CONCLUSIONS In patients with ULMCA disease and reduced LVEF, we found no significant difference in rates of the composite end point between patients receiving PCI and those undergoing CABG at 1 year follow-up.

CATEGORIES CORONARY: PCI Outcomes

KEYWORDS Coronary artery bypass grafting, Left main coronary artery disease, LV dysfunction

TCT-482

Longitudinal Geographic Miss (LGM) in Robotic-Assisted versus Manual Percutaneous Coronary Interventions

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BACKGROUND Longitudinal geographic miss (LGM) is associated with higher incidences of post-PCI adverse outcomes. Robotic-assisted PCI (R-PCI) has been shown to be safe and feasible. The incidence of LGM in R-PCI compared to standard manual PCI (M-PCI) was analyzed.

METHODS Patients evaluated underwent R-PCI (CorPath 200 System, Corindus Vascular Robotics, Inc., Waltham, MA) in the PRECISE study and M-PCI in the STLLR trial. A core laboratory evaluated target lesions for LGM and graded according to ACC/AHA criteria as simple (A and B1) or complex (B2 and C). LGM was defined as the entire length of the injured or stenotic segment not being fully covered by the total length of the stent. To be included in the analysis at least one stent had to be placed during the index procedure and a determination of LGM could be made. The overall, and by simple and complex lesion group assignment incidence of LGM was compared between the R-PCI and M-PCI cohorts.

RESULTS A total of 164 R-PCI patients and 1509 M-PCI patients met the criteria for inclusion. Baseline characteristics are detailed in Table 1. Overall, the R-PCI cohort exhibited a statistically lower incidence of LGM when compared to M-PCI, 12.2% to 43.1% (p < 0.0001). The R-PCI patients had a significantly lower incidence of LGM, in both the simple lesion (7.3% vs 28.7%, P < 0.0001) and complex lesion (15.4% vs 48.0%, P < 0.0001). The overall, and by simple and complex lesion group assignment incidence of LGM was compared between the R-PCI and M-PCI cohorts.

CONCLUSIONS Robotic-assisted PCI may reduce the incidence of LGM. Further studies are needed to confirm the results and elucidate their impact on outcomes.

CATEGORIES CORONARY: PCI Outcomes

KEYWORDS PCI - Percutaneous Coronary Intervention, Robotics, Stent Coverage

TCT-483

“Real world use of ultra-thin sirolimus-eluting stent with biodegradable polymers. 9-month results from the FLEX-registry.”

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BACKGROUND Durable polymer-based drug eluting stents have been reported to adversely affect the safety profile and are also suspected to...
Conclusions Despite treating more complex and higher-risk patients, high-volume operators had better short and long-term prognostic compared with low-volume operators when performing LM-PCI. These findings could be important when considering minimal operator’s volume requirement for the treatment of this high-risk lesion subset.

Categories: Coronary: PCI Outcomes

Keywords: Left main coronary artery, Outcomes, Percutaneous coronary intervention

TCT-485 Effect of Gender on Clinical Outcomes in Patients With or Without Myocardial Infarction Undergoing Percutaneous Coronary Intervention: Results from a Large Single Center Registry

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Background Women with coronary artery disease (CAD) undergoing percutaneous coronary intervention (PCI) are at higher risk of early and late major adverse cardiac events (MACE) compared with male subjects. Moreover, previous studies suggest a differential prognostic impact of clinical presentation between genders. In this study, we sought to investigate the effect of gender according to clinical presentation on clinical outcomes.

Methods We retrospectively analyzed patients from a large single-center PCI registry treated between January 2009 and December 2013. Study population was categorized according to gender and presence or not of myocardial infarction (MI) at time of PCI. Endpoints of interest were all-cause mortality, MI and cerebrovascular events (CVEs) at 1 year after the index procedure.

Results Out of 15,988 patients included in the present analysis, 10,764 (67%) were males and 5224 (33%) were females. Of them, 1,198 (7%) and 672 (4%) presented with an MI in the male and female group, respectively. In both groups, women were older, more commonly affected by multiple comorbidities but had lower CAD complexity compared with men. A stepwise increase in the rates of mortality, MI and CVE was observed in the transition from male with no MI, to female with no MI, to male with MI to female with MI (Figure 1). Following multivariable adjustment for baseline confounders, women with MI and similar risk of all-cause mortality (HR: 1.02; 95% CI: 0.81–1.28), MI (HR: 1.55; 95% CI: 0.93–2.59) and CVE (HR: 2.44; 95% CI: 0.64–9.36) to that of the male counterpart. The effect of gender across clinical presentation was uniform, without evidence for interaction for the investigated outcomes.

Background The impact of operator experience and volume of left main (LM) percutaneous coronary intervention (PCI) performed yearly on outcomes after LM PCI is unknown. To characterize the impact of LM-PCI operator’s experience and volume on the occurrence of adverse events after LM-PCI.

Methods High volume LM-PCI operators were defined as performing at least 15 LM PCI cases per year, for at least 3 consecutive years. Thirty day and 9-month outcomes were reported and compared between high-volume and low-volume operators.

Results From January 2004 to December 2011, 25 operators performed 1,948 LM-PCI in a single center. Among them, 7 were considered high-volume and performed 1,422 (73%) LM-PCI and 18 operators were considered low-volume and performed 526 (27%) procedures. The number of cases performed per high-volume operator was 25±8 and 4±3 in the high-volume and low-volume group, respectively. Patients treated within the high-volume operator group were in general more complex, with higher SYNTAX score, higher SYNTAX score II, more often 3-vessel disease, and with more frequently LM lesions involving the distal segment (bifurcation) requiring two stents implantation. Intravascular ultrasound was more often used by the high-volume operators compared to the other group (39.2% vs. 31.7%). Thirty-day outcomes demonstrated significantly lower rates of death and cardiac death, with trend toward lower rate