3554 I BESIDSE
A randomized placebo controlled trial of endomyocardial implantation of autologous bone marrow mononuclear cells in advanced ischemic Heart Failure (END-HF) study
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Aims: Prior studies suggest that autologous bone marrow mononuclear cells (BMSCs) implantation improve symptoms and left ventricular (LV) function in patients (pts) with ischemic cardiomyopathy. However, the efficacy of endomyocardial implantation of BMSCs in pts with advanced heart failure (HF) is unclear.

Methods and results: We performed a randomized, double blinded and placebo-controlled trial in 28 pts with advanced ischemic HF (New York Heart Association (NYHA) II–IV and LV ejection fraction (LVEF) <40%). After BMSC harvesting, we assigned pts to receive endomyocardial injection of 100 million BMSCs (n=19) or placebo (n=9) in 2:1 ratio as guided by electroanatomical mapping. Our primary endpoint assessment at 6 months was changes in LVEF measured by cardiac magnetic resonance imaging. All pts underwent successful endomyocardial injection to the targeted ischemic regions without any acute complication. Baseline LVEF and LV end-systolic volume (LVESV) were 24±6% and 189±82ml in BMSC group compared to 21±7% and 160±99ml in placebo group, respectively. After 6 months, changes in LVEF (1.6% [95% CI -2.7 to 5.9], P=0.45) was not statistically significant. There were no difference in changes in LVESV (21.5 ml [95% CI -8.5 to 51.5], P=0.15), LV infarct volume (5.6ml [95% CI -19.5 to 30.7], P=0.64) and LV peri-infarct ischemic volume (1.9% [95% CI -3.6 to 7.5], P=0.47) and exercise capacity (6-mins walk: 0.15 meters [95% CI -41.1 to 41.4], P=0.99).

Conclusion: Among pts with advanced ischemic HF, endomyocardial implantation of autologous BMSCs compared with placebo did not improve LVEF, LV infarct or peri-infarct volume or functional class or capacity.

Trial Registration: ClinicalTrials.gov identifier: NCT01150175.

3555 I BESIDSE
Obesity surgery and incidence of heart failure
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Aims: To study the incidence of heart failure during long-term follow-up after surgical obesity treatment.

Methods: The prospective, controlled Swedish Obese Subjects study involved 4047 obese subjects, of whom 2010 underwent bariatric surgery (surgery group) and 2037 received conventional treatment (control group). Patients were recruited between September 1, 1987 and January 31, 2001. Surgery patients underwent gastric bypass (13.2%), banding (18.7%), or vertical banded gastroplasty (38.3%). Baseline body weight (4047 obese subjects, of whom 2010 underwent bariatric surgery (surgery group) and 2037 received conventional treatment (control group). The mean change in body weight after 2, 10, 15, and 20 years were −23%, −17%, −16%, and −18% in the surgery group, respectively. The mean changes in LV mass and LVEF were −16% and +0.39%, respectively. The median (IQR) jet width was 1.8 (0-2.8) mm and the largest jet was 4.3 mm.

Results: In 7 and 4 patients residual flow was detected around the ACP disc and lobe, respectively. The mean ACP size was 23.4±5.9 mm.

Conclusions: In obese patients treated with bariatric surgery, the risk for developing heart failure during long-term follow-up was almost halved, as compared with those receiving usual care.

3556 I SPOTLIGHT 2013
Clinical profiles and outcomes of patients with chronic heart failure and chronic obstructive pulmonary disease: efficacy and safety of Ivalbradine. A shift study analysis
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3556 I BENCH
Transcatheter left atrial appendage occlusion: a 10-year single center experience using Amplatzer devices
S. Shakir, S. Gloekler, A. Khattab, P. Wenaweser, S. Windecker, F. Nietlispach, A. Tzikas1, M. Rezzaghi2, U. Paradossi2, C. Palmieri2, A. Clemente2, M. Vaghiotti2, S. Berri2, Interdisciplinary European Medical Center, Thessaloniki, Greece; 3. Gabriele Monastero Foundation CNR Region Toscana, Massa, Italy

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