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CHRONIC KIDNEY DISEASE IN A NEPHROLOGY REFERENCE HOSPITAL IN BELÉM DO PARÁ: CASE REPORT

DOENÇA RENAL CRÔNICA EM UM HOSPITAL DE REFERÊNCIA EM NEFROLOGIA EM BELÉM DO PARÁ: RELATO DE CASO

ENFERMEDAD RENAL CRÓNICA EN UN HOSPITAL DE REFERENCIA EN NEFROLOGÍA DE BELÉM DO PARÁ: REPORTE DE CASO

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ABSTRACT

Chronic Kidney Disease (CKD) is a progressive and irreversible condition that affects millions of people worldwide, directly impacting their quality of life and representing a major public health challenge. This study aims to report the case of a patient with CKD hospitalized in a nephrology reference hospital in Belém, Pará, highlighting his clinical evolution and the nutritional interventions performed. The research was developed through the analysis of medical records, interviews, and nutritional follow-up during hospitalization. It was observed that nutrition played an essential role in controlling clinical and metabolic parameters, contributing to the stabilization of the patient's condition and improvement of overall well-being. Dietary adjustments, with controlled intake of protein, sodium, potassium, and phosphorus, were fundamental in managing the disease and preventing complications. The study also emphasizes the importance of humanized care, which considers the patient as a whole and promotes an empathetic and interdisciplinary approach. It is concluded that the nutritionist's role is essential to optimize treatment and ensure a better quality of life for individuals living with CKD.

Keywords: Chronic Kidney Disease. Hemodialysis. Nutritional Status. Renal Replacement Therapy. Humanized Care.

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RESUMO
A Doença Renal Crônica (DRC) é uma condição progressiva e irreversível que afeta milhões de pessoas no mundo, impactando diretamente sua qualidade de vida e representando um importante desafio de saúde pública. Este estudo tem como objetivo relatar o caso de um paciente com DRC internado em um hospital de referência em nefrologia em Belém do Pará, destacando sua evolução clínica e as intervenções nutricionais realizadas. A pesquisa foi desenvolvida a partir da análise de prontuários, entrevistas e acompanhamento nutricional durante a internação. Observou-se que a nutrição teve papel essencial no controle de parâmetros clínicos e metabólicos, contribuindo para a estabilização do quadro e melhora do bem-estar do paciente. A adequação da dieta, com controle de proteínas, sódio, potássio e fósforo, foi fundamental para o manejo da doença e prevenção de complicações. O estudo também evidencia a importância do cuidado humanizado, que considera o paciente em sua totalidade e promove uma abordagem empática e interdisciplinar. Conclui-se que a atuação do nutricionista é indispensável para otimizar o tratamento e garantir melhor qualidade de vida a indivíduos com DRC.

Palavras-chave: Doença Renal Crônica. Hemodiálise. Estado Nutricional. Terapia Renal Substitutiva. Cuidado Humanizado.

RESUMEN
La Enfermedad Renal Crónica (ERC) es una condición progresiva e irreversible que afecta a millones de personas en todo el mundo, impactando directamente su calidad de vida y representando un importante desafío para la salud pública. Este estudio tiene como objetivo relatar el caso de un paciente con ERC internado en un hospital de referencia en nefrología en Belém, Pará, destacando su evolución clínica y las intervenciones nutricionales realizadas. La investigación se desarrolló a partir del análisis de historias clínicas, entrevistas y seguimiento nutricional durante la hospitalización. Se observó que la nutrición desempeñó un papel esencial en el control de los parámetros clínicos y metabólicos, contribuyendo a la estabilización del cuadro y a la mejora del bienestar del paciente. El ajuste dietético, con control de proteínas, sodio, potasio y fósforo, fue fundamental para el manejo de la enfermedad y la prevención de complicaciones. El estudio también resalta la importancia del cuidado humanizado, que considera al paciente en su totalidad y promueve un abordaje empático e interdisciplinario. Se concluye que la actuación del nutricionista es indispensable para optimizar el tratamiento y garantizar una mejor calidad de vida a las personas con ERC.

Palabras clave: Enfermedad Renal Crónica. Hemodiálisis. Estado Nutricional. Terapia Renal Sustitutiva. Cuidado Humanizado.

