There was no difference in the prevalence of thrombogenic disorders among the survivors of AMI according to the presence of normal or diseased coronary arteries. Conclusions: There is a high prevalence of hereditary thrombogenic disorders in pts who suffered a MI ≤3 years, and this may contribute to the pathogenesis of MI in young pts.

Is Age Related to Platelet Activity in Patients Presenting With Acute Coronary Syndromes?

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BACKGROUND: Bleeding is a major risk of pharmacologic strategies to treat acute coronary syndromes (ACS) and is increased in the elderly. This risk may be related to an age-dependent reduction in platelet activity.

Methods: Baseline platelet function and flow cytometry with monoclonal antibodies directed against multiple surface receptors were investigated in a subset of the EARLY Trial (n=56) that treated patients presenting to the Emergency Department with early (≤12-hour) or late (12-24 hours) stPTT.Results: A significant negative correlation was observed between age and indices of platelet activity. Mean±SD activity fell as age increased (r=-.5250, p<0.01) and platelet aggregation to adp was also lower in the elderly (r=-.5383, see figure). Conclusion: Age contributes to the bleeding risk in patients with acute coronary syndromes, older patients have less active platelets. The age-dependent increase in bleeding risk in the elderly may be related to reduced platelet activity as compared to younger patients. Monitoring of platelet function may lessen the bleeding risks in ACS treatment by appropriate adjustment of platelet inhibition.

Sustained Reduction in Coagulation Activity During Long-Term Dalteparin Treatment in Unstable Coronary Artery Disease

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Background: Short-term treatment with low molecular mass heparin is known to reduce coagulation activity. We have investigated the influence on markers of coagulation activity by long-term treatment with dalteparin, a low molecular mass heparin, in patients with unstable coronary artery disease (CAD).

Methods: Coagulation activity was monitored in 552 out of the 2257 patients with unstable CAD in the Scandinavian multicenter study FRISC II. All patients were treated with subcutaneous dalteparin 120 IU/kg twice daily for 5-7 days and then randomised to placebo or dalteparin, 120 IU/kg p.o. for 12 months. Women above these weight limits the dalteparin dose was 7,500 IU twice daily during long-term treatment. Prothrombin fragment 1+2 (F1+2) and D-dimer were analysed during in-hospital treatment with dalteparin and 3 months and 6 months following treatment. Data were compared with healthy controls.

Results: There was a sustained reduction of coagulation activity, as indicated by lower levels of F1+2 and D-dimer, during long-term treatment with dalteparin as compared to placebo. A significantly higher coagulation activity was seen at follow-up 3 months after termination of long-term dalteparin treatment, whereas coagulation activity was unchanged at follow-up in the placebo group.

Conclusions: There was a significant reduction in platelet activity after short-term treatment with dalteparin, but during long-term treatment with dalteparin as compared to placebo. A significantly higher coagulation activity was seen at follow-up 3 months after termination of long-term dalteparin treatment, whereas coagulation activity was unchanged at follow-up in the placebo group.