Research in Pharmaceutical Sciences, 2012;7(5)
School of Pharmacy and Pharmaceutical Sciences
Isfahan University of Medical Sciences

Antioxidant activity of different fractions from *Crataegus persica* extract

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Background and Aims: Some of the plants from Crataegus family such as C. azarolus and C. pinnatifida have been known as rich sources of polyphenolic and flavonoid compounds and therefore; good antioxidant activity of the plants from this family may be related to the existence of these constituents. The objective of the present study was to investigate the antioxidant properties of different fractions from C. persica extract growing in the Dena region of Iran.
Methods: The air-dried powdered aerial parts of C. persica were extracted with 80% EtOH and the extract was evaporated to dryness. The residue was dissolved in water and extracted with n-hexane, dichloromethane and n-BuOH, successively. The antioxidant activities of extracted fractions were determined via 2,2-diphenyl-1-picrylhydrazyl (DPPH) radical scavenging assay.
Results: All the fractions had shown good antioxidant activity, but n-BuOH fraction exhibited stronger antioxidant activity, compared to other fractions.
Conclusions: On the basis of our study, good antioxidant activity of C. persica might be due to the existence of phenolic constituents in the plants genus. It can also be concluded that this plant can be utilized as a source of natural antioxidant.

Keywords*: Crataegus persica*; Antioxidant activity; DPPH