

عنوان مقاله:

Therapeutic Effect of Thymoquinone against Methotrexate-Induced Damage on Sperm Parameters in Mice

محل انتشار:

اولین کنفرانس ملی پژوهش های نوین علوم طبیعی و زیستی در ایران و جهان (سال: 1396)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Fatemeh Shikhbahaei - *Ph.D student, Fertility and Infertility Research center, Kermanshah University of Medical Sciences, Kermanshah, Iran*

Ali Ghanbari - *Ph.D, Department of Biology, Central Tehran Branch, Islamic Azad University, Tehran, Iran*

Zahra Keshtmand - *Ph.D, Department of Biology, Central Tehran Branch, Islamic Azad University, Tehran, Iran*

خلاصه مقاله:

Background: Methotrexate drug is commonly used to treat cancer and caused reproductive damage. Thymoquinone, as a natural component of herbs has many healthy benefits shown in researches. The present study aimed to investigate the probable therapeutic effect of Thymoquinone against Methotrexate-induced damage on sperm parameters in mice. Material and Methods: In this experimental study, 30 male mice (25-30g) were divided into five groups of six in each. The mice were received normal saline (control group), Methotrexate (20 mg/kg), Methotrexate (20mg/kg) + Thymoquinone (2, 10 and 20mg/kg) by intraperitoneal injection. On the day after the last injection, the sperm parameters including motility, viability and count of sperms were assessed. Data analysis was performed using one-way ANOVA followed by Turkey test. Results: Methotrexate alone led to a significant reduction in sperm parameters compared to the control group ($P=0.00$). In groups treated with Methotrexate and Thymoquinone, sperm parameters (motility, viability, count sperm) did not show any significant differences with control group ($P=0.00$). Conclusion: Thymoquinone, as a potent antioxidant, could compensate for the toxicity induced by Methotrexate. These medical trends may be useful for diminishing the side effects of Methotrexate on male reproductive system.

کلمات کلیدی:

Thymoquinone, Methotrexate, Sperm, Mice

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/672744>

