Why We Should Switch ASA To Plavix For Postoperative And Post-Procedure Care of Patients Having Lower Extremity Treatments

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Conflict of Interest
Educational and research grants: Abbott, Amgen, Boston Scientific, Cook, Terumo

RCT CAPRIE: Clopidogrel vs ASA
MI, ischaemic stroke and CV (MACE)

Follow-up (months)

Cumulative event rate (%)

0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

ASA
Clopidogrel

8.7%
RRR; p = 0.043
N=19,145

RCT CAPRIE: Clopidogrel vs ASA
MACE by subgroups

Stroke
MI
PAD
All patients

Benefit-harm profile of different antiplatelet agents

Network Meta-Analysis (2015)
Efficacy & Safety of Different Antiplatelet Agents for Prevention of MACE and Leg Amputations in PAD (49 RCT)

Meta-Analysis (2009)
Aspirin in PAD

• PAD ASA meta-analysis
  – 18 trials, 5269 patients with PAD
  – 100 to 1500 mg aspirin dose
  – CV events RR 0.88 (0.76–1.04 NS)
  – Mortality RR 0.98

Benefit of aspirin remains uncertain in PAD
(mainly MACE outcome)

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(mainly MACE outcome)
Network Meta-Analysis (2015)
Prevention of leg amputations in PAD (11 trials)

<table>
<thead>
<tr>
<th>Major amputations</th>
<th>Rate Ratio (95% CI)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clopidogrel/Aspirin</td>
<td>0.81 (0.68–0.96)</td>
<td>0.003</td>
</tr>
<tr>
<td>Revascularization-Aspirin</td>
<td>0.82 (0.67–0.99)</td>
<td>0.04</td>
</tr>
<tr>
<td>Prostaglandin</td>
<td>0.81 (0.55–1.17)</td>
<td>0.29</td>
</tr>
<tr>
<td>Ticlopidine</td>
<td>0.87 (0.58–1.34)</td>
<td>0.52</td>
</tr>
<tr>
<td>Aspirin</td>
<td>1.0 (0.58–1.80)</td>
<td>0.97</td>
</tr>
<tr>
<td>Clopidogrel</td>
<td>0.89 (0.39–2.10)</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Network Meta-Analysis (2015)
Major amputations after LER (3 trials)

short term DAPT after revascularization
- sig. reduction of major amputation (CASPAR, MIRROR, CHARISMA)
- RR: 0.68, 95% CI 0.46–0.99; NNT 94 (vs. ASA)

number of major amputations avoided > number of severe bleedings

RCT CASPAR: ASA vs. ASA/Clopidogrel (DAPT)
Limb outcome after bypass surgery

double-blind treatment up to 193 events (event driven trial)

n = 1,460

ASA 75–100 mg/day

Clopidogrel 75mg/day

Placebo 1 tab/day

Bypass surgery

2 to 4 days

Venous: 70.3%
N = 598

Prosthetic: 29.7%
N = 253

Limb outcome after bypass surgery

K-M curves of time to primary outcome event total population (ITT)

K-M curves of time to primary outcome event venous vs prothetic graft (ITT)

RCT EUCLID: Clopidogrel vs Ticagrelor
MI, ischaemic stroke and CV death (MACE)

Without aspirin arm due to inferiority
RCT EUCLID: Clopidogrel vs Ticagrelor
MI, ischaemic stroke and CV death (MACE)

RCT COMPASS trial: ASA vs DOAC vs ASA/DOAC
CV death, MI, or ischemic stroke (MACE)

Major adverse limb events in patients with PAD
(COMPASS Trial)

Conclusion
Benefit of aspirin uncertain in PAD (MACE & MALE)
- DAPT (ASS/Clopidogrel) can reduce major amputations following revascularization
Combination of aspirin plus rivaroxaban 2.5 mg BID prevents MALE (subgroup-analysis)
### New Antithrombotic Rx in PAD

<table>
<thead>
<tr>
<th>Trial</th>
<th>Medication Background (Dose)</th>
<th>Medication</th>
<th>Mean change in PAD at 30 day</th>
<th>30 day change in PAD at 30 day subgroup</th>
<th>L400 change in PAD at 30 day subgroup</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCT1</td>
<td>Aspirin only</td>
<td>450 mg</td>
<td>-0.9</td>
<td>0.87</td>
<td>0.87</td>
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<tr>
<td>RCT2</td>
<td>Aspirin + Plavix</td>
<td>450 mg + 75 mg</td>
<td>-1.2</td>
<td>1.2</td>
<td>1.2</td>
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<tr>
<td>RCT3</td>
<td>Aspirin + Dipyridamole</td>
<td>450 mg + 150 mg</td>
<td>-1.5</td>
<td>1.5</td>
<td>1.5</td>
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<tr>
<td>RCT4</td>
<td>Warfarin only</td>
<td>3 mg daily</td>
<td>-1.8</td>
<td>1.8</td>
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<tr>
<td>RCT5</td>
<td>Warfarin + Aspirin</td>
<td>3 mg + 450 mg</td>
<td>-2.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>RCT6</td>
<td>Warfarin + Dipyridamole</td>
<td>3 mg + 150 mg</td>
<td>-2.4</td>
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*Note: All changes are reported as mean values.*