## Nutritional and lipid profile in chronic haemodialysis patients

<u>Arij Ben Kmicha</u><sup>1</sup>, Meriem Khadhar<sup>1,2</sup>, Sarra Hadded<sup>1</sup>, Mouna Jerbi<sup>1</sup>, Hanene Gaied<sup>1</sup>, Asma Bettaieb<sup>1</sup>, Raja Aouidia<sup>1</sup>, Rym Goucha<sup>1</sup>

<sup>1</sup>Nephrology Department, Mongi Slim University Hospital, Tunis, Tunisia

## Abstract

Introduction: The incidence of chronic kidney disease requiring haemodialysis continues to increase. Its progression is marked by several complications, including alterations in nutritional status and disturbances in lipid balance in chronic haemodialysis patients. The objective of this study is to investigate the prevalence of dyslipidemia as well as the prevalence of malnutrition in this category of patients.

Patients and methods: This is a transient retrospective study involving 21 haemodialysis patients at the haemodialysis Unit of Mongi Slim Hospital in La Marsa. The assessment of nutritional status was based on body mass index (BMI), serum protein levels, and albumin levels. The evaluation of the lipid profile was based on cholesterol and triglyceride levels.

Results: The studied group consists of 21 patients with an average age of  $54 \pm 10$  years. The initial nephropathy is diabetic in 28.57% of cases, vascular in 33.33%, and indeterminate in 19.04% of cases. Eighty percent of the studied patients have hight blood pressure, 28.57% are diabetic, 52.38% are smokers, and 9.52% are alcoholics. The estimated body mass index is  $20.3 \pm 2$ . Among these patients 9.52% have hypercholesterolemia, and 23.5% have hypertriglyceridemia, 76.2% have an albumin level below 40. Furthermore, we did not observe a significant correlation between the underlying nephropathy and the frequency of dyslipidemia or malnutrition. We found that the risk of dyslipidemia is higher in male subjects who smoke.

Conclusion: This study highlights the importance of malnutrition and dyslipidemia in chronic haemodialysis patients, which contributes to excessive mortality. Therefore, it emphasizes the importance of prevention through the identification of risk factors.

<sup>&</sup>lt;sup>2</sup>Laboratory of kidney disease (LR00SP01), Tunis, Tunisia