

عنوان مقاله:

Embryonic Toxicopathological Effects of *Origanum vulgare*: Evaluation of the Gross and Histopathological Lesions using a Chick Embryo Model

محل انتشار:

مجله علمی پژوهشی دانشگاه علوم پزشکی زنجان، دوره 27، شماره 121 (سال: 1397)

تعداد صفحات اصل مقاله: 8

نویسندگان:

امین درخشانیفر - *Diagnostic Laboratory Sciences and Technology Research Center, School of Paramedical Sciences, Shiraz University of Medical Sciences, Shiraz, Iran*

هادی توکلی - *Dept. of Clinical Sciences, Faculty of Veterinary Medicine, Shahid Bahonar University of Kerman, Kerman, Iran*

علی پوست فروش فرد - *Vice-Chancellery for Research Affairs, Shiraz University of Medical Sciences, Shiraz, Iran*

جواد مویدی - *Technology Research Center, School of Paramedical Sciences, Shiraz University of Medical Sciences, Shiraz, Iran*

خلاصه مقاله:

Background & Objective: Toxicopathological effects of herbal plants have always been a major concern, but little information is provided on the toxico-pathological effects of *origanum* on the fetus. Due to ethical rules and regulations, no drug experiment on the human fetus is permitted; hence, the chick embryo model is used as an ideal opportunity to study the adverse effects of drugs. This study aims to assess the histopathological effects of the various doses of *Origanum vulgare* (*O. vulgare*) using the chick embryo model. **Materials & Methods:** Ross chicken eggs were subjected into four experimental groups ($n=7$); phosphate buffered saline-injected group and *Origanum*-injected groups that were treated with *O. vulgare* leaf-extract at doses of 25, 50, and 100 mg per kg egg-weight, respectively. After injecting the embryos with the extracts, re-incubation was performed and allowed to develop until day 18, when embryos were evaluated for pathological lesions. **Results:** Treated embryos were normal in the *Origanum*-injected groups and no defect was noticed on the body features. The microscopic lesions including congestion and edema were made in the brain, liver, kidney, heart, and lung in a dose-dependent manner. **Conclusion:** It can be concluded that *O. vulgare* at a concentration higher than 25 mg per kg is toxic for chick embryo in a dose-dependent manner; therefore, more attention should be given to the toxicity of *O. vulgare* in the period of fetal development.

کلمات کلیدی:

Chick, Embryo, Fetus, *Origanum vulgare*, Pathology

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1191843>



