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TRIGLYCERIDES AS PREDICTOR OF TISSUE PLASMINOGEN ACTIVATOR AND OF TISSUE PLASMINOGEN ACTIVATOR INHIBITOR TYPE 1 LEVELS IN NON OBSESE NORMO AND HYPERTRIGLYCERIDEMIC SUBJECTS
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The fibrinolytic system is regulated by the balance between the levels of tissue-type plasminogen activator (t-PA) and plasminogen activator inhibitor 1 (PAI-1). Disturbances of the fibrinolytic system has been described in many atherothrombotic conditions, due, in part, to the interaction of fibrinolytic variables with lipoproteins and/or insulin or insulinlike peptides. In this study we have investigated the relationship between fasting levels of lipids, insulin and fibrinolytic variables in normo (NTG) and hypertriglyceridemic (HTG) subjects attending a Lipid Clinic. PAI-1 and t-PA antigen were higher in HTG than in NTG subjects. In the multivariate analysis several significant correlations between fibrinolytic and metabolic variables were found. At the stepwise multiple regression analysis, however, triglycerides were the only main predictor of t-PA (r²=0.13, p<0.0001) whereas both insulin and triglycerides were significant and independent predictors of PAI-1 antigen levels (r²=0.22, p<0.0001). To investigate the relationship between triglycerides, insulin and PAI-1 the subjects were then categorized in tertiles according to their levels of TG and insulin. PAI-1 antigen levels gradually increased with rising levels of TG within all strata of insulin. In contrast the increase of PAI-1 with rising levels of insulin was evident in the highest tertile of triglycerides only. In addition, subjects in the lowest tertile of TG and insulin had the lowest PAI-1 antigen levels, whereas subjects in the highest tertile of TG and insulin had the highest levels of PAI-1. This study indicates that triglycerides is the only independent predictor of t-PA antigen levels, whereas triglyceride and insulin are independent predictors of PAI-1 antigen levels.

THE BRISIGHELLA STUDY: DIETARY FAT CONSUMPTION AND CALCIUM INTAKE.

The decreased dietary intake in animal fats and cholesterol is often thought to be associated with a inadequate assumption of calcium and D-vitamin. The aim of our study is to describe the 1980-1992 trend of daily intakes of calcium, phosphorus, and vitamin D in Brisighella, a town in North-Eastern Italy, in order to analyze these intakes in terms of sex and age, before and after the attestation of a nutritional education program (NEP) aimed at reducing cardiovascular risk factors, mainly plasma cholesterol and triglycerides. The dietary habits of the Brisighella inhabitants were monitored every 4 years by an ad hoc dietary record sheet(s). Participants filled in the questionnaire, meal by meal and day by day for a week. A total of 1880, 1451, 2218 and 1687 seven-day-questionnaires were analyzed for the 4 follow-up (1980, 1984, 1988, 1992).

Cholesterol

Cholesterolester transfer protein (CETP) in Centenarians.
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Cholesterol ester transfer protein (CETP) is a regulation factor for the distribution of cholesteryl ester among the plasma lipoproteins; its transfer activity seems to be proatherogenic. Several reports indicate that hyperlipidemic subjects have often high CETP activity levels, patients with a genetic deficiency of CETP have low HDL cholesterol levels as well as decreased LDL cholesterol but, nevertheless, this deficiency appears to be a CHD independent risk factor. The CETP genetic deficiency has been also associated with the longevity although other studies have denied this. The aim of our study was to verify if the CETP activity differences exist between centenarian young subjects (Y) and centenarians (C). Methods: We studied 53 subjects (25) 18-34 years old aged (within centenarian groups: young subjects (Y) and centenarians (C)). We studied 53 subjects (25) 18-34 years old aged (within centenarian groups: young subjects (Y) and centenarians (C)). We found significant differences in CETP activity between young and centenarian subjects. Conclusion: Our findings indicate that CETP activity is significantly lower in centenarian subjects than in young adult subjects. The CETP activity is significantly lower in centenarian subjects than in young adult subjects. The CETP activity is significantly lower in centenarian subjects than in young adult subjects. The CETP activity is significantly lower in centenarian subjects than in young adult subjects.

NEAR-INFRARED SPECTROSCOPY, SCINTIGRAPHY AND TRANSCUTANEOUS OXIMETRY IN THE DIAGNOSIS OF PERIPHERAL ARTERIAL DISEASE.
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Near-Infrared Spectroscopy (NIRS), sensitive to tissue haemoglobin saturation (THS), and planar scintigraphy, measuring limb blood flow, may be useful in the assessment of peripheral ischaemia. This study evaluated NIRS and scintigraphic behaviour in 12 PAOD patients (8 stage II; 4 stage III and IV) as diagnosed by echo-Doppler and treadmill test. Stage II patients and healthy age- and sex-matched controls underwent leg scintigraphy (99mTcMBI/20mCi/v), NIRS and transcutaneous oxygen tension measurements (TCPO2) at rest and after bicycle exercise (40-80 w/s); these parameters were evaluated in stage III and IV patients only at rest. Stage III and IV had a significantly (p<0.01) lower THS (54.9% vs 40.4% in stage II). During exercise there was in stage II a significant (p<0.01) decrease in THS (20±3%) and TCPO2 values (-21±3 mmHg). Recovery times to basal values were significantly (p<0.01) longer in patients vs controls (THS 4±1.8 mins vs 2.4±1.2 mins; TCPO2 5.4±2.1 mins vs 3.8±1.5 mins; correlation r=0.67). A significant (p<0.05) decrease in photoscans was observed at rest in stage III and IV and after exercise stress in stage II patients. These preliminary results seem to indicate near infrared spectroscopy and 99mTcMBI scintigraphy distinguish between healthy subjects and PAOD patients and appear suitable for staging peripheral ischaemia.