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# Role of Ayurvedic Medicine in the Management of Diabetic Nephropathy – A Single Case Study

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## ABSTRACT

Diabetic Nephropathy is a specific form of Chronic Kidney Disease. Nephropathy is a leading complication of Diabetes mellitus that affects about 40% of diabetics. In advance cases intense management such as dialysis may be needed. Further it leads to renal transplant badly affecting the quality of life. With limited options available in modern medicine, *ayurvedic* principle of diagnosis and treatment may be useful. A 59 years old female patient visited *Panchakarma* OPD with known case of Non-Insulin Dependent Diabetes Mellitus for 17 years, with bilateral pedal oedema, puffiness of face, generalized weakness and fatigue. Her renal and diabetic profile were deranged. Patient was taking oral hypoglycaemic agent and diuretic tab. 3 tab./day. She was a known case of Diabetic Nephropathy. According to principles of *Ayurveda* she was diagnosed as case of '*Prameha updrava janya Vrukka roga*'. She was under *Ayurvedic* management for 4 months continuously. After 4 months, marked relief in symptoms was seen in patient. Diabetic and renal profile improved, particular protein in urine seen nil along with decrease in the dose of diuretics.

**Key Words** *Ayurveda, Diabetic Nephropathy, Vrukka roga*

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## INTRODUCTION

Diabetic Nephropathy (DN) is a chronic complication of D.M. It usually has a slow progression over decades after the initial diagnosis of Diabetes. DN is typically defined by micro albuminuria that is urinary albumin excretion and abnormal renal function as represented by an abnormality in serum creatinine and G.F.R. clinically, DN is characterized by progressive increase in Proteinuria and decline in GFR, hypertension and a high risk of cardiovascular morbidity and mortality. In modern medicine,

management such as Dialysis and Renal transplantation may be needed. *Ayurvedic* management is a hope for the patients. It is helpful in reducing the requirement of dialysis and the renal transplantation can be postponed. According to the principles, Diabetic Nephropathy may be a disease of *Mutravaha Srotasa Vyadhi*. The signs and symptoms of Diabetic Nephropathy suggest aggravation mainly of *Vata* and *Kapha* along with vitiation of multiple *Dushya* (10 *Dushyas* of *Prameha*).



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### CASE HISTORY

A female patient aged 59 years, enrolled in the OPD of department of *panchkarma*, Government Akhandanand Ayurved Hospital, Ahmedabad with Complaints of Bilateral pedal oedema, Puffiness of Face, Generalized Weakness and Fatigue since 15-20 days. She was a K/C/O-NIDDM since 17 years and HTN since 15 years. She was taking oral hypoglycaemic medicine (Tab.Glucobay 50 mg-1 T.D.S., Tab.Gluconorm G4 forte-1 O.D.), Antihypertensive medicine

(Tab.Telsartan Am 40mg -1 O.D.) And Diuretic drug (Tab. Torvigress 10mg-1 T.D.S.). Despite of oral hypoglycaemic agents, patient did not have good glycaemic control.

### DIAGNOSIS

According to modern science, it was clearly a case of Diabetic Nephropathy. According to *Ayurveda* patient shows symptoms like *prameha upadrava*. So precise diagnosis established was '*Prameha updrava janya Vrukka roga*'.

### TREATMENT GIVEN

**Table 1** Medication

Sr. No	Medicine	Dose	Route	Anupana	Duration
1	<i>Chandraprabha Vati</i>	250 mg of 4 tab - Three times per day after food	Orally	Luke warm water	4 months
2	<i>Rasayana choorna</i> - 1gm + <i>Dhatrinisha choorna</i> - 1gm + <i>Punarnava choorna</i> - 500mg + <i>Ashwagandha choorna</i> - 500 mg	Total 3 gm - two times per day after food	Orally	Luke warm water	
3.	Tab. Siledin (Alarsin Pharmacy)	1 tab -Three times per day after food	Orally	Luke warm water	

All other allopathic treatment like oral hypoglycaemic medicine, Antihypertensive medicine And Diuretic drug were continued.

### TREATMENT OUTCOME

**Table 2** Investigations - before and after treatment

Investigations	fore Treatment(18/6/19)	After Treatment(10/10/2019)
S. Creatinine	2.68 H	2.43 H
S. Pottasium	6.2 mEq/L	4.21 mEq/L
Haemoglobin	9.0 gm%	10.4 gm%
Blood Glucose –		
FBS	182 mg/dl	120 mg/dl
PPBS	327 mg/dl	240 mg/dl
Hypertension	160/90 mm/Hg	120/70 mm/Hg
Urine Protein	+++	Nil

**Table 3** Observation of symptoms - before and after treatment

Bilateral pedal oedema	+++	Nil
Puffiness of face	Present	Absent
Generalized weakness	Present	Absent
Fatigue	Present	Absent



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After 4 months of *Ayurvedic* management patient showed marked relief in symptoms (table 3). Her Hb level was raised & K<sup>+</sup> level dropped down, Changes in S. Creatinine was also noted along with decrease in the dose of Diuretics (Before treatment Diuretic dose 3 tab/day, after treatment dose 1tab/day) (table 2).

