

Volatile oil of *Artemisia santolina* decreased morphine withdrawal jumping in mice

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ABSTRACT

Introduction Flowered aerial parts of *Artemisia santolina* Schrenk (Asteraceae), which is found in the central and western regions of Iran were collected from Khorasan province and the volatile oil extracted by hydro distillation. **Materials and Methods** The oil (0.5% v/w) was analyzed by GC and GC/MS using DB-5 column. The effect of this oil on the withdrawal syndrome was determined in mice. After induction of dependency by morphine, mice were intraperitoneally administered different concentrations of the oil. Morphine-withdrawal inducing by naloxone was assessed by recording the incidence of escape jumps for 60 min. **Results** The results indicated that a significant difference between the essential oil received group (at dose of 3.6 mg/kg) and control group was shown but the lower doses were not effective. Essential oil analysis showed that there were forty-six components, representing 95.4% of the oil. **Conclusion** The oil of *A. santolina* which is rich in oxygenated monoterpenes with the major components, trans-verbenol (34.6%) and p-mentha3-en-8-ol (13.1%), can decreased the number of withdrawal jumping in addicted mice.

KEYWORDS

Artemisia santolina . asteraceae . essential oil . morphine withdrawal

REFERENCES

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