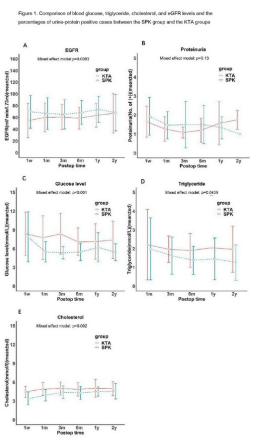

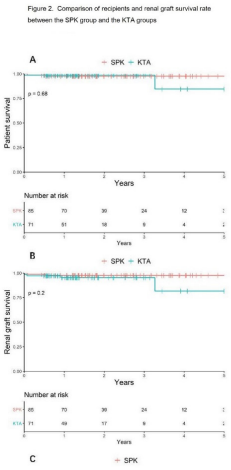

CITATION INFORMATION: Fu X., Yu C., Wang H., Zhao J., Wang Z., Mo C., Shi X., Feng G., Song W., Shen Z. Superior Metabolic Function of Type 2 Diabetes Mellitus Patients After Simultaneous Kidney/pancreas Transplantation Compared with Kidney Transplantation Alone *AJT, Volume 21 Supplement 3*

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Abstract# 897

Early Parathyroidectomy for Management of Post-transplant Hyperparathyroidism: A Case Series

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Purpose: Secondary hyperparathyroidism (HPT) gradually resolves after successful kidney transplantation (KT), and parathyroidectomy (PTX) is reserved for patients whose HPT persists longer than a year after KT. Few reports have examined the role of PTX within the first year of transplant. In this case series, we describe our experience with early PTX as treatment for post-transplant HPT that failed medical therapy.

Methods: Between August 2015 and December 2019, we identified 12 patients who underwent PTX within a year of KT. PTX was considered if HPT persisted despite treatment with the maximal tolerated dose of cinacalcet. Demographic and clinical characteristics were summarized using descriptive statistics. Estimated glomerular filtration rate (eGFR) was calculated using the Modification of Diet in Renal Disease (MDRD) formula. Intra-individual changes of relevant serum chemistry values and eGFR before and after PTX were compared with the Sign test. Statistical analysis was performed with SPSS v. 24.0; $p<0.05$ was considered significant.

Results: The median (interquartile range [IQR]) age was 54 (44-63) years; 42% were women and 83% had undergone deceased donor KT. The median daily dose of cinacalcet was 120 (60-120) mg. Pre-PTX renal biopsy showed intratubular calcium phosphate crystals in 2 patients. The median interval between KT and PTX was 169 (134 - 272) days, and the median length of stay for the PTX was 3 (3-4) days. There were no cases of permanent injury of the recurrent laryngeal nerve or chronic hypocalcemia. Before PTX, median eGFR (ml/min/1.73m2), and serum intact parathyroid hormone (iPTH, pg/mL), calcium (Ca, mg/dL), phosphorus (Phos, mg/dL), and alkaline phosphatase (ALP, U/L) were 64 (44-83), 548 (363-1032), 10.8 (9.8-11.9), 2.4 (2.2-3), and 170 (126-297), respectively. The corresponding values at 3 months post-PTX were 50 (39-68), 46 (18-154), 9.4 (9-10.5), 3 (2.6-3.2), and 75 (61-120), respectively. One year post-PTX, eGFR, and serum Ca, Phos and ALP were 49 (40-70), 9.1 (8.5-9.6), 3.2 (2.9-3.5), and 77 (50-87), respectively. Comparing intra-individual pre-PTX to post-PTX values, ALP was lower at 3 and 12 months ($p<0.01$), iPTH was lower at 3 months ($p=0.02$) and Ca at 12 months ($p<0.01$); changes in eGFR or Phos were not statistically significant at 3 or 12 months.

Conclusions: Our data suggest that early PTX is a safe and effective treatment for HPT after KT, with minimal complications. Early PTX was not associated with graft dysfunction in our study. Long term outcomes of early PTX need to be studied.

