

Morroniside Intervention Mechanism of Renal Lesions, a Combination Model of AGEs Exacerbation of STZ-Induced Diabetes Mellitus

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Abstract : The depth study aimed on the mechanism of morroniside in protecting diabetic nephropathy. The diabetic mice models with blood glucose above 15mmol/L were divided into model, aminoguanidine, metformin, captopril, morroniside low-dose, and morroniside high-dose groups. And normal group was set simultaneously. All groups were fed with high AGEs food except normal group. Each group was intragastric administration of the corresponding medicine except model and normal groups. After 12 weeks, all the indicators were measured. It showed that the morroniside could reduce blood glucose significantly, urinary protein, serum urea nitrogen, creatine, pathological changes, AGEs levels, renal cortex RAGE mRNA and RAGE protein expression levels; increase food consumption, water intake, urine volume, insulin secretion. As a conclusion, morroniside from cornus officinalis can protect renal in diabetic mice, its mechanism may be related to the proliferation of islet cells, rectify glycometabolism, reduce serum and kidney AGEs content, and descend renal RAGEmRNA and RAGE protein expression levels.

Keywords : cornus officinalis, diabetic nephropathy, morroniside, RAGE protein

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