GRADIVA REVIEW JOURNAL ISSN NO : 0363-8057 A Case-Based Evaluation of Ayurvedic Intervention in Nephrotic Syndrome

Dr. Swapnil Singhai, M.D., Ph.D, Kayachikitsa, Professor, Poornayu Ayurved Chikitsalaya Evam Anusandhan Vidyapeeth, Girls College, Tilwaraghat, Jabalpur, M.P. Pin-482003

Abstract:

Nephrotic Syndrome is characterized by a persistent urinary protein loss exceeding 3.5 grams per 24 hours, which can result in progressive kidney damage and ultimately renal failure. It is typically associated with a constellation of symptoms including edema, frothy urine, and hypoalbuminemia (serum albumin <3.5 g/dL). Despite advancements, modern medicine still lacks a consistently effective treatment with high success rates for Nephrotic Syndrome (NS). This case report highlights a 47-year-old male employed in a private company, who had been experiencing excessive frothy urine for four years and was subsequently diagnosed with NS. Initially, he was treated with allopathic medications, including corticosteroids and immunosuppressive agents, but showed no significant improvement. Consequently, he opted for Ayurvedic management. Although NS is not directly described in Ayurvedic texts, based on his clinical symptoms, a provisional diagnosis of *Sandrameha* was made. The treatment regimen included *Sarvatobhadra Vati, Chandraprabha Vati, Hajrulyahood Bhasma* and *Trinpanchmula Kwath* with *Shveta Parpati* as an adjuvant. After nine months of Ayurvedic therapy, the patient showed substantial symptomatic improvement and a marked reduction in 24-hour urinary protein levels. He reported normal urination, improved appetite, enhanced physical strength, and healthy weight gain.

Keywords: Nephrotic Syndrome, Sarvatobhadra Vati, Chandraprabha Vati, Hajrulyahood Bhasma, Trinpanchmula Kwath, Shveta Parpati.

Introduction:

Nephrotic Syndrome (NS) is a clinical disorder characterized by heavy proteinuria, hypoalbuminemia, hyperlipidemia, and edema, resulting from altered glomerular permeability. It is characterized by significant proteinuria (>3.5 g/day), hypoalbuminemia (<3.5 g/dL), hyperlipidemia, edema, and associated complications. It results from increased permeability of the glomerular basement membrane (GBM), often due to glomerular damage. This altered permeability may arise from primary glomerular diseases or secondary systemic conditions such as type 2 diabetes mellitus and amyloidosis.

In the current case study, a 27-year-old male corporate employee presented with complaints of excessive frothy urine beginning in 2019, accompanied by notable weight loss and generalized weakness. He was subsequently diagnosed with Nephrotic Syndrome. Despite undergoing conventional treatment with corticosteroids and immunosuppressive agents since 2020, there was no significant clinical improvement. This led the patient to explore Ayurvedic therapy for further management.

Although Nephrotic Syndrome is not explicitly mentioned in Ayurvedic texts, based on the clinical features, a provisional diagnosis of *Sandrameha* was made. The Ayurvedic treatment protocol included *Sarvatobhadra Vati*, *Chandraprabha Vati*, *Hajrulyahood Bhasma*, and *Trinpanchmula Kwath*, along with *Shveta Parpati* as an adjuvant. After nine months of treatment, the patient demonstrated marked symptomatic relief and a significant reduction in 24-hour urinary protein levels. His urine output normalized, appetite improved, physical strength increased, and he experienced healthy weight gain.

Though NS is a relatively uncommon manifestation of renal pathology, it poses serious health risks and remains a therapeutic challenge due to its multifactorial etiology. Currently, there is a lack of conclusive clinical trials offering definitive treatment outcomes for this condition.

The objective of this case study is to evaluate the patient's clinical status post-Ayurvedic management and ensure the absence of complications, thereby highlighting the potential efficacy of Ayurvedic formulations in managing complex renal disorders.

Case Report:

Patient information:

A 47-year-old male, employed in a private company, visited the Kayachikitsa OPD with complaints of excessive frothy urine persisting for the past four years. These symptoms were accompanied by significant weight loss, generalized weakness, and bilateral ankle swelling for the last three years. He had also been undergoing anti-hypertensive treatment since the onset of the condition.

Physical Examination:

On physical examination, the patient appeared emaciated, fatigued, and lacked vitality. His skin showed loss of luster and turgor, presenting as dry and itchy. He exhibited diminished physical strength, moderately affecting his ability to perform daily activities such as walking at 3–4 km/h and climbing, during which he experienced breathlessness. The patient's general condition was poor, though his higher mental functions remained intact.

Vital signs were unstable, with a blood pressure reading of 150/95 mmHg and a pulse rate of 78 bpm. He was on antihypertensive therapy (Tablet Triolsar 40 mg OD, a combination of Olmesartan Medoxomil 40 mg, Amlodipine 5 mg, and Chlorthalidone 6.25 mg). There were no clinical signs of icterus, clubbing, cyanosis, or pallor. Bowel movements were regular, and sleep patterns were normal.