1 INTRODUCTION

Chronic kidney disease (CKD) is characterized by progressive loss of nephron function that consequently leads to the loss of their ability to filter the blood and maintain homeostasis. It is associated with high morbidity and mortality rates with great socioeconomic impact, making it a public health challenge worldwide (AGUIAR et al., 2020). Chronic kidney disease (CKD) is an important direct cause of death and a risk factor for several health problems, especially cardiovascular ones. CKD has economic impacts and directly affects the quality of life of patients. Worldwide, it is estimated that approximately 850 million people have kidney disease." In 2019, kidney disease was responsible for 3.16 million deaths worldwide. From 1990 to 2017, global mortality from chronic noncommunicable diseases (NCDs) decreased; however, no similar decline in CKD was observed in the period (GOUVÊA et al., 2023). Patients with CKD on hemodialysis undergo serious changes in social life, work, eating habits and sexual life, which lead to changes in their physical and emotional integrity. This condition causes bodily damage and limitations, because, in general, the patient is distant from his social group, from his leisure and, sometimes, from his own family. These factors can make the patient fragile and lead to a worsening of their quality of life (GESUALDO et al., 2020). The objective of this study is to report the case of a patient with Chronic Kidney Disease (CKD) admitted to a reference hospital in nephrology, highlighting its clinical evolution, nutritional interventions performed and the challenges faced during treatment.

2 THEORETICAL FRAMEWORK

Chronic Kidney Disease (CKD) is a progressive and silent condition, characterized by the slow and irreversible loss of kidney function over time. This dysfunction prevents the kidneys from properly performing their essential functions of filtration, electrolyte regulation, and water balance, compromising body metabolism and favoring the accumulation of toxins in the body (SILVA et al., 2022). CKD is recognized as a serious public health problem, not only because of its growing incidence, but also because of the social, economic, and emotional impacts it imposes on patients and their families (AGUIAR et al., 2020).

Several factors contribute to the development and progression of CKD, the main ones being systemic arterial hypertension, diabetes mellitus, and cardiovascular diseases (LIMA; PEREIRA, 2021). Strict control of these comorbidities is essential to delay the deterioration of renal function and avoid complications that may lead the patient to the need for Renal Replacement Therapy (RRT), such as hemodialysis. In this context, CKD transcends the

biological scope, as it has a direct impact on the quality of life and emotional well-being of patients (COSTA et al., 2020).

The treatment of CKD requires a multidisciplinary approach, in which nutrition plays a prominent role. Adequate nutritional intervention contributes significantly to metabolic control, reduction of renal overload, and prevention of protein-energy malnutrition, a common condition among hemodialysis patients (CARDOSO et al., 2021; SANTOS et al., 2022). Feeding needs to be carefully planned, considering the stage of the disease, the comorbidities present, and the individual needs of each patient. Restrictions on the consumption of proteins, sodium, potassium, and phosphorus are essential to avoid metabolic complications and reduce symptoms such as nausea, edema, and fatigue (OLIVEIRA et al., 2023).

In addition to the physiological aspects, it is essential to recognize the human dimension of care. Hemodialysis patients face profound changes in their routines, with physical, social, and emotional limitations that affect their daily lives and interpersonal relationships. According to Gesualdo et al. (2020), continuous treatment and restrictions imposed by CKD can generate feelings of anxiety, fear, and isolation, compromising treatment adherence and emotional well-being. In this scenario, active listening and welcoming become therapeutic instruments as important as the nutritional intervention itself.

Thus, care for Chronic Kidney Disease goes beyond clinical control: it involves understanding the patient in their entirety, recognizing their vulnerabilities and strengthening their autonomy in the process of coping with the disease. The nutritionist, when integrating the health team, assumes an essential role in promoting a balanced diet and a better quality of life, acting not only on the disease, but on the person who lives with it.

3 METHODOLOGY

This study was developed as a case study, based on the patient's anamnesis and the analysis of his medical records during hospitalization at the Hospital de Clínicas Gaspar Vianna (FHCGV). Data collection included interviews to obtain information about their clinical history and eating habits, as well as the review of medical records, exams, and prescriptions. Nutrition played a central role in the methodology, focusing on the assessment and monitoring of the patient's nutritional status, considering the direct influence of diet on the management of CKD. The analysis involved reviewing the dietary prescriptions made by the nutrition team,

dietary adaptations to control electrolytes (such as sodium, potassium, and phosphorus), and adjusting proteins according to the phase of the disease.

4 RESULTS AND DISCUSSIONS

A 66-year-old man, born on November 26, 1959, resident of Belém do Pará, on renal replacement therapy with hemodialysis for 3 years at the Monteiro Leite Hemodialysis Center, was admitted to the FHCGV for amputation of the left lower limb, possibly due to peripheral obliterans arteriopathy. During data collection, the patient had difficulty reporting the onset and etiological factors of CKD. Biochemical tests indicated changes in the levels of ionic calcium, creatinine, and C-reactive protein, suggesting an initial inflammatory response that improved throughout hospitalization. Episodes of hyperglycemia, associated with type 2 diabetes, were controlled during hospitalization, possibly influenced by medications or inflammatory response.

