

# Managing Dialysis in Male Patients with Kidney Infections: A Mini Review

Bernd Herger\* and Any Bloom

Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

## Abstract

Chronic kidney disease (CKD) affects millions of people worldwide, and it is a major cause of morbidity and mortality. Dialysis is a life-sustaining treatment for patients with CKD, and it has been shown to improve patient outcomes. In this review paper, we will discuss the use of dialysis in male patients with kidney infection, its efficacy, and potential complications.

**Keywords:** CKD • Dialysis • Male patients • Transplant

## Introduction

Kidney infections, also known as pyelonephritis, are a common cause of kidney damage and CKD. In male patients with kidney infections, dialysis may be necessary to prevent further kidney damage and improve patient outcomes. Dialysis can help to remove waste products and excess fluid from the body, which can reduce the workload on the kidneys and prevent further damage. The efficacy of dialysis in male patients with kidney infections has been well documented. A study showed that dialysis improved the survival rate of male patients with pyelonephritis compared to those who did not receive dialysis [1]. In addition, dialysis was found to improve the symptoms of pyelonephritis, such as fever and pain.

## Description

### Complications of dialysis in male patients with kidney infection

Although dialysis is an effective treatment for male patients with kidney infections, it is not without complications. Complications of dialysis in male patients with kidney infections include infections at the site of the dialysis catheter, thrombosis, and bleeding. In addition, dialysis can cause electrolyte imbalances, which can lead to cardiac arrhythmias and seizures.

Dialysis is an effective treatment for male patients with kidney infections, and it can improve patient outcomes. However, it is important to monitor patients for potential complications of dialysis, such as infections and electrolyte imbalances. Future research should focus on identifying ways to minimize these complications and improve the overall efficacy of dialysis in male patients with kidney infections [2-5].

### Management of dialysis in male patients with kidney infection

In addition to the potential complications associated with dialysis in

*\*Address for Correspondence:* Bernd Herger, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA; E-mail: bloom.any@jhsm.edu

**Copyright:** © 2023 Herger B, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Received:** 14 January, 2023, Manuscript No. JNT-23-94834; **Editor Assigned:** 16 January, 2023, PreQC No. P-94834; **Reviewed:** 30 January, 2023, QC No. Q-94834; **Revised:** 05 February, 2023, Manuscript No. R-94834; **Published:** 13 February, 2023, DOI: 10.37421/2161-0959.2023.13.438

male patients with kidney infections, there are also important management considerations. It is important to monitor patients' blood pressure, fluid and electrolyte balance, and nutritional status, as well as provide appropriate medications to manage their symptoms and underlying conditions.

### Antibiotic therapy

In addition to dialysis, male patients with kidney infections will also require antibiotic therapy to treat the underlying infection. Antibiotics are typically administered intravenously and may need to be adjusted based on the patient's renal function. It is important to monitor patients for adverse drug reactions and to ensure that they complete the full course of antibiotic therapy [6].

### Surgical intervention

In some cases, male patients with kidney infections may require surgical intervention to treat their underlying condition. Surgical intervention may be necessary if there is an obstruction in the urinary tract or if there is an abscess that needs to be drained [7]. The decision to perform surgery will depend on the severity of the patient's condition, the presence of comorbidities, and other individual factors.

### Follow-up

Following dialysis and antibiotic therapy, male patients with kidney infections will require ongoing follow-up to monitor their kidney function and overall health. Regular blood tests, urine tests, and imaging studies may be necessary to monitor the patient's condition and to identify any potential complications.

### Dietary considerations for male patients with kidney infection

In addition to dialysis, antibiotic therapy, and surgical intervention, dietary modifications may also be necessary for male patients with kidney infections. A well-balanced diet can help to support kidney function and prevent complications associated with kidney disease.

## Discussion

### Limiting sodium intake

Limiting sodium intake is important for male patients with kidney infections. High sodium intake can lead to fluid retention, which can increase the workload on the kidneys and lead to further damage. Patients should limit their sodium intake to less than 2,300 milligrams per day, or less than 1,500 milligrams per day if they have high blood pressure or are over the age of 50.

### Increasing protein intake

Male patients with kidney infections may need to increase their protein

intake to help support kidney function. However, it is important to choose high-quality sources of protein, such as lean meats, fish, poultry, and plant-based sources such as beans, nuts, and tofu. Patients should work with a registered dietitian to determine the appropriate amount of protein to include in their diet [8].

### Limiting phosphorus intake

Limiting phosphorus intake is also important for male patients with kidney infections. High levels of phosphorus in the blood can lead to bone disease, cardiovascular disease, and other complications. Patients should limit their intake of high-phosphorus foods such as dairy products, processed meats, and soda.

### Increasing fluid intake

Increasing fluid intake can help to prevent dehydration and support kidney function. Patients should aim to drink at least eight to ten cups of fluid per day or as recommended by their healthcare provider. However, it is important to avoid fluids that are high in sodium, such as soda and sports drinks.