A transient, non-pitting edema was observed bilaterally in the ankle region. The patient also presented with Grade II dyspnea—characterized by slower walking than peers due to breathlessness, the need to pause for air when walking at a normal pace, and difficulty climbing stairs.

GRADIVA REVIEW JOURNAL History of Past Illness:

The patient had a two-year history of acid-peptic disorder, which he managed effectively through dietary modifications without the need for medication. Additionally, he was diagnosed with hypertension around the same time the symptoms of Nephrotic Syndrome began to manifest.

Diagnostic Protocol:

Based on symptoms such as Atisrasta Mutra (frequent urination), Bahal Mutra (turbid or dense urine), along with Aruchi (loss of appetite), Mukhavairasya (bad taste in mouth), Gaurava (heaviness), Shithilata (fatigue or laxity), and Pandutva (pallor), a clinical assessment was carried out using the principles of Ashtavidha Pariksha (Eight-fold Examination). **Examination Findings:**

- Nadi (Pulse): Indicative of Kapha-Vata predominance
- Mala (Stool): Normal soft and regularly passed without abnormality •
- **Mutra (Urine):** Abnormal reduced quantity with frothy appearance (*phenavukta*)
- Jivha (Tongue): Clear with healthy pinkish-red coloration
- Shabda (Speech): Normal in tone and clarity
- Sparsha (Touch): Rough texture felt on skin (khara sparsha)
- Drishti (Eyes): Normal appearance and function
- Akruti (Body Build): Abnormal lean and emaciated (krisha)

Based on modern clinical signs, symptoms, and diagnostic investigations-particularly the 24-hour urinary protein analysis-the diagnosis of Nephrotic Syndrome (NS) was confirmed. Accordingly, a treatment protocol was formulated.

Treatment Timeline:

Following the comprehensive assessment of clinical features, a structured Ayurvedic treatment regimen was prescribed for a duration of nine months, with regular follow-ups. The detailed treatment plan is outlined as under-

Table 1. Timeline

Duration	Intervention
25 th August 2024	The patient presented to the Kayachikitsa OPD with clinical complaints of frothy urine, generalized weakness, loss of appetite, and weight loss. A 24-hour urinary protein test was conducted as part of the diagnostic evaluation.
2 nd September 2024 to 31 st May 2025	A course of treatment was administered over a period of nine months.
Follow up	Following the treatment, the patient showed complete recovery.

Therapeutic Interventions:

Following thorough clinical evaluation and after obtaining informed consent from the patient, Ayurvedic drug intervention was initiated. The treatment was planned according to the principles of Mutrakriccha Chikitsa. The selected formulations included Sarvatobhadra Vati, Chandraprabha Vati, Hajrulvahood Bhasma and Trinpanchmula Kwath with Shveta Parpati, which are considered effective in the management of Mutrakriccha.

During the subsequent follow-up visit (15 days after starting the medication), the patient was also advised on appropriate diet and lifestyle modifications to enhance overall quality of life. Table 2. Treatment Regime for every 3 months

Intervention	Dose	Frequency	Anupana
Sarvatobhadra Vati	125 mg BD for first month	Twice daily after 2hrs of breakfast	Lukewarm water
	-	and dinner.	
Chandraprabha Vati	250 mg for second & third	Twice daily after meals	Lukewarm water
	months		
Trinpanchmula Kwath	60 ml BD	Empty stomach in morning and 2hrs	
+	+	after lunch in evening.	-
Shveta parpati	250 mg BD		
Hajrulyahood Bhasma	250 mg BD for one month	Twice daily after 2hrs of breakfast	Water
		and dinner.	
Follow up and Outcomes			

follow-up and Outcomes:

Duration	25/8/24	28/9/24	25/11/24	26/12/24	29/2/25	27/3/25	27/5/25	Follow-up
	Before treatment		after intervention					
24hour urine protein	6.56g/day	5.42g/day	5.25g/day	4.15g/day	3.77g/day	2.22g/day	2.20g/day	2.20g/day

GRADIVA REVIEW JOURNAL



Discussion:

Nephrotic Syndrome (NS) is a pathological condition affecting the renal glomeruli, characterized by increased permeability of the glomerular basement membrane (GBM) to plasma proteins. This leads to clinical manifestations such as heavy proteinuria, hypoalbuminemia, hypercholesterolemia, and edema. While NS is commonly observed in the pediatric population regardless of age or gender, its prevalence is significantly higher in adults, with a reported adult-to-child ratio of 26:1. Additionally, males are more commonly affected than females, with a male-to-female ratio of 2:1.

Conventional treatment for NS typically involves the administration of high-dose, long-term corticosteroids and various immunosuppressive agents, all of which are associated with substantial adverse effects. A study reviewing 75 cases of NS reported that within five years of diagnosis, 21% of patients progressed to end-stage renal disease (ESRD), 23% developed chronic kidney disease (CKD), 37% had persistent proteinuria, and only 11% achieved sustained remission.

