1213

Post-TAVR antithrombotic treatment and one-year survival: insights from the FRANCE TAVI registry

P. Overtchouk[1], P. Guedeney[1], G. Montalescot[1], J.P. Verhoye[2], R. Koning[3], T.L. Lefevre[4], E. Van Belle[5], H. Eltchaninoff[6], M. Gilard[7], P. Leprince[1], B. Iung[8], O. Barthelemy[1], J. Silvain[1], H. Le Breton[2], J.P. Collet[1]. *[1]Hospital Pitie-Salpetriere, Paris, [2]University Hospital of Rennes, Rennes, [3]Clinic Saint-Hilaire, Rouen, [4]Institut Hospitalier Jacques Cartier, Massy, [5]CHRU Lille, Lille, [6]University Hospital of Rouen, Rouen, [7]University Hospital of Brest, Brest, [8]Hospital Bichat-Claude Bernard, Paris, France*

Introduction: The optimal anti-thrombotic treatment (ATT) after TAVR remains a matter of debate. Dual antiplatelet therapy (DAPT) is recommended but single antiplatelet therapy and oral anticoagulation (OAC) are frequently used when the bleeding risk is high or when there is a compelling indication. Whether this may impact clinical outcome is unknown.
Method: FRANCE-TAVI is a prospective multicenter nation-wide French registry that enrolled patients after successful TAVR between January 1st 2013 and December 31st 2016. In this ad hoc analysis we performed multiple imputation followed by multivariable stepwise Cox regression to investigate if the anti-thrombotic treatments are amongst the independent predictors of all-cause mortality. Results are given as adjusted HR (95% confidence interval).
Results: Out of 12,804 patients included in FRANCE TAVI registry, 11469 patients (age 82.8±0.068 [mean±standard error] years old, logistic Euroscore 17.8±0.114%) were alive at discharge with known ATT treatment. Half were female and one third had history of atrial fibrillation. Transfemoral approach was used in 83.5% of patients and mean duration follow-up was 495±3.5 days. OAC was given at discharge in 33.4% of patients. Neither aspirin, nor clopidogrel or OAC were independently associated with mortality in the multivariable analysis. Female gender (adj HR 1.63 [1.44–1.84], p<0.001), history of atrial fibrillation (adj. HR 1.58 [1.41–1.76], p<0.001) and chronic renal failure (adj. HR 1.38 [1.24–1.53], p<0.001) were the strongest independent correlates of mortality.
Conclusion: Antithrombotic given at discharge was not associated with mortality after TAVR in the FRANCE TAVI registry. Further studies are needed to assess whether ischemic or bleeding complications are mitigated.

REFINING SECONDARY PREVENTION

P1228

Which role plays the school degree in effectiveness of prevention after myocardial infarction?

T. Backhaus[1], S. Michel[1], S. Meyer[2], A. Fach[1], J. Schmucker[1], R. Osteresch[1], J. Stehmeier[1], T. Wettwer[1], H. Haase[3], A. Elsaesser[2], R. Hambrecht[1], H. Wienbergen[1]. *[1]Hospital Links der Weser, Bremer Institut für Herz- und Kreislaufforschung (BIHKF), Bremen, Germany; [2]Oldenburg Hospital, Oldenburg, Germany; [3]RehaZentrum, Bremen, Germany*

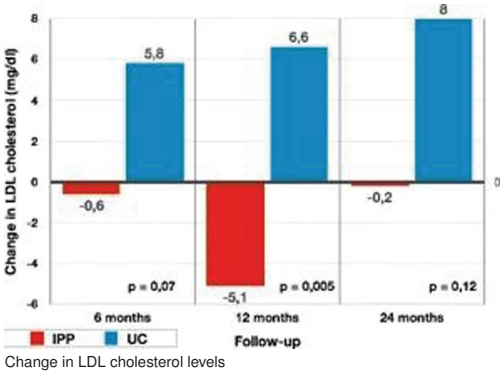
Introduction: Registry studies have shown that a low social status is associated with a high incidence of myocardial infarction (MI). Furthermore, risk for reinfarctions is higher in patients with less income. The study's hypothesis is, that the school degree has an important impact on the effectiveness of secondary prevention after MI. Patients with a lower school degree might not be able to benefit substantually by prevention efforts.
Methods: This analysis is a substudy of the randomized, multicentric IPP (Intensive Prevention Program) study, which showed effectiveness of a 12-months program of intensive prevention versus usual care (UC). Primary endpoint was a scoring system called IPP-Prevention-Score (0 to 15 points), indicating the individual risk by different risk factors (0 = highest risk profile; 15 = lowest risk profile). In this analysis the study population was divided into three groups according to their school-leaving qualification (1: completed secondary school, n=68; 2: middleschool, n=115; 3: grammar school, n=67).
Results: When presenting with MI at hospital, risk factors differed between the three groups. Patients with lowest school degrees showed significant higher levels of LDL-cholesterol (group 1: 134±33mg/dl, group 2: 137±42 mg/dl, group 3: 115±38mg/dl; p=0,028) and were less physical active (group 1: 626±1512 kcal/week, group 2: 502±973 kcal/week, group 3: 1362±229 kcal/week; p=0,008). Furthermore, patients who completed secondary school were more likely to smoke and had less points in the IPP Prevention Score, indicating a lower rate of risk factors in the guideline-recommended target compared to patients with higher school degree (IPP-prevention-score: group 1: 6.8±2.3; group 2: 7.4±2.4; group 3: 9.1±2.7; p<0,001)
One month after discharge risk factors improved in both study populations (IPP versus UC). During the following 12 months, risk factors further decreased significantly in all school qualifications by IPP. Patients with completed secondary school, who initially presented lowest IPP Score and highest risk factors, showed best improvement after 12 month of IPP (IPP-prevention-score: group 1: Δ4,0±2,4; group 2: Δ3,7±2,3; group 3: Δ2,5±3,1; p=0,046).
Conclusion: Patients with MI and different school-leaving qualification presented different levels of risk factors. A three-week rehabilitation program after MI and a 12-months of intensive prevention resulted in improved risk factors in all different school qualifications. Contrary to the study's hypothesis, patients with lowest school degree, who showed initially an unfavourable risk profile, reached highest effects out of the prevention program.

