

Antidepressant-like effect of methanolic extract of Punica granatum (pomegranate) in mice model of depression

Abstract

Punica granatum L. (pomegranate) is commonly known for its traditional use as a food supplement and for its medicinal values. *P. granatum* methanolic pulp and peel extract were investigated for its antidepressant activities on mice model of depression using tail suspension test (TST) and forced swimming test (FST). *P. granatum* pulp and peel extract were administered at doses of 25 and 50 mg/kg intraperitoneally, respectively while fluoxetine (20 mg/kg) was administered intraperitoneally as the standard drug. The results showed that *P. granatum* pulp extract at 25 mg/kg significantly exhibited antidepressant activity in both TST and FST which able to reduce the immobility time, similar to fluoxetine, a recognized antidepressant drug. It is concluded that *P. granatum* methanolic extract has the ability as antidepressant-like agent. Further research is required to investigate the exact pharmacological mechanism of action of this fruit.

Keyword: *Punica granatum*; Antidepressant; Tail suspension test; Forced swimming test