CITATION INFORMATION: Gokhale A., Chancay J., Johnson S., Owen R., Tedla F., Bhansali A., Sehgal V., Shapiro R., De Boccardo G. Early Parathyroidectomy for Management of Post-transplant Hyperparathyroidism: A Case Series *AJT, Volume 21 Supplement 3*

DISCLOSURES: A. Gokhale: None. **J. Chancay:** None. **S. Johnson:** None. **R.P. Owen:** None. **F. Tedla:** None. **A. Bhansali:** None. **V. Sehgal:** None. **R. Shapiro:** None. **G. De Boccardo:** None.

Abstract# 898

Renal Transplant Recipients with Low Skeletal Muscle Attenuation Have a Greater Risk of Developing New-onset Diabetes After Transplantation

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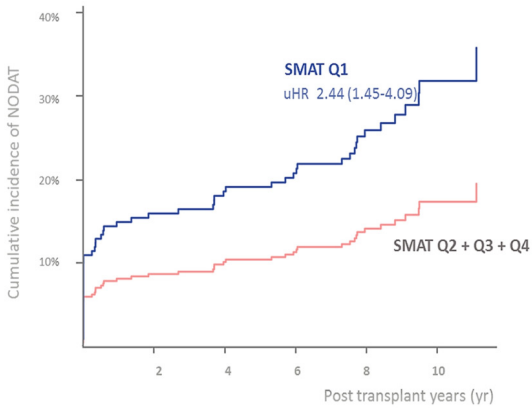
Purpose: Decreased muscle radiation attenuation on computed tomography (CT) is indicative of fat infiltration within the muscle. Such ectopic fat accumulation has recently been recognized as a risk factor for metabolic alterations and cardiovascular disease. Here we examined the possible association between skeletal muscle attenuation and future development of new-onset diabetes after transplantation (NODAT) in renal allograft recipients.

Methods: We performed a morphometric assessment of preoperative abdominal CT scans of non-diabetic adult patients who underwent renal transplants between January 2009 and December 2014 in our transplant center. Mean skeletal muscle attenuation (SMAT), skeletal muscle index (SMI; height normalized skeletal muscle area) were assessed for non-contrast CT scans at the level of L3 vertebra. Patients with polycystic kidney disease were excluded. We examined the association between CT morphometric indices and NODAT development.

Results: Our study population included 314 adult renal allograft recipients who did not have diabetes mellitus at the time of transplant. A total of 59 (18.8%) patients developed NODAT during the mean follow-up period of 8.9 years. According to univariate cox analysis, SMAT but not SMI showed significant association with future NODAT development (HR of the lowest quartile of SMAT 2.44, 95% CI 1.45-4.09, p=<0.001; HR for SMI 1.02, 95%CI 0.99-105, p=1.55; Figure 1). Other patient and transplant factors that showed significant association with NODAT development in univariate analysis were age (HR 1.03), BMI (HR 1.16), previous diagnosis of hypertension (HR 2.67). In the multivariate model including the factors mentioned above and other known risk factors of NODAT such as HCV and tacrolimus use, SMAT remained a significant factor (HR of the lowest quartile of SMAT 1.96, 95% CI 1.04-3.69, p=0.039) along with age (HR 1.03, 95% CI 1.00-1.06, p=0.023).

Conclusions: Our study shows that decreased muscle attenuation in preoperative CT scans is associated with the development of NODAT in renal allograft recipients independent of known risk factors.



CITATION INFORMATION: Han A., Kim H., Chung C., Ko H., Choi K., Min S., Min S., Ha J. Renal Transplant Recipients with Low Skeletal Muscle Attenuation Have a Greater Risk of Developing New-onset Diabetes After Transplantation *AJT, Volume 21 Supplement 3*

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Abstract# 899

An Unexpected Case of Transthyretin Amyloid Cardiomyopathy (ATTR-CM) Overlooked Pretransplant, but Then Diagnosed Early After Kidney Transplant with a Negative Patient Outcome: A Case Report

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Purpose: ATTR-CM is underrecognized and commonly overlooked and undiagnosed. When found it is often a late diagnosis in patients with severe left ventricular hypertrophy (LVH) and diastolic heart disease. These findings are common and non-specific in patients with end-stage renal disease (ESRD) making for a challenging diagnosis.

Methods: We present a case of a 63-year-old female with a history significant for ESRD on hemodialysis, idiopathic chronic hypotension, and dysautonomia. She