

Nutritional status in end stage renal disease patients receiving chronic hemodialysis sessions in El Moassah university hospital

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Introduction

Chronic kidney disease (CKD) is a very common public health problem.

One of the commonest complications of chronic kidney disease is malnutrition.

There is no single gold standard method for assessment of the nutritional status of chronic kidney disease patients and so it is better to use multiple methods of assessment for the patients including history taking and dietary assessment via diaries and questionnaires, anthropometric measurements including body mass index calculation , laboratory testing and body composition assessment

Aim of the work

The aim of the present work is to study the nutritional status of the patients receiving maintenance hemodialysis sessions using the body composition monitor device

Subjects and Methods

This study was conducted over 50 patients receiving hemodialysis sessions in

El Moassah university hospital after applying the exclusion criteria and they were subjected to :

1. Thorough history taking including the subjective global assessment questionnaire
2. Thorough clinical examination including anthropometric measurements (weight, height , mid upper arm circumference) and body mass index calculations
3. laboratory testing : blood urea, serum creatinine , hemoglobin and serum albumin
4. assessment of the body composition by the body composition monitoring device and obtaining the values of lean tissue index, fat tissue index, lean tissue mass , fat tissue , adipose tissue mass and body cell mass.

Results

	Min. – Max.	Mean \pm SD.	Median (IQR)
Urea	61.0 – 187.0	121.5 \pm 26.70	126.5(102.0 – 132.0)
CR	4.80 – 13.80	9.04 \pm 2.09	9.25(7.5 – 10.5)
HB (gm/dl)	6.40 – 14.30	10.09 \pm 1.64	10.10 (9.0 – 10.9)
Albumin	3.60 – 5.0	4.33 \pm 0.39	4.25 (4.1 – 4.7)

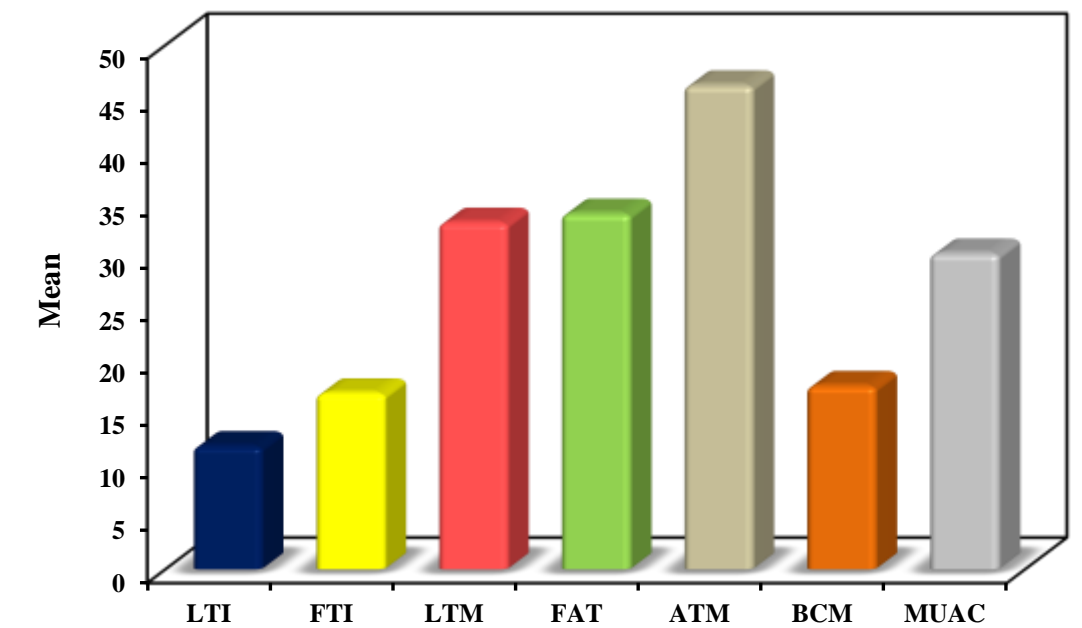
IQR: Inter quartile range

Descriptive analysis of the studied cases according to Blood urea level, Serum creatinine, Hemoglobin level and serum albumin level (n = 50)

	Min. – Max.	Mean \pm SD.	Median (IQR)
LTI	7.60 – 22.30	11.76 \pm 2.75	11.40 (9.5 – 13.1)
FTI	4.30 – 33.20	16.79 \pm 5.91	16.85 (12.6 – 19.6)
LTM	17.20 – 72.30	33.09 \pm 10.56	30.30 (25.3 – 39.2)
FAT	9.80 – 64.80	33.95 \pm 11.89	32.35 (27.1 – 43.1)
ATM	13.30 – 88.10	46.20 \pm 16.17	44.0 (36.8 – 58.6)
BCM	7.60 – 44.30	17.50 \pm 6.88	16.15 (12.4 – 20.5)

Descriptive analysis of the studied cases according to different nutritional parameters of the body composition monitor device (n = 50)

Descriptive analysis of the studied cases according to different parameters (n = 50)



Conclusions

Malnutrition has a great effect on quality of life , morbidity and mortality of the CKD patients and it needs assessment using multiple methods to obtain an accurate estimation of the nutritional status of the CKD patients