

11th International Conference and Exhibition on

Pharmacology and Ethnopharmacology & International Conference on **Pharmaceutical Oncology**

July 18-19, 2018 | Atlanta, USA

Comparing anticonvulsant effects of viola extract and carbamazepine on mice model of PTZ-induced seizure

Mehrdad Modaresi

Islamic Azad University, Iran

The seizure is a set of central nervous system disorders which appears as sudden, fleeting, recurrent and unpredictable convulsions with sensorimotor and autonomic origin. Various chemical drugs are used to treat seizure and its following convulsions. These drugs have side effects and also a long-term use of them causes medicinal resistance. Viola has been used in traditional medicine to cure convulsion. Ease of use of medicinal plants and their popularity has provided fertile ground for the use of them. In view of the prevalence of seizure and side effects of chemical drugs such as carbamazepine, this study was carried out to compare anticonvulsant effects of viola and carbamazepine on an animal model of seizure. Forty laboratory mice were being chosen and further divided into five groups: control, carbamazepine, and viola extract in 50, 100, and 200 mg/kg doses and these laboratory mice were being injected intraperitoneal one hour before pentylenetetrazole injection. Studied factors were: lack of animal's responding, duration of tonic, clonic and generalized convulsions and percentage of mortality. According to results, viola in 50 mg/kg dose was different from control group only in tonic-clonic stage and total convulsion time but 100 and 200 mg/kg groups showed significant differences from the control group in all stages ($p < 0.05$). Mortality of 200 mg/kg group was also less than other groups which show a protective effect of viola extract. On the whole, hydroalcoholic extract of viola flower in 200 mg/kg dose can be proposed as an effective medication for preventing convulsion of an animal model.

mehrdad_modaresi@hotmail.com