There was a 100% response rate in the second survey. Respondents worked at chain-based outpatient facilities in the USA, and all had used the algorithm for 6 months on 2–4 patients. Sixty-four percent of respondents felt the algorithm improved or significantly improved their patient interactions, the remainder saw no change, and 57% thought the algorithm increased their understanding of the patient’s condition. Algorithm use increased the mean estimated monthly nutrition care time for patient compared to average habits \( (p < 0.001); 45 \pm 27 \) minutes without the algorithm, \( 100 \pm 43 \) minutes in month 1 of the algorithm, and \( 77 \pm 35 \) minutes in the last month. The additional time was distributed evenly between interaction and documentation.

These surveys show that dietitians felt that an online nutrition algorithm may improve dietitian-patient interactions and understanding of patient conditions which may be helpful in medically complex cases.

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74 MALNUTRITION INFLAMMATION SCORE IS COMPARABLE TO SUBJECTIVE GLOBAL ASSESSMENT AS A NUTRITIONAL ASSESSMENT TOOL FOR PERITONEAL DIALYSIS PATIENTS

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Malnutrition is highly prevalent in dialysis patients. Appropriate assessment tools are key for its prevention and treatment. This study aimed to provide information regarding the Malnutrition Inflammation score (MIS) as a nutritional assessment tool in Peritoneal Dialysis (PD) patients by analysing relationships with other standard measures of nutritional status, and comparing them with the Subjective Global Assessment (SGA). The study also aimed to provide information regarding the nutritional status of a cohort of Australian PD patients, which is lacking in current literature. Ninety stable PD patients received a nutritional assessment over a period of 6 months. Nutritional status was assessed by MIS, SGA, serum albumin, c-reactive protein (CRP), body mass index (BMI), mid arm muscle circumference (MAMC), and a 24-hour recall to measure energy and protein intake. Estimated glucose absorption from the dialysate was also included. Correlations between MIS, SGA and the other measures of nutritional status were analysed (using Spearman’s analysis, SPSS, v 17.0) and compared. Thirty seven percent of the study group was considered to be malnourished according to SGA score. The median MIS score was 5.0 (2.5–7.5). MIS and SGA were both inversely correlated with energy intake \( (p = 0.002, p = 0.001 \) respectively), serum albumin \( (p = 0.001, p = 0.001 \) respectively), BMI \( (p = 0.002, p = 0.006 \) respectively) and MAMC \( (p = 0.001, p < 0.008 \) respectively). In conclusion, the MIS was comparable to the SGA when correlated with standard markers of nutritional assessment. The results indicate that the MIS is a useful nutritional assessment tool for PD patients. The study also showed that 37% of patients were malnourished, providing information regarding the nutritional status of Australian PD patients.

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75 IMPAIRED GLUCOSE METABOLISM DESPITE DECREASED INSULIN RESISTANCE AFTER RENAL TRANSPLANTATION

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The pathophysiology underlying new-onset diabetes after transplantation (NODAT) is unresolved. We obtained demographics and laboratory data from all 1004 renal transplant recipients followed at our outpatient clinic in 2009/2010, randomly assigned 307 patients without previously diagnosed diabetes to a routine 2-hour oral glucose tolerance test (OGTT), and compared the metabolic results to a large, unrelated cross-sectional cohort of non-transplanted subjects. Among renal transplant recipients, 11% had a history of NODAT, and 12% had type 1 and type 2 diabetes, 42% of all OGTTs were abnormal (9% diabetic), predominantly in older patients who received tacrolimus. Compared to non-transplanted subjects, basal glucose was lower and Hba1c higher in renal transplant patients. Compared to non-transplanted subjects, insulin secretion was inferior, and insulin sensitivity improved at \( \geq 6 \) months, as well as 3 months post-transplantation. [The Figure shows linear spline interpolation; all \( p \) for overall difference between non-Tx and Tx patients \( < 0.02, \) using likelihood ratio testing]. Our results indicate that impaired insulin secretion is the predominant problem after renal transplantation, suggesting benefit for therapeutic regimens that preserve beta cell function after renal transplantation. The mechanism of increased insulin sensitivity might be pathophysiological similar to pancreaticogenic diabetes.

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76 TRANSHYRETIN PREDICTS CARDIOVASCULAR OUTCOME IN HEMODIALYSIS PATIENTS WITH DIABETES MELLITUS TYPE 2

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BMI and albumin are commonly accepted parameters to recognize wasting in dialysis patients and are powerful predictors of morbidity and mortality. However, both parameters reveal limitations and may not cover the entire range of patients with wasting. The visceral protein transthyretin (TTR) may be helpful in overcoming the diagnostic and prognostic gap. Therefore, the aim of this study was to assess the association of TTR with morbidity and mortality in hemodialysis patients. The TTR concentration was determined in baseline plasma samples of 1177 hemodialysis patients with diabetes mellitus type 2. Cox regression analyses were used to determine hazard ratios for the risk of cardiovascular events (CVE) and mortality according to quartiles of TTR plasma concentration for the total study cohort and the subgroups BMI \( \geq 23\)kg/m\(^2\), albumin concentration \( \geq 3.8\)g/dl and a combination of both. A low TTR concentration was associated with an increased risk for CVE for the total study cohort (HR 1.65; 95% CI 1.27–2.14), patients with BMI \( \geq 23\)kg/m\(^2\) (HR 1.70; 95% CI 1.22–2.37), albumin \( \geq 3.8\)g/dl (HR 1.68; 95% CI 1.17–2.42) and the combination of both (HR 1.69; 95% CI 1.13–2.53). Additionally, a low TTR concentration predicted all-cause mortality for the total study cohort (HR 1.79; 95% CI 1.43–2.24) and patients with BMI \( \geq 23\)kg/m\(^2\) (HR 1.46; 95% CI 1.09–1.95). In conclusion, the present study demonstrated that TTR is a useful predictor for cardiovascular outcome and mortality in hemodialysis patients. TTR was particularly useful in patients who were not identified to be at risk by BMI or albumin status.

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77 AUDIT OF THE PREVALENCE OF MALNUTRITION USING THE MODIFIED SUBJECTIVE GLOBAL ASSESSMENT TOOL IN MAINTENANCE PERITONEAL DIALYSIS PATIENTS IN THE TOP END RENAL SERVICE OF THE NORTHERN TERRITORY AUSTRALIA

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Introduction: The objective of the audit is to determine the prevalence of malnutrition in maintenance peritoneal dialysis (MPD) patients in the Top End of the Northern Territory, using the modified Subjective Global Assessment (SGA) tool. Methods: The audit was conducted in an outpatients setting. Approximately 75% of PD patients in the Top End Renal service are represented by Aboriginal and Torres Strait Island people. The study population was MPD patients in the Top End Renal Service (TEARS) of the Northern Territory, from January 1st 2010 to December 31st 2010. Results were compared to malnutrition rates found in the 2008/09 the audit of MPD patients in the TERS. The SGA’s were performed by the renal Dietitian as part of the standard dietary support of MPD patients. SGA scores were collected from patient medical