar	Nil			Nil	--	--	Nil	Nil
Sp. Gravity	1.020			1.020	--	1.015	1.015	1.010
eGFR (ml/min/1.73m^2	8	9	15	10	12	9	10	12

*Dialysis was done after this report ** after dialysis, GFR- Glomerular filtration rate

Follow-up Period

Investigation	23/7/16	13/8/16	10/9/16	22/10/16	23/01/17	04/03/17	15/04/17
Hb%	11.6	10.8	10.5	10.0	12.7	12.9	12.7
Blood uria	69	58	79	48	54	37	45
S.creatinine	4.9	4.5	3.9	4.5	4.3	4.6	4.3
Na+	150.0	146	-	140	133	140	138
K+	4.2	5.0	-	4.0	3.8	4.8	4.2
Cl-	110	108	-	110	97	108	115
U.albumin	+	+	++	+	++	++	++
U.sugar	Nil	Nil	nil	Nil	Nil	Nil	Nil
Sp.gravity	1.015	1.015	1.010	1.015	1.020	1.015	1.015
eGFR (ml/min/1.73m^2	14	15	18	15	16	15	16

DISCUSSION:

Patients report clearly suggested chronic renal failure as per modern science. In Ayurveda, there is not direct description of such diseases. However, the symptoms which are found i.e. oligouria, decreased GFR, increased level of

creatinine are indicative of *mūtravahasrotasduṣṭi. medovaha srotoduṣti* can be considered because vṛkka which was affected in this disease is a root of *medovaha srotas*. Decreased filtration rate and oligo-uria indicates dysfunction of *vāta*. Here increased level of s. creatinine which is waste product of body can be considered as *malasaṅcaya āma*. Electrolyte imbalance is considered as rasa *duṣṭi*. So, involvement of *doṣa*, *dhātu*, *mala* concluded as per symptoms are:

Doṣa- *VātaKapha pradhan tridoṣa*

Duṣya-Rasa, Rakta, Māṁsa, Meda

Mala-Sveda, Mutra

Srotas- Medovaha, Mootravaha; Srotas duṣṭi type: *Saṁga* and *vimārga gamana*

Agni- Jaṭharāgni, Dhātvāgnimāndya

Mode of action of Drugs:

Rasāyana therapy: According to principles of management of the disease, the tissue damage can be prevented and repaired by *rasāyana* drugs by their antioxidative properties [6]. *Rasāyanacūrṇa* (*guḍuci, gokṣura, āmalaki*) is helpful to improve qualities of damaged tissue.

Guggulu preparation: *Srotosanga* i.e. blockage of microchannels can be removed by *lekhana* drugs having scrapping effect on blocked channels. *Gokṣurādi guggulu* is *rasāyana* for *mūtravaha*srotas and it has also *lekhana* (scraping) properties because of *guggulu* [7].

Varuṇādikvātha: It is helpful in *kaphavātajvikāra*. It has also *lekhana* property [8].

Īkṣumūlakvātha: *Īkṣumūla* is best *mūtrajananadravya* [9]so it helps in condition like oliguria.

Nirūhabasti: *Nirūhabasti* helps in *śodhana* of mala from whole body [10]. The normal function of kidney is to excrete metabolic wastes from the body. Hence, *nirūhabasti* can be a minor alternative of dialysis. *Punarnavādikvātha nirūhabasti* has *lekhana* and *rasāyana* property which can be helpful in CRF. Here *basti* was given in minor dose i.e. 320 ml for 34 days hence no *anuvāsan basti* was given in between.

Patient responded well with above medication. Dialysis was done only once after the commencement of treatment i.e. on 9thJune, 2016. After that without dialysis, serum creatinine level was reduced.

Above table shows that initial eGFR was 8 ml/min/1.73m^2 which was increased up to 12 ml/min/1.73m^2 during patient's hospitalization time. During follow up period, patient's eGFR was increased up to 16 ml/min/1.73m^2 which clearly confirms that patient is shifted from Stage 5 chronic kidney disease to stage 4 chronic kidney disease [11].

REFERENCES:

1. Stanley Davidson, Colledge N.R., Walker B.R., Ralston S.H., (editor) Davidson's Principles and Practice of

Medicine, Chapter 17- Kidney and urinary tract disease, 21st edition, Churchill living stone publication;2010; 492.

2. Prasanth G.S., Baghel M. S., Ravishankar B.,Gupta S. N.,A Clinical Comparative Study of the Management of Chronic Renal failure with Punarnavadi Compound. 'Ayu' ;Apr-Jun 2010;31(2); 185-192.

3. Patel M.V., Patel N. K., Gupta S. N. Effects of Ayurvedic treatment on 100 cases of chronic renal failure (other than diabetic nephropathy).'AYU', October-December 2011;32(4); 483-486.

4. Gohil U. V, Mandaliya V., Patel M.V., Gupta S. N., Patel K. B., Polyherbal treatment in chronic kidney disease – A case study; UJP 2013; 2 (4); 44-47.

5. PatelM.V., Patel K. B., Gupta S. N. Āyurvedic management of primary nephrotic syndrome. Journal of Research and Education in Indian Medicine 2015. available from –http://dx.doi.org/10.5455/JREIM.82-1422092361

6. Singh Akhileshkumar, Rationality of rasāyan therapy as adaptogenic, anti-oxidant and anti-inflammatory agent, IRJP 2011, 2(12), 259-260.

7. Prof.K.R.Srikantha Murthy(editor), Sārṅgadharasaṃhitā of Sārṅgadhara, Madhyamkhaṇḍa chapter 7 verse no.84-87. reprint edition,Varanasi, Chaukhambhaorientalia;2012;109

8. Prof.K.R.Srikantha Murthy(editor), Sārṅgadharasaṃhitā of Sārṅgadhara , Madhyamkhaṇḍa chapter2 verse no.128-130. reprint edition,Varanasi, Chaukhambhaorientalia;2012;71.

9. JādavajiTrikamajiĀchārya(editor), Carakasaṃhitāof Agnivesh,Sutrasthānachapter no.25 verse no.40 3rd edition,Mumbai, published by Nirnayasagar press;1941; 131.

10. JādavajiTrikamajiĀchārya(editor), Carakasaṃhitā of Agnivesh,Siddhisthāna chapter 1 verse no.27-28, 3rd edition,Mumbai, published by Nirnayasagar press;1941; 682.

11. www.davita.com/gfr-calculator

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