Anxiolytic effect of noscapine in mice

Parvin Khodarahmi1, Parvin Rostami2, Armin Rashidi3, Iman Khodarahmi3

1 Department of Biology, Islamic Azad University, Parand Branch, Tehran, Iran
2 Department of Biology, Tarbiat Modaress University, Tehran, Iran
3 Students’ Scientific Research Center, Tehran University of Medical Sciences, PO Box: 1415566337 Tehran, Iran

Correspondence: Iman Khodarahmi, e-mail: iman.khodarahmi@yahoo.com

Abstract:
The anxiety-related effects of noscapine were investigated using male Balb-c mice. Since noscapine-induced locomotion may alter the animals’ activity level in the dark-light model, the anxiety-related effects of noscapine were studied at doses with no effect on locomotion (0.1, 0.2, 0.3, 0.4, 0.5, 0.8, 1, 1.5 and 2 mg/kg). The parameter measured in dark-light model was the time spent in lit compartment. Intraperitoneal administration of noscapine (0.1–0.5 mg/kg) did not produce a significant effect on the time spent in the light, whereas higher doses (0.8, 1, 1.5 and 2 mg/kg) increased it significantly, implying an anxiolytic effect.

Key words:
noscapine, dark-light model, anxiety, mice