

comunicazioni orali

SESSIONE COMUNALE AMCLI-SIBioC

Il laboratorio nella diagnostica cardiologica

Venerdì 17 Ottobre 2003, 10.00-13.00 Sala Michelangelo,
Palazzo dei Congressi, piano -I

CO6.1

THYROID PROFILE EVALUATION AND POSTOPERATIVE ATRIAL FIBRILLATION

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Objective. Increasing evidences suggest that thyroid metabolism has a major role on the prognosis of cardiac patients. Cardiac surgery is a well recognized cause of thyroid dysfunction. This study evaluates the role of thyroid profile evaluation in the preoperative assessment of cardiac surgery patients.

Methods. Free triiodothyronine (fT3), free thyroxine (fT4) and thyroid stimulating hormone (TSH) were assayed in 107 consecutive patients undergoing coronary artery bypass grafting (CABG) by the AxSYM® (Abbott Laboratories, Diagnostic Division, Abbott Park, USA) Microparticle Enzyme Immunoassay (MEIA); serum samples, collected in serum separator tubes, were immediately centrifuged and stored at -20°C till the analysis was performed. All the samples from the same patient were analyzed together in the same session in order to minimize the inter-assays variations.

Results. A strong correlation was found between low fT3 concentration at admission and postoperative atrial fibrillation (AF), that occurred in 33 (30.8%) patients. An older age ($p=0.03$), no therapy with β -blockers ($p=0.08$), chronic obstructive pulmonary disease ($p=0.08$), lower left ventricle ejection fraction ($p=0.09$), and lower fT3 concentration ($p=0.001$) were all univariate predictors of postoperative AF. On multivariate analysis, low fT3 resulted to be the most important independent predictor of postoperative AF

(OR 4.425; 95% CI, 1.745-11.235; $p=0.001$).

Conclusions. Our data show the existence of a strong, previously unrecognized, relationship between low fT3 at admission and AF after CABG. These finding remarks the importance of thyroid profile laboratory evaluation in patients undergoing CABG, in order to reduce postoperative AF risk.

Reference. Lein I, Ojamaa K. Mechanism of disease: thyroid hormone and the cardiovascular system. *N Engl J Med* 2001; 344:501-509

CO6.2

PREVALENCE AND CLINICAL PROFILE OF CARDIAC MYOSIN-BINDING PROTEIN C GENE MUTATIONS ASSOCIATED WITH HYPERTROPHIC CARDIOMYOPATHY IN TUSCANY.

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Objectives: We studied the clinical and genetic features of hypertrophic cardiomyopathy (HCM) caused by mutations in MYBPC3 in 57 consecutive patients from Italy.

Background: HCM is an autosomal dominant disorder characterized by unexplained left ventricular hypertrophy, usually asymmetric and involving the interventricular septum. More than 130 mutations in nine different genes encoding sarcomere proteins have been