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Poster Presentations

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Prosopis farcta improves histopathological disorders and reduces oxidative stress of testicular tissue in diabetic rats

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Background: Prosopis farcta (PF) has antioxidant effects and might be effective in avoiding damaging effects of diabetes on the testicular tissue.

Objective: This study purposes to examine the effect of PF on oxidative stress and the structure of testis in diabetic rats.

Materials and Methods: 32 male adult Wistar rats were randomly divided into control, PF, diabetic and diabetic/PF. Streptozotocin was administered intraperitoneally to induce diabetes mellitus in rats. PF group and PF-treated diabetic group received intraperitoneally 300 mg/kg extract of PF for 30 days. At the end of the study, the rats were weighed and dissected. Then, oxidative stress and histopathology of testis were examined.

Results: The level of malondialdehyde in diabetic rats treated with PF decreased in compared with diabetic group ($p = 0.001$), although PF extract increased the level of superoxide dismutase in the diabetic group (373.9 ± 16.6) ($p < 0.001$). Moreover, PF decreased testicular damage caused by diabetes mellitus.

Conclusion: Hydroalcoholic extract of PF improves testicular tissue structure in diabetic rats via decreasing oxidative stress.

Key words: Testis, Rat, Prosopis farcta.