عنوان مقاله:

Protective Effect of Hydro-ethanolic Leaf Extract of Pelargonium graveolens L on Sperm Production and Testis Histology in Male Rats Treated with Lead Acetate

محل انتشار:

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خلاصه مقاله:

Background and Objective: Lead is one of the most common environmental pollutants. The use of medicinal plants may protect tissues from lead damages. The aim of this study was to evaluate the protective effect of Pelargonium graveolens leaf extract (PGE) on spermatogenesis in male rats. Materials and Methods: Forty-two male rats with ۲۲۰-۲۵۰ gr body weight were randomly assigned to ۶ groups(n=۷): control (normal saline,۰.۵ml/day, gavage), witness group (lead acetate, ۵۰۰ ppm in tap water), treated groups: (۱; ۲۵۰mg/kg PGE and ۲; ۵۰۰mg/kg PGE, gavage), and lead acetate-induced group (۵۰۰ ppm in tap water) + treated by PGE (۲۵۰mg/kg and ۵۰۰mg/kg, daily gavage) for one month. After examination, the epididymis and testes tissues were collected for sperm counting and histological study. All data were expressed as mean±SEM, and statistically significant differences were accepted at P<۰.۰۵. Results: Our results showed that the lead acetate decreased sperm numbers and damaged testis tissue. The PGE protected testes and significantly increased sperm number compared with witness group (P<۰.۰۰۱). Conclusion: The Pelargonium graveolens hydro-ethanolic extract can protect the testis tissues against toxic effect of lead acetate.

کلمات کلیدی:

Keywords: Pelargonium graveolens, Lead, Sperm, Rat, Testis