

## ***The effect of aqueous extract of *Elaeagnus Angustifolia* on infarct tissue volume and neurologic deficits in rat stroke model***

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### ***Abstract***

**Background & Aim:** Stroke is the most common neurological disease and the first cause of disability in the world. Since *Elaeagnus Angustifolia* contains antioxidant compounds and has been used as a treatment for many diseases, the effect of aqueous extract of *Elaeagnus Angustifolia* on infarct tissue volume and neurologic deficits in rat stroke model was investigated.

**Methods:** In this experimental study, 35 male Wistar rats were selected and divided into 5 groups of 7 members (Control, Sham, and 3 experimental groups). The studied groups received three different doses of aqueous extract of *Elaeagnus Angustifolia* (100, 200 and 400 mg/kg) through gavage feeding for 30 days. Control group received distilled water and sham group did not receive any treatment and ischemia induction. Data was analyzed through SPSS 18 version software.

**Results:** Compared to the control group, the mean of total volume of infarction in two doses of 200 and 400 mg/kg had a significant difference ( $p < 0.05$ ) whereas, there was no significant difference in 100 mg/kg dose. Also, the mean of total volume of infarction was not significantly difference between control and sham groups.

**Conclusion:** It seems that, due to the reduction of infarct tissue volume and neurological deficits, *Elaeagnus Angustifolia* can have a protective effect on damages caused by stroke.

**Keywords:** *Elaeagnus Angustifolia*, infarct tissue volume, Neurological deficit, rat