World Academy of Science, Engineering and Technology
International Journal of Pharmacological and Pharmaceutical Sciences
Vol:8, No:12, 2014

Characteristic Components in Cornusofficinalis to AGEs Injury Protective Effect and Mechanism of HUVEC

Authors : Yu-Han Tao, Hui-Qin Xu

Abstract : The present study aimed to explain the protective effect of Cornus officinalis characteristic components, under AGEs damage to HUVEC. After cultured HUVEC adhered, Cornus officinalis characteristic components such as loganin, morroniside, oleanolic acid, ursolic acid and aminoguanidine (positive control dug) hatched, after 1h the AGEs (200 mg/L) were added. After 24h, LDH, SOD, MDA, NO, ET, and AngⅡ, TGF-β, IL-1β, ROS in the supernatant were determined. The results showed the Cornus officinalis characteristic compounds could improve vitality of SOD, NO, reduce the MDA, ET, AngⅡ, TGF-β, IL-1β, ROS significantly when compared with the model groug. Loganin, oleanic acid, ursolic acid, had significant protective effect on AGEs injured HUVEC. As a conclusion, characteristic components in Cornus officinalis had a positive effect after HUVEC injured by AGEs.

Keywords : Cornus officinalis, morroniside, oganin, oleanolic acid, ursolic acid
Conference Title : ICPP 2014 : International Conference on Pharmacy and Pharmacology
Conference Location : Bangkok, Thailand
Conference Dates : December 24-25, 2014