

عنوان مقاله:

Administration of troxerutin improves testicular function and structure in type-1 diabetic adult rats by reduction of apoptosis

محل انتشار:

مجله گیاهان دارویی ابن سینا، دوره 9، شماره 4 (سال: 1398)

تعداد صفحات اصل مقاله: 12

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خلاصه مقاله:

Objective: The glucose-reducing effects of troxerutin was previously proven. This study was conducted to evaluate troxerutin effect on testicular structure and spermatozoid parameters in type-1 diabetic adult male rats. **Materials and Methods:** Fifty male Wistar rats were randomly classified into 5 groups as follows: control (C), troxerutin (T), diabetic (DM), troxerutin-treated DM (DT) and insulin-treated DM (DI). Testicular structure, apoptosis, lipid peroxidation and antioxidant activity, and spermatozoid parameters were assessed 4 weeks after initiation of the interventions. **Results:** The results revealed that diabetes caused testicular stereological changes and significantly increased blood glucose level, testicular MDA content and apoptosis but decreased insulin level, testicular GPX activity, and sperm parameters compared to controls (p Conclusion: Taken together, troxerutin, comparable to insulin, effectively improved DM-induced testicular dysfunction and sperm parameters in diabetic rats and these effects might be mediated through .troxerutin's anti-apoptotic effects

کلمات کلیدی:

Diabetes, Troxerutin, Testis, Apoposis, Stress oxidative, Rat

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