Background

Surgical revascularization remains as the recommended treatment for most lesions of the unprotected left main coronary artery. However, there are multiple series of patients treated percutaneously with outcomes comparable to surgery.

Methods

A multicenter, prospective registry performed at 30 hospitals in Spain. From Nov-2007 to Nov-2008 all consecutive patients with a significant involvement of the LM, with indication of revascularization treated with PCI or surgery, were included consecutively in a database via web and were followed during their hospital stay, at 6 and 12 months. Primary endpoint were major adverse cardiac events (death, AMI and new revascularization) at 6 and 12 months after PCI of the LM and after surgery. We present the hospital outcomes of patients undergoing PCI.

Results

1493 patients were included, 796 treated with PCI (53.3%). The mean age was 69.4±10.5 years, and the number of patients aged ≥75 years was significantly higher in the PCI group (45.4% vs 28.8%, p< 0.001). Regarding risk factors only dyslipidemia was significantly higher in CABG group (65.3 vs 58.6 ;p<0.01).

Radial access: 36.1%. 6Fr catheter: 77%. IIb/IIIa Inh: 26.3%. Bivalirudin: 2.1%; IABCP: 16%. Vascular complications (femoral): pseudoaneurism: 0.9%, a-v fistula: 0.1%; major hematoma: 1.6%. Procedure success : 96.4%.

Hospital Follow up overall: QwMI: 4.1%; mortality: 5.4%; MACE: 9.9%; angina postPCI: 2.3% (16); TVR:0.9% (6).

Excluding cardiogenic shock and STEAMI: QwMI 2.3%; mortality: 2.3%; MACE 5.8%

Conclusions

Percutaneous revascularization is an alternative to surgery in LM disease. High-risk patients are more likely to be treated with PCI, with a higher percentage of women, subjects aged over 75 years, those with AMI, and cardiogenic shock.