J Nephrol Ther 2016, 6:4 (Suppl)
http://dx.doi.org/10.4172/2161-0959.C1.003

8th World Nephrology Conference

August 15-16, 2016 Sao Paulo, Brazil

Early kidney injury biomarkers in type 2 diabetes patients

Marcelo Rodrigues Bacci
Faculdade de Medicina do ABC, Brazil

Background: Diabetic nephropathy is associated with specific histological changes. An early detection of the depletion of the glomerular and tubular function can be done, with biomarkers of diabetic disease. The aim of this study was to evaluate the accuracy of early kidney dysfunction biomarkers in type 2 diabetes.

Methods: Patients with type 2 diabetes were split according to their levels of glycated hemoglobin. Their urine and blood samples were taken to measure Cystatin C (CysC), NGAL, Beta-Trace Protein (BTP) and the first morning void Albumin-Creatinine Ratio (ACR). Patients in the end stage of the renal disease or in dialysis were not included. Receiver-Operating characteristic Curves (ROC) were generated and the areas under the curve (AUCs) were compared with the performance of the biomarkers used in early detection of kidney dysfunction in type 2 diabetic patients.

Results: Ninety patients with type 2 diabetes were chosen. CysC was positively correlated with creatinine ($p<0.001$), Estimated Glomerular Filtration Rate (eGFR) ($p<0.001$), and urinary βTP ($p=0.01$). The AUC for CysC was 0.635, 0.621 for serum NGAL and 0.660 for ACR. The crude logistics regression model, observed a positive association between serum CysC ($p=0.01$), and serum NGAL ($p<0.001$).The linear regression model, showed a positive association between serum CysC, creatinine and eGFR ($p<0.001$), but did not show a positive association with Glicated Hemoglobin ($p=0.892$).

Conclusions: NGAL and serum CysC were positively associated with the presence of renal dysfunction and better performance on the ROC analysis in relation to other markers evaluated in patients with T2D without kidney dysfunction.

mrbacci@yahoo.com

Analysis of combination of plasmapheresis, immunoglobulin and rituximab in the treatment of antibody mediated rejection after kidney transplantation: A review of literature

Bruna Cristina Cardoso Martins
Federal University of Ceará, Brazil

Antibody-mediated rejection (AMR) is one of the important complications of renal transplant that results in the loss of the kidney graft when not treated. The Ministry of Health of the Brazil recommends the use of immunoglobulin (IVIg) or a combination of plasmapheresis (PP) for treatment. The aim of the study was to identify and describe the results of use of PF, IVIg and RIT in the treatment of AMR in after kidney transplantation in the literature. This is an integrative literature review that uses the key words: "rituximab", "plasmaphereses", "immunoglobulin", "antibody-mediated rejection" and "kidney transplantation" in the databases PubMed, LILACS and Cochrane. Inclusion criteria were studies published between 2005 and 2015, follow-up type with clinical outcome analysis and combination of PP therapy and/or IVIG and/or RIT. The study included six papers, after analysis of 490 articles found. The mean duration of follow-up was 3.8±1.9 years (min: 1, max: 6) and the number of monitored patients was on average 19.3±18.0 (min:7 and max:54). The studies analyzed that combined PP, IVIg and RIT, it was evaluated that there was articles in which the graft survival rate was 50% after 10 months of treatment, 71.4% at 1 year and 90% at the end of follow-up two years. In conclusion, the combination of PP, IVIg and RIT is protocol for the treatment of AMR in different transplant centers and were no differences between graft survival rates in relation to follow-up and early treatment, requiring the completion of prospective studies with longer follow-up.

bbrunacristina@hotmail.com