

AGEs-Aggravating Renal Lesions in C57BL/6J Mice, STZ-Induced Diabetes Nephropathy Model

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Abstract : The present study aimed to reveal the mechanism in aggravating STZ induced diabetic nephropathy (DN) by AGEs (advanced glycation end products). At the eighth day, 20 diabetic mice were randomly divided into STZ group and combination (combine AGEs with STZ) group. Simultaneously, AGEs group and normal group were set. Only mice in AGEs group, combination group were fed with high-AGEs diets. Mice diabetic conventional indicators, biochemical analysis were measured. Among the indicators, food consumptions, water intake, urine output, blood glucose, urine protein, urine creatinine, serum urea nitrogen were increased significantly in STZ, combination groups. The AGEs levels in combination group increased significantly when compared with STZ group. Weights and insulin levels in the STZ, combination groups were decreased significantly when compared with normal group, and the difference was significantly between AGEs group and STZ group. As a conclusion, AGEs play an important role in the DN development, inducing kidney damages.

Keywords : AGEs, diabetic nephropathy, serum urea nitrogen, urine protein

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