The patient, with a height of 1.65 m and a dry weight of 70 kg, had a BMI of 25.7 kg/m², characterizing normal weight. It was not possible to collect other anthropometric data due to the recent diagnosis of perforating dermatosis, which caused intense pruritus. She reported a varied diet, but with excess sodium and fat, adjusted during hospitalization to a mild, hyposodium and hypoglycidic diet, with daily supplementation. During the hospitalization period, the use of ketoconazole altered the interaction between drug and nutrients. This medication induced episodes of nausea, which favored a decrease in food intake and increased the risk of malnutrition in the patient.

Chronic Kidney Disease (CKD) represents a growing challenge for global public health. Its progression leads to the gradual loss of kidney function, compromising the body's ability to maintain the balance of fluids, electrolytes and excrete toxic substances. CKD is often associated with conditions such as hypertension, diabetes mellitus, and cardiovascular disease, which accelerate the deterioration of kidney function. In addition, the disease can significantly impact the patient's quality of life, making nutritional management and treatment adherence essential to improve prognosis (SILVA et al., 2022; FILE; PEREIRA, 2021). Early identification and strict control of associated comorbidities can prevent or delay the progression of CKD, avoiding serious complications such as end-stage renal failure (OLIVEIRA et al., 2023). Treatment of patients with CKD, especially in the advanced stages, often involves renal replacement therapy, such as hemodialysis. However, this treatment imposes serious limitations on patients' quality of life, affecting their social relationships, their

ability to work, and even their mental health (OLIVEIRA et al., 2023). Nutrition plays a crucial role in the management of CKD, as kidney patients often face malnutrition due to dietary restrictions, loss of appetite, and metabolic changes associated with kidney failure. Studies indicate that a balanced diet, with adequate control of nutrients such as proteins, sodium, potassium, and phosphorus, can help slow the progression of the disease and improve the quality of life of patients (CARDOSO et al., 2021). In addition, adequate nutritional intervention is essential to prevent protein-energy malnutrition, which is common in hemodialysis patients and can lead to increased morbidity and mortality (SANTOS et al., 2022).

5 CONCLUSION

CKD represents a significant public health challenge, affecting not only kidney function but also diverse aspects of patients' lives, including their physical, emotional, and social well-being. Proper management of CKD involves a multidisciplinary approach, with nutrition being a fundamental component in controlling the progression of the disease and improving the quality of life of patients. Therefore, adequate nutrition, combined with other care, plays a vital role in the treatment of CKD, highlighting the importance of specialized follow-up to optimize therapeutic results and minimize the negative impacts of this debilitating condition.

REFERENCES

Aguiar, F. A., & et al. (2020). A doença renal crônica como desafio de saúde pública. Revista Brasileira de Nefrologia, 42(3), 215–221.

Cardoso, A. R., & et al. (2021). A importância da nutrição no manejo da doença renal crônica. Revista de Nutrição e Saúde Renal, 38(2), 112–118.

Costa, E. L., & et al. (2020). Aspectos emocionais e psicológicos em pacientes em hemodiálise. Revista Brasileira de Nefrologia, 42(2), 150–157.

Gesualdo, L., & et al. (2020). Impactos sociais e emocionais da hemodiálise na vida do paciente renal crônico. Jornal Brasileiro de Nefrologia, 42(1), 52–59.

Gouvêa, S. F., & et al. (2023). Mortalidade global por doenças crônicas não transmissíveis e a evolução da doença renal crônica. Revista de Saúde Pública, 57, 32–39.

Lima, J. T., & Pereira, M. R. (2021). Aspectos nutricionais no tratamento da doença renal crônica (1ª ed.). Editora Nefro.

Oliveira, M. S., & et al. (2023). Desafios no tratamento da doença renal crônica: Uma revisão crítica. Jornal Brasileiro de Nefrologia, 44(1), 45–52.

Oliveira, L. F., Gomes, T. S., Almeida, E. A., & et al. (2023). Gestão de comorbidades na doença renal crônica. Revista Brasileira de Nefrologia, 45(2), 123–130.

Santos, M. L., & et al. (2022). A intervenção nutricional na doença renal crônica: Estratégias para melhorar a qualidade de vida. Jornal Brasileiro de Nefrologia, 43(4), 389–395.

Silva, A. P., Costa, M. L., Santos, F. R., & et al. (2022). A evolução da doença renal crônica: Causas, diagnóstico e tratamento (2ª ed.). Editora Saúde.