

عنوان مقاله:

Protosappanin A protects against atherosclerosis via anti- hyperlipidemia, anti-inflammation and NF- κ B signaling pathway in hyperlipidemic rabbits

محل انتشار:

مجله علوم پایه پزشکی ایران، دوره 21، شماره 1 (سال: 1397)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Ying Huang - Department of Cardiology, Shang Hai PuDong New Area People's hospital, Shanghai, China

Yuan Qi - Department of Cardiology, Shanghai East Hospital, New Area of Pu Dong, Shanghai, China

JianQing Du - Department of Cardiology, Shang Hai PuDong New Area People's hospital, Shanghai, China

DaiFu Zhang - Department of Cardiology, Shang Hai PuDong New Area People's hospital, Shanghai, China

خلاصه مقاله:

Objective(s): Protosappanin A (PrA) is an effective and major ingredient of *Caesalpinia sappan* L. The current study was aimed to explore the effect of PrA on atherosclerosis (AS). Materials and Methods: Firstly, the experimental model of AS was established in rabbits by two-month feeding of high fat diet. Then, the rabbits were randomly divided into five groups and treated with continuous high lipid diet (model control), high lipid diet containing rosuvastatin (positive control), 5 mg/kg PrA (low dose) or 25 mg/kg PrA (high dose). Results: Our results showed that PrA markedly alleviated AS as indicated by hematoxylin/eosin (HE) staining. PrA also reduced hyperlipidemia (as demonstrated by the serum levels of total blood cholesterol (TC), triglyceride (TG), low-density lipoprotein (LDL) and high-density lipoprotein (HDL)) in a time and dose-dependent manner, and decreased inflammation (as indicated by the serum levels of matrix metalloproteinase-9 [MMP-9], interleukin-6 [IL-6] and tumor necrosis factor- α [TNF- α]). Moreover, PrA significantly inactivated nuclear factor kappa B (NF- κ B) signaling as indicated by nuclear NF- κ B p65 protein expression, as well as the mRNA expression and serum levels of downstream genes, interferon- γ (IFN- γ) and interferon-gamma-inducible protein 10 (IP10). Conclusion: This study proved that PrA might protect against atherosclerosis via anti-hyperlipidemia, anti-inflammation and NF- κ B signaling pathways in hyperlipidemic rabbits.

کلمات کلیدی:

Anti-hyperlipidemic, Anti-inflammatory, Atherosclerosis, NF- κ B, Protosappanin A

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1295391>

