Effect of Aloe vera (L.) Burm. fil. leaf gel and pulp extracts on kidney in type-II diabetic rat models.

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Abstract:
Significant degenerative changes were observed in the kidney tissue of untreated neonatal streptozotocin (n0STZ)-induced type-II diabetic rats. These degenerative changes were diminished in the kidney tissue of diabetic animals given glibenclamide and Aloe leaf gel and pulp extracts. Kidney lipid peroxidation levels were increased in diabetic rats compared to healthy rats; these levels were higher in rats treated with glibenclamide than in those which received Aloe extracts. Serum urea and creatinine levels were higher in diabetic rats in comparison to healthy rats. The administration of Aloe gel extract and glibenclamide decreased serum urea and creatinine levels in comparison to diabetic controls. Only A. vera leaf gel extract showed improvement both in histological and biochemical parameters suggesting a protective effect of A. vera on mild damage caused by type-II diabetes on kidney tissue.