Impact of Alcohol on Coronary Artery Spasm as assessed with Intracoronary Acetylcholine Provocation Test

Methods: A total 3034 consecutive patients [pts, Men 1457 (48.0%), mean age 54.5 ± 12.4 years who underwent coronary angiography with Ach provocation test were enrolled. Study population were divided into current alcoholic (912, 30.1%) vs. non alcoholic (2101, 69.2%) groups. Significant CAS was defined as transient >70% luminal narrowing with chest pain and/or ST segment changes.

Results: Baseline clinical characteristics were balanced except non alcoholic had more hypertension (49.3% vs. 40.4%, P<0.001), diabetes (13.6% vs. 10.2%, P=0.009), peripheral vascular disease (6.3% vs. 3.0%, P<0.001), history of CVA (3.5% vs.2.1%, P=0.041), congestive heart failure (2.0% vs 0.5%, P=0.004) whereas alcoholic group were mostly men (76.5% vs.35.8%,P<0.001) and had more current smokers (42.8% vs. 13.8%,P<0.001). Although the alcoholic group showed higher incidence of myocardial bridge, Ach induced cervical narrowing on QCA on univariate analysis, however, after adjusting the baseline differences, all clinical and angiographic parameters of Ach provocation test were not different between the two groups (Table).

Conclusions: In our study, current alcohol use was not associated with clinical and angiographic characteristics of CAS as assessed with Ach provocation test.
Conclusion: A high level of Cystatin C at admission is a strong predictor of 120-days mortality. Mean cystatin C was 1.42 ± 0.45 when moving from the second to the third tertile, with a RR of 8.04 when moving from the first to the third tertile and a RR of 7.24 when moving from the second to the third tertile (p < 0.033). Prognostic value is uncertain for milder elevations between the first and second tertiles (p = 0.45).

Conclusion: A high level of Cystatin C at admission is a strong predictor of 120-days mortality among patients with HF. Discriminative value falls for milder elevations.

CRT-120

Neointimal Contractility Inside Of Stent: IVUS Observation In a Porcine Coronary Model

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Aims: QCA after intracoronary Acetylcholine (Ach) infusion is used to evaluate of coronary vasomotor dysfunction following stent implantation, which diameter changes of non-stented segment was observed. In this case study, IVUS was utilized to analyze the coronary vasomotor dysfunction following stent implantation, which measured by the changes of neointimal hyperplasia area (NIA) at follow-up. The presence of a protocol led to increasing use of therapeutic hypothermia and immunohistochemistry.

Methods and Results: Everolimus-eluting stent (3.0×18mm) was implanted to RCA with a large tertiary hospital and to describe the outcomes of OHCA following its implementation.

Results: We evaluated 964 OHCA patients who presented to the Emergency Department from April 2010 to July 2012. A protocol for therapeutic hypothermia was implemented in June 2011. On patients’ demographics, initial rhythm of arrest, site of care, institution of therapeutic hypothermia, and neurological outcome on discharge were collected.

Conclusion: The presence of a protocol led to increasing use of therapeutic hypothermia for comatose OHCA patients in our intensive care units and may have contributed to an improvement in the outcomes of OHCA patients.

Thrombosis

CRT-122

Pretreatment of Synthetic Vascular Grafts With Heparin Before Implantation, A Simple Technique To Reduce The Risk of Thrombosis

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Background: Synthetic grafts are being widely used to bypass occluded vessels or to supply blood flow. Thrombosis of these grafts is a major complication. The clots are often formed during the first exposure of blood to the graft surface which later become a nidus for larger clots. We examined whether pretreatment of the graft with heparin prevents this initial clotting process.

Methods: A circuit was assembled to compare two sets of shunts in the same subject. This circuit simulated a systemic-pulmonary shunt with inflow cannula in the aorta, branching to 2 groups of study and control grafts, connected to an outflow cannula in the pulmonary artery. The study group was treated with heparin for 15 minutes prior to placement in the circuit. With installation of the circuit, the blood flowed from the aorta to a set of multiple branches all the same size and properties with the only difference being exposure to heparin.

Pressure was monitored proximal and distal to the branches to verify similar flow dynamics in each group. After 2 hours of simultaneous and equal flow in all branches the circulation was discontinued and the grafts were irrigated and sliced open to expose the inner surface. Digital images were taken in a standard technique coded for each graft for