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

Comparison of renal effects caused by synthetic and isolated natriuretic peptide of *Crotalus durissus cascavella* venom

Helena Serra Azul Monteiro
Federal University of Ceara, Brazil

Natriuretic Peptides (NPs) have significant interest in regulating cardiovascular, renal and endocrine homeostasis and have been described in the snake venoms. *Crotalus durissus cascavella*, a characteristic terrestrial snake of caatinga biome of northeastern Brazil, has in his whole venom an NP (NPCasca) of which are reported vascular and renal effects. The aim of this study was qualitative comparisons of the results obtained on isolated rat kidney perfusion system of the isolated and the synthetic peptides from *Crotalus durissus cascavella* venom (NPCasca and NPCdc, respectively) in different concentrations. The effects of NPCdc were investigated in four concentrations (0.03 µg/mL, 0.1 µg/mL, 0.3 µg/mL and 1 µg/mL) and compared to the effects of NPCasca in two concentrations (0.1 µg/mL and 0.3 µg/mL). There was increase in perfusion pressure (PP) in 0.03 µg/mL and reduction in 1 µg/mL. Renal vascular resistance (RVR) was increased at 0.03 µg/mL. Urinary flow (UF) increased in 0.03 µg/mL and decreased in 0.1 µg/mL and 1 µg/mL. The glomerular filtration rate (GFR) was reduced at all the concentrations tested. Percentage of the total and proximal tubular transport of sodium (%TNa^+) and chloride (%TCl^-) showed reductions at all concentrations tested. Percentage of the total proximal tubular transport and potassium (%TK^+) were reduced in 0.03 µg/mL and 0.3 µg/mL. These results do not reproduce the actions of the original molecule: Increased FU, GFR and urinary sodium excretion, similar to the effects caused by most NPs. However, these same concentrations were unable to cause changes in RVR, contrary promoted reduced GFR, leading also to reduce UF at 0.1 µg/mL. Transports, nevertheless, were reduced.

alinediogo_marinho@hotmail.com

Hyperglycemia associated with kidney transplantation: Clinical and possible risk factors

Aline Diogo Marinho
Federal University of Ceara, Brazil

Aim: The hyperglycemia associated with transplantation (HAT) is associated with worse patient survival outcomes and renal graft. The aim of this study was to evaluate clinical features and risk factors for the development of hyperglycemia after renal transplantation in a university hospital (Fortaleza/ Ceará).

Methods: This is a retrospective cohort study of kidney transplant patients from July 2012 to July 2013. All 121 transplant patients in this period were selected for the study, 37 patients were excluded for transfer to another transplant center, death, loss graft, pre-transplant diabetes mellitus or double transplantation during the study. The 84 patients were divided into 3 groups according to glycemic status (normal glycemic, pre-diabetics and diabetics) and parameters were analyzed in laboratory during the period of 1 year post-transplant and hypoglycemic agents used within 2 years after transplantation.

Results: Advanced age was the risk factor that had a significant association with hyperglycemia ($p<0.05$). The percentage of diabetic patients was found to be 8.3% (n=7) and pre-diabetic 48.8% (n=41). In the study, 14 patients used glucose-lowering drug therapy (oral and/or injectable), being 8 (57.1%) patients in pre-diabetic group and 6 (42.9%) of the diabetic group, with the median time to onset treatment of 216 days, median of 47 days and range from 12-692 days and hypoglycemic metformin more frequent.

Conclusion: The hyperglycemia associated with renal transplantation has a strong relationship with older, so older individuals need more intensive monitoring of glycemic parameters.

alinediogo_marinho@hotmail.com