inh/a (anova Q1-Q4: p<0.01). Patients from socially disadvantaged city districts were on average younger at onset of STEMI, more likely to smoke and to be obese (BMI >30 kg/m^2). Gender distribution, prevalence of hypertension and diabetes mellitus were similar in all quartiles. Regarding severity of STEMI, treatment quality as well as in-hospital and 1-year mortality after STEMI no difference could be observed between the different quartiles.
Conclusions: When assigning patients with STEMI to social clusters utilizing postal codes of their home addresses a direct association between STEMI-incidence and presumed social status can be observed with an elevation of STEMI-incidence by 26% in the most socially deprived city districts in comparison to the most privileged city areas. Furthermore patients with STEMI from socially disadvantaged city districts are on average younger, more likely to smoke and to be obese. This data demonstrates that efforts/programs in cardiovascular prevention should in particular be organized in socially disadvantaged city districts.

ANTITHROMBOTICS AND INTERVENTION IN ACUTE CORONARY SYNDROMES

1977 | BEDSIDE
Heparin versus bivalirudin in patients with non ST-elevation acute coronary syndrome undergoing percutaneous coronary intervention - a report from SCAAR

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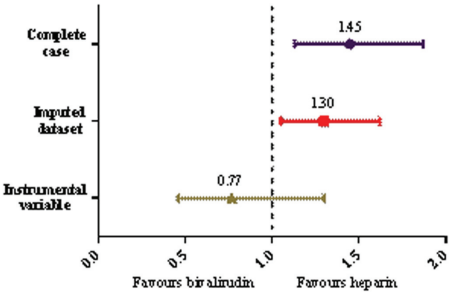
Purpose: To compare the outcome of treatment with unfractionated heparin/low-molecular weight heparin (heparin) alone versus bivalirudin in patients with non ST-elevation acute coronary syndrome (NSTE-ACS) undergoing percutaneous coronary intervention (PCI).
Methods: We extracted data for all consecutive PCI procedures due to NSTE-ACS between 2005 and 2011 from the Swedish Coronary Angiography and Angioplasty Registry (SCAAR). Patients that received GPIIb/IIIa inhibitors were excluded. Multilevel logistic regression and instrumental variable analysis (for hidden selection bias) adjusted for propensity score were used to compare the groups in regard to 30-days mortality. The analyses were performed on patients with complete data and using multiple imputation method. Background characteristics and procedural data including year of the procedure were used to calculate propensity score. Administrative region was employed as instrumental variable using two-stage least squares regression.
Results: In total, there were 41,537 consecutive patients treated with heparin alone (n=31,351) or bivalirudin (n=10,186) between 2005 and 2011. After adjustment with propensity score, the baseline characteristics of the two groups were well balanced. Treatment with heparin alone was associated with lower 30-days mortality in complete case analysis (p<0.01) and in multiple imputation model (p=0.02). There was no difference between the groups after instrumental variable analysis (p=0.27). See figure.



Odds ratio 30-day mortality

Conclusions: Our large observational study, questions the superiority of bivalirudin over heparin in the absence of GP IIb/IIIa blockade in patients with NSTE-ACS undergoing PCI. A prospective randomized trial evaluating bivalirudin vs heparin is highly warranted.

1978 | BEDSIDE
"Bridging therapy" with low molecular weight heparin in patients with coronary stents undergoing surgery

