

## Effects of *Achillea millefolium* L. Extract on Rat Spermatogenesis

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**Abstract :** Introduction: Today herbal medicine are extensively used for various therapeutic reasons. Whereas *Achillea millefolium* L. comprises different chemical compounds it is used in classic and modern medicine for different purposes. Concerning the family planning as a principle matter, the idea of using specific herbal medicine is of great importance. Purpose: To investigate the effects of *Achillea millefolium* L. extract on fertility power and spermatogenesis process in male mature Wistar rats and the anti-fertility effects of this extract in male genital system. Material and methods: In this study 32 male mature Wistar rats were randomly divided in to 4 experimental groups. 1st experimental group included 8 rats receiving *Achillea millefolium* extract at the dose of 200 mg/kg intraperitoneally. Second and third groups received the extract the same at the doses of 400 and 800 mg/kg respectively. 4th group was considered as control group in which the parenteral distilled water was administered. after 20 days, rats were sacrificed and the spermatogenesis process was histologically examined. Results: In experimental groups receiving high doses of extract comparing with control group, thickness in seminiferous tubules basal membrane, decrease in germinal epithelium cells, congestion in testicular tissue, disarrangement in germinal epithelium cells as well as decrease in cellular condense were observed ( $p < 0.001$ ). Conclusion: Findings suggest that alcoholic extract of *Achillea millefolium* at high concentrations lead to the structural alterations and changes in spermatogenesis in testicular tissue.

**Keywords :** spermatogenesis, alcoholic extract of *Achillea millefolium* L., testis, Wistar rat

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