

The American College of Cardiology Scientific Session – ACC'10, Atlanta, Georgia

Claudiu STOICESCU, MD

Emergency University Hospital, Bucharest, Romania



The American College of Cardiology Scientific Session, ACC'10 and I2 Summit (the Interventional Cardiology Summit) were held this year in Atlanta, Georgia, between 14th and 16th of March. Considered a top business city and transportation hub Atlanta is the headquarters of the world-famous soft drink brand, Coca-Cola, the world's largest indoor aquarium, the Georgia Aquarium, AT&T and Delta Air Line. Contemporary Atlanta is sometimes considered to be an archetype for cities experiencing rapid growth and urban sprawl. Unlike most major cities, metropolitan Atlanta does not have any natural boundaries, such as an ocean, lakes, or mountains that might constrain

growth. But following 1996, when Atlanta became the third American city to host the Summer Olympics, several major construction projects improved the city's parks, sports facilities, and transportation. This year meeting has been one of the most interesting with several trials results presented as highlights.

The STICH trial represents the first multi-center randomized trial of CABG + SVR (ventricular reconstruction) in patients with coronary artery disease. The hypothesis 2, Surgical Treatments for Ischemic Heart Failure sub-study said that although SVR was demonstrated to reduce LVESV to a greater extent than CABG alone, this result did not translate into an improvement in cardiovascular morbidity or mortality in

Address for correspondence:

Claudiu Stoicescu, MD, Emergency University Hospital, 169 Splaiul Independentei Blvd., Zip Code 050098, Bucharest, Romania
email address: claudiu_md@yahoo.com

this study. Based on these results, routine SVR at the time of CABG should not be recommended at this time. Although there seemed to be a mortality benefit in patients with an LVESVI <90 ml/m² (normal LVESVI ~ 25 ml/m²), this is exploratory, and needs to be confirmed in further studies. The hypothesis 1 sub-study of the STICH trial, comparing medical therapy alone with medical therapy + CABG, is ongoing.

The results of the DOSE trial illustrate that there is no difference in global symptom relief or change in renal function, with separate doses versus continuous infusion, or low versus high intensification of furosemide dosing. Further, continuous dosing was not associated with an improvement in any of the secondary outcomes assessed, including net diuresis, weight loss, or treatment failure. On the other hand, high intensification (2.5x oral dose) of furosemide was associated with a significant improvement in net diuresis, weight loss, and symptom relief, as compared with low intensification. Changes in creatinine noted in the high intensification arm were transient. These results are important, but because of the trial design, results are applicable to patients with chronic CHF, who did not require inotropes or intravenous vasodilators, and who were on moderate to high doses of diuretic at baseline.

The results of Rate Control Efficacy in Permanent Atrial Fibrillation: A Comparison Between Lenient Versus Strict Rate Control II (RACE II) indicate that a lenient rate control strategy, with a target resting HR <110 bpm is easier to achieve with beta-blockers, calcium-channel blockers, and/or digoxin, as compared with a strict control strategy, with a target resting HR <80 bpm, and an exercise HR <110 bpm. The former strategy is also non-inferior for CV outcomes, and is associated with a reduction in the incidence of strokes.

In Duration of Dual Antiplatelet Therapy After Implantation of Drug-Eluting Stents (DES-LATE) study patients who had been on DAT for at least 12 months following DES PCI were randomized to continuing DAT for another 2 years, or stopping clopidogrel, and continuing aspirin only. The investigators found no difference in the incidence of any of the endpoints studied, including stent thrombosis. They did note a trend towards harm for the composite endpoint of death, MI, or stroke with DAT.

In Action to Control Cardiovascular Risk in

Diabetes Lipid Trial (ACCORD Lipid) study among diabetic patients at high risk for cardiovascular disease, the addition of fenofibrate to statin therapy was not superior to statin therapy alone. Fenofibrate was not able to reduce rates of cardiovascular disease. Although fenofibrate reduced triglyceride levels, although there was only a small difference in mean HDL cholesterol between groups, which could help to explain lack of benefit. In the same study but this time focused on Blood Pressure, ACCORD BP trial, among patients with type 2 diabetes at high risk for cardiovascular events, a goal systolic blood pressure <120 mm Hg was not superior to a goal <140 mm Hg. This intensive target did not reduce composite cardiovascular events; however, there was a small reduction in any stroke from 0.5% to 0.3%. In the intensive systolic blood pressure group, there were more serious adverse events, hypokalemia, and elevated serum creatinine. These findings contrast with the UKPDS and HOT trials, which documented benefit from blood pressure reduction; however, the mean systolic blood pressure in the intensively treated groups in those trials was 144 mm Hg.

Endovascular Valve Edge-to-Edge Repair Study II (EVEREST II) was one of the most important trials. It is for the first time when a percutaneous device is compared with a standard surgery procedure for mitral regurgitation (MR). Severe MR, repair with a percutaneous mitral valve clip was feasible. This therapy demonstrated improved safety at 30 days compared with surgery, largely by reducing the need for blood transfusion. The mitral valve clip was also non-inferior for effectiveness at 12 months.

Long-term Outcome of a Routine Versus Selective Invasive Strategy in Patients With Non-ST Elevation Acute Coronary Syndrome: First Meta-analysis of 5-year Outcomes Based on Individual Patient Data (FIR Trial Collaboration) with data from FRISC-II, ICTUS, RITA-3 trials. An integer-based risk scoring system was used to categorize patients into three risk groups: low (0-4), intermediate (5-8), and high (≥ 9). The effect of treatment strategy (routine invasive versus selective invasive) on the primary outcome was greatest among patients at high risk (risk difference of 11%) compared to those at intermediate and low risk (risk difference of 3.8% and 2%, respectively). At five years, a routine invasive strategy was associated with decreased CV death and MI in patients with

NSTEMI, particularly in those with higher underlying risk. Long-term data of routine invasive strategy for NSTEMI appears to confirm the short- and intermediate-term results. With improvement in medical therapy, such as antiplatelet and anticoagulation therapy, the up-front management strategy for NSTEMI may need to be reexamined.

This year at ACC10/i2 Romania has had two oral abstracts one in “i2 Summit Valvular Inter-

ventions” session and the other one in “Myocardial Recovery/Reverse Remodeling” session and one moderated poster. All Romanian research works were highly appreciated.

Next year, in April 2011, the American College of Cardiology Congress and the Interventional Cardiology Summit, will be held in New Orleans.

