Abstract: P1961

**Clopidogrel compared to aspirin in symptomatic peripheral arterial disease, a nationwide cohort study**

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**Topic(s):**
Peripheral Artery Disease

**Citation:**

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None

**Background**
Aspirin and clopidogrel is currently recommended as equivalent choices for antithrombotic therapy for peripheral arterial disease (PAD) in both European and US guidelines. A recent meta-analysis quested the efficacy of aspirin in prevention of myocardial infarction and cardiovascular mortality and found it protective only against non-fatal stroke. Clopidogrel, however, was effective against non-fatal myocardial infarction and the composite endpoint of death, non-fatal stroke, and myocardial infarction.

**Purpose**
To investigate if clopidogrel provide clinical benefits over aspirin in a national cohort of revascularized patients with PAD.

**Methods**
Comparative cohort study including all Danish patients recorded in the Danish Vascular Registry undergoing surgical or endovascular revascularization due to symptomatic PAD in Danish hospital settings from 2000 through 2016. We used multiple national population-based registries to collect individual-level data on comorbidity, medical treatment, and life status. We emulated the principles of a pragmatic randomized controlled trial, i.e. eligibility criteria, exclusion criteria, treatment assignment, and follow-up period, and used inverse probability of treatment weighting to account for treatment confounding.

**Results**
33,381 patients were considered for inclusion, and 15,737 was excluded according to prespecified criteria, leaving 13,653 taking aspirin and 1,312 clopidogrel. There were baseline differences between the two groups, which mitigated after applying treatment weights. Over a mean follow-up of 5.7 years, there were no treatment differences between aspirin (reference) and clopidogrel for outcomes of myocardial infarction, weighted hazard ratio (HR) 0.84 (95% CI;0.64-1.10); stroke HR 1.09 (0.83-1.41); amputation HR 0.86 (0.66-1.13); and limb revascularisation HR 0.95 (0.73-1.124). For combined cardiovascular endpoints myocardial infarction, stroke or death we found HR 0.89 (0.75-1.05) and combined limb outcome, amputation and revascularisation HR 0.92(0.75-1.13), Figure 1. Hazard ratios for risk of all bleedings were similar, also when divided on intracranial, gastrointestinal and others.

**Conclusion**
In this nationwide cohort of revascularized patients with PAD, clopidogrel in comparison with aspirin showed no difference for cardiovascular outcomes or limb protection.
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