## DISCUSSION

Diabetic Nephropathy cannot be correlates directly with any clinical entity mentioned in *ayurvedic* classics (In *Ayurvedic* classics, there is no any clinical entity which can be correlated with Diabetic Nephropathy). One can also understand that *Kapha* is responsible in blocking micro-vessels because of its *Picchila Guna* and developing micro-angiopathy. *Vata* is responsible for degeneration of the structure of the kidney, because of its *Ruksha Guna*<sup>1</sup>. Pathophysiology of Diabetic nephropathy can be explained with *Sheshmajanya Upadrva* of *Prameha*<sup>2</sup>. Diabetic glomerular lesions, and loss of glomerular filtration rate (GFR) in diabetes indicates *Shaithiya* (weakened, impaired, decayed, deteriorated) *karma* of vitiated *Kapha dosha* in *Mutravaha Srotas*. *Mamsa Upachaya karma* of vitiated *Kapha* in *Mutravaha Srotas* may leads to develop glomerular basement membrane thickening and mesangial expansion which is detected as early as 2-8 years after onset of diabetes<sup>3</sup>. According to *ayurvedic* principles of management *chikitsa* of *vrukkamaya* (nephropathy) is *Mutrala*, *Shonitashodhana*,

*Poshana* and *Agnivardhaka chikitsa*<sup>4</sup>. Here tissue damage can be prevented and repaired by *Poshana* (*Rasayana*) drugs because, they have the capability to improve qualities of tissues. All the drugs used in the management of this patient were *Rasayana*, *Balya* and *Mutrala* in nature. Diabetic Nephropathy is a leading complication of Diabetes. According to *Charaka Chikitsa Visharpa Adhyaya*<sup>5</sup>, to treat the complications, underlying disease should be treated first. so, *Chandraprabha Vati*, *Rasayana Choorna* and *Dhatrinisha Choorna* were used to treat *prameha* also.

### ▪ *Chandraprabha vati*<sup>6</sup>-

*Vachadi* drugs help to digest *Kleda*, most of them are *Kaphaghna* and *Kledaghna* in nature. As *Srotorodha* is removed, kidney function is normalised. *Loha*, *Guggulu*, *Shilajatu* are *Rasayana* in nature, as the chronicity of the disease increase, kidney tissue damage also increases resulting in less function of Kidney. All these drugs potentiate functioning of kidney. It also acts as *Pandughni*, *Pramehaghni* and *Mutrakrichhahara*. It acts as *Balya* so, it gives strength to the organ involved in the pathology of the disease.

▪ *Rasayana choorna*- *Guduchi*, *Gokshur*, *Amalaki* are the contents of this combination, *Guduchi* acts wonderfully on vascular diseases, here Glomerular filtration is improved by these drugs.

▪ *Dhatrinisha choorna*- *Dhatri* acts as *kledaghna*, *pramehaghna* and *rasayana*<sup>7</sup>. *Nisha*



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acts as *Meha-Shotha-Pandu hara*<sup>8</sup>, it helped to increase Haemoglobin of the patient.

- *Punarnava choorna*- The name says *punarnava* means new again. *Punarnava* can rejuvenates the dying cells and helps to revive the dying organs of homeostatic balance of body fluids by removing wastes out of body. It acts as *sothaghni, pandughni* and *Anilashleshmahari*<sup>9</sup>.

- *Ashwagandha choorna*- it is also *Rasayani, Sothahara* and *Anilashleshmahara*<sup>10</sup>. In chronic cases all diabetes patients convert into *Vataja Madhumeha*. Here this drug helps in *Brimhana*.

- Tab Siledin- This drug is Patent medicine of Alarsin Pharma Company. In chronic cases many patients tend to get depressive state. This may lead to vitiation of *Vata*. Most of the contents of this drug are *medhya*. So, in such conditions *Medhya Rasayana* plays an important role. *Sarpagandha, Shankhapushpi, Bhanga, Brahmi, Vacha, Jivanti* are *Kleda-pachaka, Rakta-prasadaka, mutra-rechaka*. It helps to maintain blood pressure under control too.

## CONCLUSION

Treatment to delay DN progression involves adequate control of metabolic and hemodynamic abnormalities which can be achieved by *Chikitsa sutra* of *Vrukkaamya* like *Mutrala, Shonitshodhana, Poshana* and *Agnivardhaka chikitsa*. Here in this case after 4 months of *ayurvedic* medicine, marked relief in symptoms was seen in patient. As diabetic and renal profile was improved the dose of allopathic medicines

decreased. Proper combinations of drugs help to give maximum result to the patient in minimum period.



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