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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

Ghanabari E¹, Khazaei F², Niromand E³, Khazaei M³.

1. Department of Tissue Engineering, Tabriz University of Medical Sciences, Tabriz, Iran.

2. Student Research Committee, Kermanshah University of Medical Sciences, Kermanshah, Iran.

3. Fertility and Infertility Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran.

Email: e_ghanabari90@yahoo.com

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.