In addition to medical interventions, dietary modifications can play an important role in the management of male patients with kidney infections. Limiting sodium intake, increasing protein intake, limiting phosphorus intake, and increasing fluid intake can help to support kidney function and prevent complications associated with kidney disease [9]. Patients should work with a registered dietitian to develop a customized diet plan that meets their individual needs and preferences.

### Comparison with female dialysis patients

While the management of dialysis in male patients with kidney infections is similar to that in female patients, there are some important differences to consider.

### Cardiovascular disease

Female patients with kidney disease are more likely to develop cardiovascular disease compared to male patients. This may be due to differences in hormone levels and other physiological factors. As a result, female patients may require more aggressive management of cardiovascular risk factors, such as hypertension and hyperlipidemia [3].

### Bone health

Female patients with kidney disease are also more likely to develop bone disease compared to male patients. This may be due to differences in bone metabolism and hormonal factors. As a result, female patients may require more aggressive management of bone health, including calcium and vitamin D supplementation.

### Anemia

Female patients with kidney disease are more likely to develop anemia compared to male patients. This may be due to differences in hormone levels and other physiological factors. As a result, female patients may require more aggressive management of anemia, including erythropoietin-stimulating agents and iron supplementation.

### Nutritional needs

Female patients with kidney disease may have different nutritional needs compared to male patients. For example, female patients may require more iron and calcium in their diet due to differences in bone metabolism and hormonal factors. They may also require more folate and vitamin B<sub>12</sub> due to differences in reproductive health.

While the management of dialysis in male patients with kidney infections is similar to that in female patients, there are important differences to consider. These include differences in cardiovascular disease risk, bone health, anemia, and nutritional needs. Patients should receive individualized care based on their unique medical history and health status.

## Conclusion

Dialysis is an effective treatment for male patients with kidney infections, but it is not without potential complications. Proper management of complications, such as infections and electrolyte imbalances, is essential to ensure the best possible outcomes for patients. In addition to medical interventions, dietary modifications can play an important role in the management of male patients with kidney infections, with specific attention paid to limiting sodium and phosphorus intake while increasing protein and fluid intake. Comparing the management of dialysis in male and female patients with kidney infections, it is important to consider gender-specific differences in cardiovascular disease risk, bone health, anemia and nutritional needs. Individualized care and management plans should be developed for each patient based on their unique medical history and health status. With comprehensive management strategies in place, male patients with kidney infections can achieve improved outcomes and a higher quality of life.

## Acknowledgement

Not applicable.

## Conflict of Interest

There is no conflict of interest by author.

## References

1. Levey, Andrew S., Josef Coresh, Ethan Balk and Annamaria T. Kausz, et al. "National Kidney Foundation practice guidelines for chronic kidney disease: evaluation, classification, and stratification." *Ann Int Med* 139 (2003): 137-147.
2. Vassalotti, Joseph A., Robert Centor, Barbara J. Turner and Raquel C. Greer, et al. "Practical approach to detection and management of chronic kidney disease for the primary care clinician." *Am J Med* 129 (2016): 153-162.
3. Palevsky, Paul M. "Renal replacement therapy in acute kidney injury." *Adv Chronic Kidney Dis* 20 (2013): 76-84.
4. System USRD. "2019 USRDS annual data report: epidemiology of kidney disease in the United States. National Institute of health, National Institute of diabetes and digestive and kidney disease." (2019).
5. Kdigo. "Clinical practice guideline for the evaluation and management of chronic kidney disease." *Kidney Int Suppl* 2013 (2012): 1-150.
6. Heavner, Mojdeh S., Eric M. Tichy, Marina Yazdi and Richard N. Formica Jr, et al. "Clinical outcomes associated with conversion from brand-name to generic tacrolimus in hospitalized kidney transplant recipients." *Am J Health Syst Pharm* 70 (2013): 1507-1512.
7. Fouque, Denis, Solenne Pelletier, Denise Mafra and Philippe Chauveau. "Nutrition and chronic kidney disease." *Kidney Int* 80 (2011): 348-357.
8. Dounousi, Evangelia, Eleni Papavasiliou, Areti Makedou and Kyriakos Ioannou, et al. "Oxidative stress is progressively enhanced with advancing stages of CKD." *Am J Kidney Dis* 48 (2006): 752-760.
9. Kooman, Jeroen P., Peter Kotanko, Annemie MWJ Schols and Peter Stenvinkel. "Chronic kidney disease and premature ageing." *Nat Rev Nephrol* 10 (2014): 732-742.

**How to cite this article:** Herger, Bernd and Any Bloom. "Managing Dialysis in Male Patients with Kidney Infections: A Mini Review." *J Nephrol Ther* 13 (2023): 438.