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Background: Bridging discontinuation of antithrombotic agents with low molecular weight heparin (LMWH) in patients with coronary stents undergoing cardiac or non cardiac surgery is not infrequent in clinical practice. However, safety and efficacy data on this approach are sparse.
Methods: Patients with coronary stent(s) undergoing surgery between March 2003 and February 2012 were included. The primary efficacy endpoint was the 30-day incidence of major adverse cardiac or cerebrovascular events (MACCE), defined as the composite of cardiac death, myocardial infarction, stroke, acute coronary syndrome leading to hospitalization, congestive heart failure leading to hospitalization and definite or probable stent thrombosis. The primary safety endpoint was the 30-day incidence of Thrombolysis in Myocardial Infarction (TIMI) major or minor bleeding.
Results: Of 748 patients analyzed, 251 (33.6%) were on dual antiplatelet therapy (DAPT) at the time of surgery. Among them, LMWH bridging was used in 144 (57%). At 30 days, the risk of MACCE was not significantly decreased by LMWH bridging (13% vs 8%, odds ratio [OR] 1.8, 95% confidence interval [95% CI] 0.7-4.2; P=0.20). This finding was consistent after adjusting for age, insulin dependent diabetes mellitus, chronic kidney disease, prior drug eluting stent (DES) implantation, surgical risk and American Society of Anesthesiologists (ASA) score. On the other side, patients on LMWH bridging experienced a significantly higher risk of 30-day TIMI major or minor bleeding (33% vs 11%, OR 4.0, 95% CI 2.0-7.9, P<0.001). After adjustment for age, body mass index, female gender, renal failure, insulin dependent diabetes mellitus, prior stroke, prior ulcer, prior DES implantation, use of vitamin K antagonists, surgical risk, ASA score, and dual antiplatelet therapy discontinuation at surgery, LMWH bridging remained independently associated with 30-day TIMI major or minor bleeding (adjusted OR 2.3, 95% CI 1.0-5.0; P=0.04).
Conclusions: LMWH bridging in patients with coronary stents undergoing surgery is a detrimental practice, resulting in no advantage on cardiac outcomes at 30 days, and a significant risk of bleeding.

1979 | BEDSIDE
30-days outcome in NSTEMI patients treated with PCI is worse in those receiving GP IIb/IIIa blockers

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Objectives: In current NSTEMI guidelines among patients who are already treated with dual antiplatelet therapy, the addition of a GP IIb/IIIa inhibitor for high-risk PCI is recommended if the risk of bleeding is low (I,B). We studied the outcome in NSTEMI patients depending on GP IIb/IIIa use.
Material: The study is based on data from the Polish Acute Coronary Syndrome Registry (PL-ACS) and included patients with NSTEMI treated with PCI. We analyzed the outcome and independent variables influencing outcome of patients divided according to use of GP IIb/IIIa inhibitors during PCI.
Results: Data from 30 048 patients were analyzed out of which 3 527 (11,7%) were given GP IIb/IIIa inhibitors during PCI. Patients who received GP IIb//IIIa inhibitors had higher 30-days mortality (7,0% versus 3,4%; p<0,0001). In comparison with patients who did not received GP IIb//IIIa inhibitors, GP IIb//IIIa group more frequently had IABP inserted (2,5% vs. 0,5%), cardiogenic shock (3,6% vs. 1,2%), culprit lesion in LM (5,9% vs. 1,7%), history of past PCI (10,5% vs. 9,4%) or CABG (5,4% vs. 3,0%), sudden cardiac arrest before hospitalization (1,4% vs. 0,9%). In multivariate analysis independent factors influencing 30-days mortality in both groups were the same and included: sudden cardiac arrest before hospitalization (Hazard Ratio in GP IIb//IIIa group 2,6 and in non GP IIb//IIIa group 2,0), peripheral atherosclerosis (HR 2,2 and 1,2), cardiogenic shock (HR 12,5 and 9,8), older age (HR 1,2 and 1,2), IABP use (HR 2,1 and 2,0), culprit lesion in LM (HR 2,3 and 2,3).
Conclusions: In NSTEMI patients treated with PCI those receiving GP IIb/IIIa blockers have worse 30-days outcome.

1980 | BEDSIDE
Prognosis and antithrombotic therapy of patients with atrial fibrillation after undergoing percutaneous coronary intervention)

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Objective: To elucidate the clinical status of the patients with atrial fibrillation (AF) after percutaneous coronary intervention (PCI).