

O8 SELECTIVE COX-2 INHIBITION WITH CELECOXIB INHIBITED ATHEROSCLEROTIC PLAQUE DEVELOPMENT IN CHOLESTEROL-FED RABBITS.

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ABSTRACT

Inflammatory phenomena at site of atherosclerotic plaque are thought to be major determinants of the progression and clinical outcome of atherosclerotic disease. Cyclooxygenase-2 (COX-2) is involved in the inflammatory response via the generation of prostanoids, and the expression of COX-2 was found in atherosclerotic vascular wall. This study aimed to investigate the effects of selective COX-2 inhibitor on atherosclerotic plaque development in cholesterol fed rabbits. Rabbits were fed diet containing no additive (control), 1%cholesterol (cholesterol group) or 1% cholesterol with 30 mg/kg/day celecoxib (celecoxib group). Blood cholesterol, LDL, HDL, platelet aggregation, and urinary 2,3 dinor TXB2, 6-keto PGF2, and 8-iso PGF excretion were measured 4 week intervals. After 12 weeks the rabbits were sacrificed and the severity of atherosclerosis in the thoracic aorta was measured. Urinary levels of 2,3 dinor TXB2, and 8-iso PGF and ex vivo platelet aggregation in response to ADP were elevated , whereas the level of 6-keto PGF2 was decreased in cholesterol-fed rabbits. Supplementation with celecoxib restored urinary 6-keto PGF2 level to the normal control, and increased urinary 8-iso PGF level but had no significant effect on dinor TXB2 and platelet aggregation. Cholesterol feeding significantly increased aortic intima/media ratio (2.97±0.25), and celecoxib reduced the intimal thickening (0.82±0.08). The results indicate that celecoxib is effective in the retardation of atherosclerotic plaque development which shows the involvement of COX-2 in the progression of atherosclerosis.

สารสกัดที่มีฤทธิ์ antioxidant eff

1 Pygogonon มีสารสกัดในเมล็ดองุ่น → potent antioxidant eff

2 สารสกัดจากชา

3 green tea

4