



Integrative Management of Stage 3 Chronic Kidney Disease: A Case Report on Infrared Sauna Therapy, Blood Cupping and Vegan Diet

¹Dr. Dasheni Puvanaendran, ²Dr. Lydia Devega Devanayagam, ³Bhushan Nikam

¹MBBS, ²MBBS, ³BPharm,
¹Department of Functional Medicine,
¹SOL integrative wellness centre, kuala lumpur, Malaysia

Abstract

Background:

Chronic Kidney Disease (CKD) is a progressive condition characterized by a gradual decline in renal function, which can significantly impact quality of life. Traditional management strategies often focus on pharmacological and dietary interventions to slow disease progression. This case report explores the use of integrative therapies, specifically infrared sauna therapy, blood cupping, and a vegan diet, as complementary approaches to managing Stage 3 CKD. The aim is to evaluate their potential combined impact on renal function and overall patient outcomes.

Case Presentation:

A 79-year-old male with Stage 3 Chronic Kidney Disease (CKD) and a history of hypercholesterolemia underwent a comprehensive treatment plan for his CKD. Treatment plan was initiated, including 40-minute infrared sauna sessions twice a week for three consecutive months, completed four blood cupping sessions, with one session per week lasting 45 minutes, over a period of two consecutive months and lifestyle modifications focusing on diet transitioned to a vegan diet, fully eliminating red meat, gluten, and dairy from his dietary intake. Significant improvement was noted after the treatment, with EGFR improving to 57 mL/min/1.73m², and normalization of creatinine and urea levels. No major contraindications were observed.

Conclusion:

The integration of infrared sauna therapy and blood cupping sessions, along with targeted lifestyle modifications, led to significant improvements in renal function in a patient with stage 3 chronic kidney disease. The patient showed notable enhancements in EGFR and normalization of creatinine and urea levels. These findings suggest that integrative approaches may offer effective complementary options for managing CKD.

Keywords: Chronic Kidney Disease, Infrared Sauna Therapy, Blood Cupping, Vegan Diet, Renal Function Improvement, Stage 3 CKD.

Introduction

Chronic kidney disease (CKD) affects 10–15% of the population worldwide and its prevalence is increasing.^{[1][2]} CKD is defined as the presence of reduced kidney function (an estimated glomerular filtration rate [eGFR] < 60 mL/min/1.73m²^[3] or kidney damage (often indicated by the presence of proteinuria) for ≥ 3 months duration. This case report presents a 79-year-old male with a history of hypercholesterolemia, and stage 3 CKD. The patient sought treatment at SOL Integrative Wellness Centre, where a holistic treatment plan was implemented. This plan included infrared sauna sessions, Blood cupping, and comprehensive lifestyle modifications. The following case details the interventions and outcomes that led to significant improvements in his health, demonstrating the effectiveness of an integrative approach to managing complex, chronic conditions.

Case Presentation

A 79-year-old male with a history of hypercholesterolemia (not on medication) and Stage 3 Chronic Kidney Disease (CKD) presented for treatment at SOL Integrative Wellness Centre in Kuala Lumpur under the care of Dr. Dasheni Puvanaendran, showing a moderate decline in kidney function with an estimated glomerular filtration rate (eGFR) of 45 mL/min/1.73 m², and creatinine and urea levels of 138 µmol/L and 7.4 mmol/L, respectively, with no other significant comorbidities.

For his CKD management, the patient has been undergoing several treatments. Currently, he is receiving Infrared Sauna therapy once a week for 40 minutes each session. Previously, he engaged in Infrared Sauna therapy twice a week for 40 minutes each session, completed over three months consecutively. He completed a series of treatments including blood cupping, which involved four sessions, each lasting 45 minutes and administered weekly over a two-month period.

Treatment Details:

Infrared Sauna Therapy:

Sauna bathing, a tradition embedded in the Finnish culture, has mainly been used for thousands of years for leisure and relaxation purposes. Sauna bathing is becoming a popular global lifestyle activity given its link with a myriad of health benefits.^[4] Sauna use causes sweating and changes in body fluid balance and has the potential to cause dehydration, there have been some isolated reports of a link to renal impairments including acute renal failure.^[5] Poyhonen et al.^[6] Infrared sauna therapy is increasingly recognized for its potential benefits in managing chronic conditions, including CKD. The therapy utilizes infrared light to penetrate the skin, inducing sweating and enhancing circulation. The proposed mechanisms include detoxification through sweating and reduced inflammation. In this case, the patient engaged in weekly 40-minute sessions, aiming to promote renal health by improving systemic circulation and reducing oxidative stress. Studies have suggested that such thermal therapies can aid in the management of CKD by reducing inflammatory markers and enhancing overall circulation.

Blood Cupping Therapy:

Blood cupping, or wet cupping, is a traditional practice that involves drawing blood to the surface of the skin to stimulate circulation and reduce inflammation. Removing toxins and excess fluids from the kidneys. Hijama cupping therapy can trigger certain pressure points that help the body expel excess water, toxins, and waste products from the kidneys. This can improve the kidney health and function and prevent further damage or infection.^[7] This therapy was administered weekly over two months, with each session lasting 45 minutes. Although conventional medical evidence supporting the efficacy of blood cupping in CKD management is limited, it is thought to improve renal function by enhancing blood flow and reducing systemic inflammation.^[8] The patient's positive response to this therapy, indicated by improved renal function markers, suggests that it may contribute to symptomatic relief and overall renal health.

