5 ANTI-INFLAMMATORY THERAPY WITH TNF-ALPHA INHIBITORS IMPROVES HDL-CHOLESTEROL ANTI-ATHEROGENIC CAPACITY IN RHEUMATOID ARTHRITIS PATIENTS

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Background and aims: HDL is protective against cardiovascular (CV) disease, but its antiatherogenic functions seem to be diminished during inflammatory conditions such as rheumatoid arthritis (RA). The aim of this study was to investigate the effects of anti-inflammatory therapy with TNF inhibitors on the anti-oxidative capacity of HDL.

Methods: Disease activity (DAS28), plasma lipids and lipoprotein concentrations (total-, HDL- and LDL-cholesterol, triglycerides, ApoA, ApoB) and paraoxonase (PON)-1 activity were investigated in a group of 33 patients with RA, before and during 6 months after the start of anti-TNF therapy.

Results: At baseline, RA patients had an increased inflammatory status (ESR = 31±19 mm/h) and a high disease activity (DAS28 = 5.23±1.23), which considerably decreased during the first 6 months of therapy ($p < 0.0001$ compared to baseline). Plasma lipid concentrations did not considerably change after 6 months of anti-TNF therapy. However, throughout the same period PON-1 activity increased ($p < 0.05$) and paraoxonase/HDL and arylesterase/HDL ratios were higher compared to baseline ($p<0.03$. Initially, inflammatory status was likely to influence PON-1 activity, but this diminished at the end of follow-up period.

Conclusion: Our study is the first to suggest a beneficial effect of anti-TNF therapy on lipids through changes in HDL anti-atherogenic properties. An increased PON-1 activity could contribute to the reported protective effect of anti-TNF on CV morbidity in RA and underlines the importance of evaluating HDL anti-atherogenic properties, especially in particular populations where the predictive value of traditional CV risk factors is limited.

6 EFFECTS HORMONE REPLACEMENT THERAPIES-FEMOSTON ON SERUM LIPIDS AND LIPOPROTEINS IN POSTMENOPAUSAL WOMEN WITH HYPERTENSION

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Objectives: To assess the effects of Femoston (2 mg micronised 17 beta oestradiol daily, sequentially combined in one tablet with 10 mg dydrogesterone for 14 days per 28 day cycle) on the serum lipid profile of postmenopausal women with hypertension.

Methods: 30 postmenopausal women with intact uteri (aged 40 to 65 years) were enrolled in an open, 6 month study. Serum lipids and lipoproteins were measured at baseline and after 3 and 6 months.

Results: A total of 30 women completed the 6 month study. We found significant decrease in BMI by 10, 5%, from 30, 6±2, 6 to 27, 4±2,6 kg/m^2 ($p>0,005$). Mean serum levels of total cholesterol and low-density lipoprotein (LDL)-cholesterol were significantly reduced (P less than 0.001) at all assessments compared with baseline; the reductions observed at the final assessment were 20 and 30,1%, respectively. A significant increase of 40,3% (P less than 0.001) was seen in high-density lipoprotein (HDL)-cholesterol levels by month 6. Mean levels of triglycerides were also reduced. Blood pressure and heart rate remained unchanged throughout the study.

Conclusions: The results show that the overall effects of Femoston on the serum lipid profile are favourable and should reduce the risk of cardiovascular disease in postmenopausal women with hypertension.

7 CORONARY FLOW WAS NOT FULLY DELAYED AT THE FIRST ADMINISTRATION OF CONTRAST IN PATIENTS WITH CORONARY SLOW FLOW PHENOMENON

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Background and aims: Coronary slow flow phenomenon is an angiographic observation characterized by angiographically normal or near-normal coronary arteries with delayed opacification of the distal vasculature. This phenomenon is not an infrequent finding, but it has received little attention and thus not been observed precisely. Moreover, there is no standardized method when we should measure the frame counts of coronary angiography of the phenomenon.

Methods: Twelve patients (58.4±10.5 years, male 66.7%) with coronary slow flow phenomenon were selected from 1597 patients who underwent coronary angiography at our hospital between May 2005 and April 2007. We counted the frames of angiography (15 frames/second) in each coronary artery at the first shot and the subsequent shots.

Results: Ten patients (83%) had chest pain and 5 patients (42%) admitted to our hospital as acute coronary syndromes. ST-T changes and/or ischemic findings on myocardial scintigram were noted in 8 patients (67%). The frame counts of the subsequent shots were significantly prolonged compared to the first shot in the left anterior descending artery (52.8±20.9 from 32.2±22.6, p=0.016), the circumflex artery (36.6±11.5 from 24.0±13.3, p=0.008), and the right coronary artery (48.3±21.5 from 30.9±15.7, p=0.007).

Conclusions: The contrast opacification at the first shot was not fully delayed in the patients with coronary slow flow phenomenon. Therefore we should take several shots of coronary angiography to evaluate coronary slow flow.

8 HYPOLIPIDEMIC AND ANTIOXIDANT EFFICACY OF OCIMUM SANCTUM IN PREVENTING ATHEROGENESIS IN MALE ALBINO RABBITS

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Ocimum sanctum Linn: is a potent scavenger of Super oxide, Hydrogen Peroxide and showed antilipid peroxidative effects in vivo and in vitro in normal and hypercholesterolemia induced stress conditions. The present study was aimed to investigate the effect of Ocimum sanctum under hypercholesterolemia induced oxidative stress and experimentally induced atherosclerosis in male albino rabbits.

Method: Atherosclerosis was induced in male albino rabbits by feeding cholesterol 0.5g/day for 45 days of experimental period and was administered with different doses aqueous extract of leaves of Ocimum sanctum through out the experimental period. Biochemical evaluation of erythrocytic antioxidant enzymes (Glutathione peroxidase, Catalase) and serum lipid profiles was followed up to 4 months. At the end of experimental period, Tissues were analyzed for their antioxidant status, fat content and histopathology.

Results: Hypercholesterolemia induced oxidative stress brought down the level of antioxidant enzymes. After the cessation of atherogenic diet, Ocimum treated groups showed faster recovery in blood antioxidant enzymes level, but in tissue catalase showed dose dependant recovery where as Glutathione Peroxidase activity did not recovered. Serum LDL-C level showed a sharp decrease in Ocimum treated groups when compared to cholesterol controls. A significant decrease in accumulation of fat in liver and aorta was associated with reduction in fatty micovesicular formation in liver and atheroma in aorta. A dose dependant regression of atheroma was found in Ocimum administered groups.

Conclusion: Hypolipidemic effect Ocimum together with antioxidant and antilipidperoxidative properties prevented atherogenesis in experimentally induced atherosclerosis in male albino rabbits.

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