This case report discusses a 47-year-old male private company employee who had been experiencing excessive frothy urine, along with marked lethargy, generalized weakness, and weight loss. He was diagnosed with Nephrotic Syndrome and underwent modern medical treatment with corticosteroids and immunosuppressants for one year without any notable improvement. Seeking alternative options, he turned to Ayurvedic medicine for further management.

Although Nephrotic Syndrome is not explicitly described in classical Ayurvedic texts, based on the clinical features, a provisional diagnosis of *Sandraprameha*—a subtype of *Kaphaja Prameha*—was made. In *Sandraprameha*, albuminuria is interpreted as causing dense, turbid, and viscous urine, closely correlating with the modern description of protein-laden urine.

According to Ayurvedic understanding, the pathogenesis involves the vitiation of Kapha-Vata-dominant Tridoshas, along with the involvement of Rasa, Mutra, Udaka, and Ojas. The treatment protocol included Sarvatobhadra Vati (Swarna, Rajata, Abhraka, Loha Bhama, Shodhit Shilajit, Gandhak, Swarnamakshik bhasma processed in Varuna kwath (Crataeva nurvala decoction), Chandraprabha Vati, Hajrulyahood Bhasma, Trinpanchmula Kwath and Shveta Parpati. The ingredients of medicines have mutrala properties, helping in promoting urine output. This aids in reducing fluid retention and edema-a hallmark symptom in NS. The formulation helps in reducing the Kleda (fluid accumulation and turbidity), Meda (fat), and Kapha by its lekhana and shoshana actions, which are useful in clearing proteinaceous and fatty materials accumulated in the urinary system. Sarvatobhadra Vati helps in improving Ojas and strengthens Dhatus (body tissues), thereby reducing general weakness, fatigue, and improving immunity, which is often compromised in NS. Some ingredients possess krimighna (antimicrobial) and shothahara (anti-inflammatory) actions, potentially aiding in resolving any underlying infection or inflammation contributing to glomerular damage. It helps in purification of blood and improves the quality of Rasa Dhatu (plasma), which in turn benefits the filtration function of kidneys and restores the integrity of glomerular filtration barrier.

After nine months of Ayurvedic management, the patient experienced significant symptomatic relief. Clinical improvements included normalization of urine, restoration of appetite, increased body strength, and healthy weight gain. A notable reduction in 24-hour urinary protein was also observed.

This case study was designed to evaluate the efficacy of Ayurvedic intervention in Nephrotic Syndrome, assessed through modern diagnostic parameters.

Conclusion:

In this case study, the multi-faceted Ayurvedic actions of the selected formulations - such as *Mutrala* (diuretic), *Kapha-Vata Shamana* (dosha pacification), *Shothahara* (anti-inflammatory), *Rasayana* (rejuvenative), and *Raktaprasadana* (blood purification) - led to marked improvement in clinical symptoms including edema, loss of appetite, weakness, and frothy urine, along with enhanced kidney function in Nephrotic Syndrome. No recurrence of symptoms was noted during the follow-up period, and importantly, no steroid therapy was required after the initial assessment. These outcomes indicate that Ayurvedic treatment can be an effective and potentially safer alternative to conventional corticosteroids and immunosuppressants in managing Nephrotic Syndrome. Depending on the stage of the disease and the patient's constitution (*Prakriti*), this therapy may be utilized as a standalone or adjunctive approach.

GRADIVA REVIEW JOURNAL References:

- 1. Harrison's Principles of Internal Medicine, Vol-II, published by McGraw- Hill Medical Publishing Division, 17th Edition
- 2. Manish V Patel, Kalapi B Patel. S. N. Gupta. Ayurvedic management of Primary Nephrotic Syndrome. J. Res. Educ. Indian Med., July 2015. DOI 105455/JREIM 8- 1422092361
- 3. Carolina Tapia, Khalid Bashir. Nephrotic Syndrome. National Library of Medicine, May 29, 2023.
- 4. Hull RP, Goldsmith DJ. Nephrotic syndrome in adults. BMJ 2008, May 24; 336 (7654): 1185-9. doi: 10.1136.
- 5. Boyer O., Schafer. F, Haffner D. et al. Management of congenital Nephrotic Syndrome. Consensus recommendations of the ERK Net- ESPN working group. Nat. Revised Nephrol 17, 277-289 (2021)
- Monika Meshram. An ayurvedic approach to Nephrotic syndrome in children. Paediatric Urol. case reports 2021; 9 (2): 153-156. DOI- 10.14534/3
- 7. Sastri Pt Kashinath, Chaturvedi Gorakhnath, Caraka Samhita of Agnivesh, Vimansthana, Varanasi, Chaukhamba Bharti Academy: 2016, p.711
- Geetismita Borah, Hemen Kalita. Aetiological study of Nephrotic syndrome in ayurveda. A single case discussion. Int. J. AYUSH Care.2020, 4 (3): 172-175