Hallmarks of nutritional status in kidney transplant recipients

Lies ter Beek^{1,2}, Antonio W. Gomes Neto³, Michele F. Eisenga³, Jan L.N. Roodenburg⁴, Cees P. van der Schans^{1,5}, Faith D. Ottery^{1,6}, Stephan J.L. Bakker³, Harriët Jager-Wittenaar^{1,4}

- 1. Hanze University of Applied Sciences, Research Group Healthy Ageing, Allied Health Care and Nursing, Groningen, The Netherlands
- 2. University of Groningen, University Medical Center Groningen, Department of Pulmonary Diseases and Tuberculosis, Groningen, The Netherlands
- 3. University of Groningen, University Medical Center Groningen, Department of Internal Medicine, Groningen Transplant Center, Groningen, The Netherlands
- 4. University of Groningen, University Medical Center Groningen, Department of Oral and Maxillofacial Surgery, Groningen, The Netherlands
- 5. University of Groningen, University Medical Center Groningen, Department of Rehabilitation Medicine, Groningen, The Netherlands
- 6. Ottery & Associates, LLC, Vernon Hills (Chicago), United States of America

Aim

We aimed to assess nutritional status in patients who had received a kidney transplant more than one year prior to assessment.

Methods

- In 72 outpatients (aged 55.5) ±11.8 years; 50% male) that received their kidney transplant >1 year prior to assessment, nutritional status was assessed by the Dutch version of the Patient-Generated Subjective Global Assessment (PG-SGA), v3.7 (based on the original English PG-SGA ©FD Ottery, 2005, 2006)², utilizing the Pt-Global© web tool
- Patients were categorized as well nourished (Stage A), moderate/ suspected malnutrition (Stage B), or severely malnourished (Stage C)
- Total PG-SGA point score of 4-8 indicates intervention by dietitian, in conjunction with nurse or physician as indicated by symptoms, and ≥9 points indicates a critical need for improved symptom management and/or nutrient intervention options

Results

- Nutritional status of the patients is shown in Table 1
- 22% (16/72) had a total PG-SGA score of ≥4
- 4% (3/72) of the patients were categorized as malnourished (Stage B or C)
- Median point score in malnourished patients was 10, which mainly related to nutrition impact symptoms
- In well nourished patients (Stage A), scores 4-8 were mainly related to limited activities/functioning, disease factors, and/or deficit/loss of muscle and/or fat

Background

Prevalence of malnutrition in patients with chronic kidney disease (CKD) is reported to vary between 18% and 75%, depending on dialysis mode, criteria used, and patient population.¹

Thus far, prevalence of malnutrition and its risk factors in patients that received a kidney transplant are unknown.

Conclusion

Our findings show that >1 year after kidney transplantation, prevalence of malnutrition is low.

However, a substantial proportion of the patients (22%) is at nutritional risk (Total PG-SGA score ≥4 points), indicating symptom management and nutritional intervention is needed.

Table 1. Nutritional status of kidney transplant recipients (n=72)

		PG-SGA Global Category		
PG-SGA total point score		Stage A	Stage B	Stage C
	0-3 points	56	0	0
	4-8 points	13	1	0
	≥9 points	0	1	1

References

- 1. Kalantar-Zadeh K, Ikizler TA, Block G, Avram MM, Kopple JD. Am J Kidney Dis 2003;42(5): 864-881.
- 2. Ottery FD. Nutrition 1996;12(1 Suppl): S15-9.







