Effects of HO-1 and ox-LDL expression in rat with atherosclerosis and their correlation

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To explore effect of heme oxygenase-1 (HO-1) and oxidized low density lipoprotein (ox-LDL) on rats with atherosclerosis (AS). Methods: A total of 40 healthy Wistar rats were divided into 5 groups randomly: control group (group A), simple high-fat diet group (group B), Ginkgo biloba group (group C), zinc protoporphyrin IX (ZnPP IX) group (group D). HO-1 expression was detected by immunohistochemical assay, the expression of HO-1 protein was detected by immunocytochemical assay. Results: HO-1 expression was highest in Group C (P<0.05), ox-LDL level was highest in Group D (P<0.05). There was negative correlation between HPO-1 and ox-LDL expression (P<0.05). Conclusions: EGB induces HO-1 expression to inhibit expression of ox-LDL, while ZnPP IX can inhibit HO-1 expression to promote ox-LDL expression.

[KEY WORDS] Heme oxygenase-1; Oxidized low density lipoprotein; Atherosclerosis; Rat