P1229

Intensive prevention program after myocardial infarction: how can LDL cholesterol be reduced and how long are intensive prevention efforts needed?

S. Michel[1], T. Backhaus[1], S. Meyer[2], A. Fach[1], J. Schmucker[1], R. Osteresch[1], J. Stehmeier[1], T. Wettwer[1], H. Haase[3], A. Elsaesser[2], R. Hambrecht[1], H. Wienbergen[1]. *[1]Bremer Institut für Herz- und Kreislaufforschung (BIHKF) am Klinikum Links der Weser, Bremen, Germany; [2]Klinikum Oldenburg, European Medical School Oldenburg-Groningen, Oldenburg, Germany; [3]RehaZentrum Bremen, Bremen, Germany*

Background: Hypercholesterinaemia is a well-known risk factor in cardiovascular disease and guidelines recommend to lower LDL cholesterol levels in manifest coronary heart disease. Patient education leads to better drug compliance; however, until now prevention programs (such as EUROACTION or RESPONSE II) did not show significant effects on lipid levels.
Purpose: Aim of the study was to prove the effects of a modern intensive prevention program (IPP) for 12 months after acute myocardial infarction (MI) on lipid levels in a longtime view.
Methods: In the multicenter IPP trial patients with MI were randomized one month after discharge to IPP versus usual care (UC). IPP was coordinated by prevention assistants and included education sessions (≥1/month), telemetric risk factor control, telephone visits and clinical visits to control and intervene, if risk factors did not meet the guideline-recommended targets. To optimize risk factors patients, their general practitioners and cardiologists were requested both orally and in writing to escalate prevention efforts and medication. The primary endpoint of the IPP trial was global risk factor control at the end of the prevention program at 12 months, last follow up was performed after 24 months.
The present sub-study analyzes interventions on lipid profile and effects after 6, 12 and 24 months in 282 patients of the Bremen cohort of the IPP trial.
Results: At randomization one month after discharge (97,5% after a 3-week cardiac rehabilitation programm) LDL cholesterol was 71,4±24,6 mg/dl in the IPP group and 69,0±23,1 mg/dl in the UC group (p 0,41).
During the following 12 months adaption of statin therapy (increase of dose, change to more potent statin or combination with ezetimib) was adviced in 57 patients of the IPP group (48,7%) due to elevated LDL cholesterol levels. This advice was followed in 74%.
A significant improvement in LDL cholesterol levels was observed in the IPP group compared to UC after 12 months (IPP: 66,3±19,9 versus UC: 75,6±28,9 mg/dl; p 0,005; Figure 1).
After termination of IPP at 12 months LDL cholesterol levels increased again at the 24 months visit reaching levels like at baseline (Figure 1). In the UC group a continous increase could be observed with no significant difference between both groups after 24 months (IPP: 71,2±26,1 versus UC: 77±28 mg/dl; p 0,12).



Change in LDL cholesterol levels

Conclusion: An intensive prevention program after myocardial infarction leads to significant better LDL cholesterol levels. After termination of the program after 12 months LDL cholesterol levels increased again, indicating that even a 12 months prevention program is not long enough to achieve sustainable low LDL cholesterol levels and longerlasting prevention is needed.

P1230

Association between early invasive management, secondary preventive medical therapy and long-term outcomes after acute coronary syndromes

K.W. Hansen[1], R. Sorensen[2], M. Madsen[3], J.S. Jensen[4], P.E. Mortensen[5], T. Lange[3], G.H. Gislason[4], S. Galatius[1]. *[1]Bispebjerg University Hospital, Department of Cardiology, Copenhagen, Denmark; [2]Rigshospitalet - Copenhagen University Hospital, Department of Cardiology, Copenhagen, Denmark; [3]University of Copenhagen - Departmen of Public Health, Copenhagen, Denmark; [4]Copenhagen University Hospital Gentofte - Department. of Cardiology, Copenhagen, Denmark; [5]Odense University Hospital, Department of Thoracic Surgery, Odense, Denmark*

Background: Although secondary preventive medical therapy is recommended in all patients with an acute coronary syndrome (ACS) a higher use has been