Results: OCT assessment was available in 119 patients. Nine had a MACE (peri-procedural myocardial infarction, myocardial infarction during follow-up or cardiac death), while 110 had no complications (control group). The control group showed a smaller number of cross section with residual thrombus area >10% respect to MACE group (8.26±5.49 vs 16.00±12.25; P= 0.02) and a smaller mean Thrombus area % (4.71±2.64 vs 0.33±2.94, p= 0.008).

Conclusions: Residual intrathrombus is associated with higher incidence of cardiac events during follow-up in STEMI patients treated with primary angioplasty despite the adoption of aggressive strategy for thrombus removal.

TCT-134

Primary Outcome of In-Stent Restenosis and In-Stent Thrombosis: Impact of Manual Thrombectomy

Elmir Omerevic1
Salhgrenska University Hospital, Gothenburg, Sweden

Background: The purpose of this observational study was to evaluate the impact of thrombectomy on in-stent restenosis and stent thrombosis in patients undergoing primary PCI due to ST-elevation myocardial infarction (STEMI). Methods: Data were obtained from the SCAAR registry (Swedish Coronary Angiography and Angioplasty Registry) for PCI procedures performed in the county of Västra Götaland in Sweden between January 2005 and May 2013. The primary combined endpoint included in-stent restenosis and stent thrombosis. The study population consisted of 9058 patients that were used in 6595 procedures on 5388 patients. The two groups were compared using propensity score adjusted multilevel Cox proportional-hazards regression to account for hierarchical structure. Stents were the primary observation unit, while patients and hospitals were two additional hierarchical clusters. Adjustments for differences in baseline characteristics were made with propensity score. The following variables were included in the calculation of the propensity score: age, gender, indication for PCI, smoking habits, hypertension, diabetes, dyslipidemia, severity of coronary artery disease, previous infarction, previous PCI, coronary artery by-pass surgery (CABG), antiplatelet therapy, objective at baseline angiography, glycoprotein IIb/IIIa receptor antagonists (GP IIb/IIa), bivalirudin, clopidogrel, ticagrelor, prasugrel, unfractured heparin/fundamental weight heparin (UH/ LMWH), year, hospital, completeness of revascularisation, stent length, stent diameter.

Results: The two groups were balanced regarding age, gender, diabetes, smoking habits, hypertension, hyperlipidaemia, previous PCI, previous CABG. Patients who were treated with thrombectomy were more likely to be completely revascularized, more treated with aspirin and clopidogrel, and to receive bivalirudin and drug-eluting stents during the procedure. Mean follow-up time was 3.3 years. After adjustment, the use of thrombectomy was not associated with lower risk for stent thrombosis and restenosis (HR 1.14; 95% CI 0.81–1.63; P = 0.45).

Conclusions: In patients with STEMI, treatment with thrombectomy was not associated with decreased risk for in-stent restenosis and stent thrombosis.

TCT-136

Impact of Thrombectomy on Stent Thrombosis and In-Stent Restenosis after Primary PCI

Eimar Omerevic1
Salhgrenska University Hospital, Gothenburg, Sweden

Background: The purpose of this observational study was to evaluate the impact of thrombectomy on in-stent restenosis and stent thrombosis in patients undergoing primary PCI due to ST-elevation myocardial infarction (STEMI). Methods: Data were obtained from the SCAAR registry (Swedish Coronary Angiography and Angioplasty Registry) for PCI procedures performed in the county of Västra Götaland in Sweden between January 2005 and May 2013. The primary combined endpoint included in-stent restenosis and stent thrombosis. The study population consisted of 9058 patients that were used in 6595 procedures on 5388 patients. The two groups were compared using propensity score adjusted multilevel Cox proportional-hazards regression to account for hierarchical structure. Stents were the primary observation unit, while patients and hospitals were two additional hierarchical clusters. Adjustments for differences in baseline characteristics were made with propensity score. The following variables were included in the calculation of the propensity score: age, gender, indication for PCI, smoking habits, hypertension, diabetes, dyslipidemia, severity of coronary artery disease, previous infarction, previous PCI, coronary artery by-pass surgery (CABG), antiplatelet therapy, objective at baseline angiography, glycoprotein IIb/IIIa receptor antagonists (GP IIb/IIa), bivalirudin, clopidogrel, ticagrelor, prasugrel, unfractured heparin/fundamental weight heparin (UH/ LMWH), year, hospital, completeness of revascularisation, stent length, stent diameter.