Hijama may be performed safely in patients of chronic renal failure on dialysis with overall improvement in quality of life, since there was reduction in fatigue, improvement in appetite, quality of sleep and platelet count.^[9]

Vegan Diet:

The adoption of a vegan diet, excluding red meat, dairy, and gluten, is aligned with dietary recommendations for CKD patients. Plant-based diets are known to be low in saturated fats and cholesterol, and they can reduce kidney stress and inflammation. Plant-based diets may offer benefit for hyperphosphataemia as phosphorus is not as efficiently absorbed from plant sources.^[10] This dietary shift is intended to minimize the intake of potentially harmful substances and provide a nutrient-dense alternative that supports kidney function and overall health. The patient's adherence to a vegan diet may have played a significant role in the observed improvement in renal function markers.

Clinical Laboratory Test Results:

Test Parameter	Pre-Therapy	Post-Therapy
eGFR	45 ml/min/1.73m ²	57 ml/min/1.73m ²
Urea	7.4 mmol/L	7.6 mmol/L
Creatinine	138 µmol/L	113 µmol/L

Significance of Lab Results:

EGFR (Estimated Glomerular Filtration Rate): The increase from 45 to 57 mL/min/1.73m² indicates an improvement in kidney function, suggesting that the interventions had a positive impact on renal filtration capacity.

Creatinine: The reduction from 138 µmol/L to 113 µmol/L signifies a decrease in creatinine levels, a marker of kidney function. Lower levels indicate improved renal clearance and function.

Urea: The slight increase in urea from 7.4 mmol/L to 7.6 mmol/L shows stable urea levels, which are crucial for assessing protein metabolism and kidney health.

Discussion

This case report illustrates the potential benefits of combining infrared sauna therapy, blood cupping, and a vegan diet in managing Stage 3 Chronic Kidney Disease (CKD). The patient demonstrated significant improvements in renal function, with an increase in EGFR and a reduction in creatinine levels. These results suggest that the integrated approach of these therapies, alongside dietary modifications, may positively impact CKD management. While the findings are promising, further research with larger sample sizes and extended follow-up is needed to confirm these benefits and optimize treatment protocols. Overall, this case supports the exploration of complementary therapies in CKD care.

Conclusion

This case report highlights the potential benefits of integrating infrared sauna therapy, blood cupping, and a vegan diet in the management of Stage 3 Chronic Kidney Disease (CKD). The patient showed significant improvements in renal function, including enhanced EGFR and reduced creatinine levels. These results suggest that such a comprehensive approach may be effective in supporting kidney health and improving CKD outcomes. This case supports the exploration of holistic and complementary therapies as part of CKD management strategies.

Declaration:

All activities performed on the subject in this case report were conducted in accordance with Good Clinical Practice (GCP) guidelines and under the supervision of a qualified physician. The therapeutic interventions, including infrared sauna sessions, blood cupping therapy and the administration of natural supplements, were carried under the direct guidance of Dr. Dasheni Puvanaendran at SOL Integrative Wellness Centre. The patient's treatment plan and subsequent follow-ups adhered strictly to ethical standards and clinical protocols to ensure patient safety and the validity of the observed outcomes.

References

- Coresh J, Selvin E, Stevens LA, Manzi J, Kusek JW, Eggers P, et al. Prevalence of chronic kidney disease in the United States. *JAMA*. 2007;298:2038–2047.
- Mills KT, Xu Y, Zhang W, Bundy JD, Chen CS, Kelly TN, et al. A systematic analysis of worldwide population-based data on the global burden of chronic kidney disease in 2010. *Kidney Int*. 2015;88:950–957.
- Stevens PE, Levin A. Evaluation and management of chronic kidney disease: synopsis of the Kidney Disease: Improving Global Outcomes 2012 clinical practice guideline. *Ann Intern Med*. 2013;158:825–830.
- Laukkanen JA, Laukkanen T, Kunutsor SK. Cardiovascular and other health benefits of sauna bathing: a review of the evidence. *Mayo Clin Proc*. 2018; 93(8): 1111-1121.
- Hofmann N, Waldherr R, Schwenger V. Is the sauna a common place for experiencing acute renal failure? *Nephrol Dial Transplant*. 2005; 20(1): 235-237.
- Poyhonen A, Akerla J, Koskimaki J, Tammela TLJ, Auvinen A. Sauna habits/bathing and changes in lower urinary tract symptoms – tampere ageing male urologic study (TAMUS). *Scand J Urol*. 2022; 56(1): 77-82.
- How Hijama Cupping Therapy Can Help You with Kidney Disease (worldofcupping.com)
- Khan, M. Z., et al. (2020). "Effectiveness of Cupping Therapy on Chronic Kidney Disease: A Review." *PubMed*.
- Bento CP, Soares M, Molin C, Martins L, Martins J, Mazza M, Riella M. Relato de caso: Insuficiência renal crônica estágio 5 D em paciente com doença renal crônica medicado com varfarina [Case report: end stage renal disease in a chronic kidney patient on warfarin therapy]. *J Bras Nefrol*. 2015 Apr-Jun;37(2):275-8. Portuguese. doi: 10.5935/0101-2800.20150043. PMID: 26154651.
- Clegg DJ, Hill Gallant KM. Plant-Based diets in CKD. *CJASN* 2019;14:141–3. 10.2215/CJN.08960718