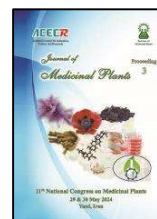




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Examine the effect of *Cicer arietinum* extract on the expression of Sertoli cell androgen receptors in mouse azoospermia model

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ABSTRACT

Infertility is one of the problems of today's societies. 50% of infertility cases are related to male causes, which is one of the common cases of azoospermia [1]. Chickpea, which seems to be effective on spermatogenesis and male infertility in different ways. Therefore, the aim of the present survey is to study the effectiveness of the total extract and different fractions of chickpea seeds on the effective factors in male infertility. In this study, 30 mice were used, which were randomly divided into 6 groups; The control group, which were kept under normal conditions, the azoospermic group, in which the rats received a single intraperitoneal dose of busulfan at a dose of 40 mg/kg; Groups 3 to 6, after 35 days of receiving a single dose of busulfan, received total extract and hexane, chloroform, and methanolic fractions of chickpea seeds at a dose of 400 mg/kg for one week. The diameter of the seminiferous tubules showed a significant increase in the control group compared to the azoospermic group. The total number of Sertoli cells, spermatogonia and spermatocytes counted in the group receiving total extract had a significant increase compared to the azoospermic group. In the Immunohistochemistry test, the expression level of androgen receptor in the total extract group and fractions increased significantly compared to the azoospermic group. Total extract of *Cicer arietinum* can improve the destructive effects of busulfan on spermatogenic cells and the process of spermatogenesis.

References

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