

6th Edition of International Conference on

Pharmacognosy and Medicinal Plants

April 16-17, 2018 Amsterdam, Netherlands

Nafiseh Khosravi Dehaghi et al., Am J Ethnomed 2018, Volume 5 DOI: 10.21767/2348-9502-C1-006

HISTOPATHOLOGICAL EFFECTS OF HYDROALCOHOLIC EXTRACT OF BERBERIS VULGARIS ON EXPERIMENTAL STOMACH PEPTIC ULCER IN RATS

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Berberis vulgaris L. (Berberidaceae) is an evergreen plant. The fruits of the plant are used to enhance the food taste. Berberis L. species are effective as anti-insomnia, liver protective. antibacterial, antifungal and anti-inflammatory, and have different constituents such as alkaloids, flavonoids, mineral compounds and phyto-acids. Peptic ulcer disease is one of the most common diseases, it means disintegration of gastric or duodenal mucosa integrity and one of the symptoms is burning epigastric pain that is selected by food intake and exacerbated by starvation. In this study, 24 male Wistar rats were fasted for 48 hours. Peptic ulcer was induced by Indomethacin (50 mg/kg). The rats randomly were divided in to four groups of six. Berberis vulgaris hydroalcoholic fruits extract (BVHFE) (50, 100 mg/kg), omeprazole (40 mg/ kg) and normal saline (5 mL/kg) were administered orally to the rats for 14 days. After five hours of the last dose, all animals were anesthetized by ether and sacrificed. Their stomachs were prepared to J. Score by loop and the histopatologic examination. Both doses of BVHFE had significant effects on improvment of ulcers in the stomach mucosa, reduced inflammation, accelerated wound healing and BVHFE (100 mg/kg) was found to be the best.

Recent Publications

- Khanavi M, Ahmadi R, Rajabi A, Jabbari Arfaee S, Hassanzadeh G, et al. (2012) Pharmacological and histological effects of *Centaurea bruguierana* ssp. belangerana on indomethacin-induced peptic ulcer in rats. J Nat Med. 66(2):343-9.
- Rezaei M E A, Reim S, Fatahi R, Balandary A and Farrokhi N (2011) Molecular analysis of Iranian seedless barberries via SSR. Sci Hort. 129:702–709.
- Zovko Koncic Z K D, Karlovic K and Kosalec I (2010) Evaluation of antioxidant activities and phenolic content of *Berberis vulgaris* L. and Berberis croatica Horvat. Food Chem Toxicol. 48: 2176–2180.
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