Results: The two groups were balanced regarding age, gender, diabetes, smoking habits, hypertension, hyperlipidaemia, previous PCI, previous CABG. Patients who were treated with thrombectomy were more likely to be completely revascularized, more treated with aspirin and clopidogrel, and to receive bivalirudin and drug-eluting stents during the procedure. Mean follow-up time was 3.3 years. After adjustment, the use of thrombectomy was not associated with lower risk for stent thrombosis and restenosis (HR 1.14; 95% CI 0.81–1.63; P = 0.45).

Conclusions: In patients with STEMI, treatment with thrombectomy was not associated with decreased risk for in-stent restenosis and stent thrombosis.

TCT-137

Effective thrombectomy reduces no-reflow and in-hospital mortality frequency in patients with anterior ST elevation myocardial infarction undergoing primary percutaneous coronary intervention

TANEK SEKER1, MUSTAFA GUR1, CANER TURKOGULLI2, Hakan Uçar2, Abdurrazzak Borekci3, Ömer Yen2, DURMUS Y SAHIN1, OYTUN A BAYKAN5, mevlut koç1, Murat Çetli1
1ADANA NUMUNE TRAINING AND RESEARCH HOSPITAL, ADANA, Turkey, 2Adana Numune Training and Research Hospital, Adana, Wa, 1Kars University, Kars, Wa, 3Adana Numune training and Research Hospital, Adana, Wa, 4ADANA NUMUNE TRAINING AND RESEARCH HOSPITAL, Adana, Turkey, Adana numune training and research hospital, Adana, Turkey

Background: The clinical outcome of intracoronary thrombus aspiration before primary percutaneous coronary intervention (PCI) in patients with ST-segment elevation myocardial infarction (STEMI) is controversial. Effective thrombectomy treatment on myocardial damage has not been evaluated comprehensively. The main goal of this study is to examine clinical impact of effective thrombectomy (ET) and non-effective thrombectomy (non-ET)

Results: We prospectively included 395 patients with TIMI 0 or 1 flow anterior STEMI, who underwent p-PCI with thrombus aspiration within 12 hours from symptom onset. Main thrombus aspiration devices (6f VMAX Asp. Catheter, ASTRON, GERMANY,crossing profile,0.086 in) were used for thrombectomy. Effective thrombectomy (ET) was defined as achieved visible aspiration material.Non-ET was defined as no visible aspiration material. No-reflow was defined as TIMI grade 0, 1 and 2 flows or TIMI grade 3 with myocardial blush grade 0 and 1. The primary end points were the occurrence of no-reflow and the rate of 90-min-ST-segment resolution >70%. Patients were divided into two groups (ETandnonETgroups) according to their aspiration materials.

Results: Effective thrombectomy was observed 178 (60.3%) of patients. No-reflow was lower in ET group compared with non-ET group 28 (15.7%) and 47 (40.2%); p= 0.001). Baseline clinical and demographic characteristics of the two groups are similar. Effective thrombectomy (ET) and ST-segment resolution >70%, and prior history of hospital mortality. Killip class II-IV and Post-pPCI TIMI frame count were lower in ET group compared with non-ET group (p< 0.05 for all). Infarction time, total stent length (mm), initial SYNTAX score, post-primary PCI SYNTAX score and use of IIb/IIIa glycoprotein inhibitors were similar in two groups (p>0.05 for all).