DIAGNOSTIC ACCURACY OF PG-SGA AND MUST IN PATIENTS WITH CHRONIC KIDNEY DISEASES, A PILOT.

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Introduction

Screening for 'risk of malnutrition' is required in hospitals by the IGZ performance indicators.

The National registration describes 18% patients in the Departments of Nephrology as malnourished, assessed with the SNAQ. In 2015 the departments Nephrology Radboudumc register 12% of the patients an 'increased risk of malnutrition' with the MUST.

In the literature, prevalence of Malnutrition or Protein Energy Wasting (PEW) in patients with CKD is between 18-75%.

We suspect that patients with a '(risk of) malnutrition or PEW' with CKD are not recognized by the MUST.

Objective

The aim of this pilot was to determine the diagnostic accuracy of the PG-SGA and the MUST compared to the PEW-criteria in patients with CKD in the department Nephrology

Methods

In this cross sectional study, we collected data on malnutrition using different screening tools in outpatients with CKD. All patients were screened by the MUST, the Patient Generated Subjective Global Assessment (PG-SGAtotal) and the Short Form (SF).

We used the PEW criteria of the International Society of Renal Nutritional and Metabolism (ISRNM) as golden standard for malnutrition (n=22). Criteria are based on 4 categories: serum chemistry (serum albumin), Body Mass (BMI), Muscle Mass (HGS) and Dietary Intake (protein intake using food diaries).

Results

50 patients with CKD (age 58 y +/-16,5, mean and SD, 28 male) were included. 23 outpatients with End-stage renal disease and 27 outpatients with hemodialysis/peritoneal dialysis.

Prevalence of '(Risk on) Malnutrition' by MUST is 4%, PG-SGA(SF) is 40%, PG-SGA 46%.

According the PEW-criteria (n=22) 40% has PEW

Table 1:

The sensitivity and specificity of the MUST, PG-SGA (SF) and PG-SGA relative to the PEW-criteria (n=22)

	Sensitivity (%)	Specificity (%)
MUST (≥2)	13 (95% CI 0,3- 53%)	100 (95% CI 72- 100%)
PG-SGA(SF) (≥4)	25 (95% CI 4-65%)	73 (95% CI 39-94%)
PG-SGA (≥4)	63 (95% CI 25- 93%)	64 (95% CI 31-89%)

Conclusion

Using the MUST as screening tool a lot of patients with PEW are not recognized as being at '(Risk for) Malnutrition'. As an alternative the PG-SGA has the highest sensitivity of 63%.

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