

만성콩팥병에 따른 신이식 환자에서 Onodera 영양지표는 의미있는 영양인자이다

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Onodera's Prognostic Nutritional Index may be a Significant Nutritional Factor in Renal Transplantation Patients according to the Presence or Absence of Chronic Kidney Disease

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Background: Evaluation of nutritional status is essential clinical procedures for managing renal transplantation patients, especially in status of chronic kidney disease (CKD). However, no standard method for assessing the nutritional status in renal transplantation patients exists. Onodera's Prognostic Nutritional Index (OPNI) is a method that considers serum albumin level and total lymphocyte count. This simple method may involve common measures and can be applied rapidly in a large number of patients. Validation of OPNI has been performed for patients with end-stage liver disease, active tuberculosis, and gastrointestinal malignancies.

Methods: We examined the OPNI scores of 184 renal transplantation patients (50.2±11.3 years; 115 men and 69 women). The OPNI is calculated based on the serum albumin level and total lymphocyte count and uses the following equation: $OPNI = 10 \times \text{serum albumin (g/dL)} + 0.005 \times \text{total lymphocyte count (/mL)}$. Logistic regression analysis was performed for predicting malnutrition in renal transplantation patients.

Results: The average OPNI value was 48.9±7.1, and OPNI values were normally distributed. According to logistic regression for predicting malnutrition, male, total lymphocyte count and chronic kidney disease predicted malnutrition.

Conclusions: These results suggest that OPNI may be a significant nutritional marker in renal transplantation patients. The simple OPNI method is a clinically useful marker for the assessment of nutritional status in renal transplantation patients.

Key Words: 오노데라영양인자, 신이식, 영양지표

OPNI, Renal transplantation, Malnutrition

Table 3. Logistic regression for predicting malnutrition

Variable	OR (95% CI)	P
Age > 60 years	0.404 (0.119-1.372)	0.146
Male	3.094 (1.036-9.244)	0.043
DM	0.895 (0.232-3.452)	0.872
CKD	3.699 (1.425-9.603)	0.007
Duration after kidney transplantation (months) > 100	2.746 (0.992-7.599)	0.052
Serum Albumin < 3.5 g/dL	0.724 (0.094-5.559)	0.756
Total Lymphocyte Count < 1500/mm ³	83.045 (20.484-336.675)	0.001