WHAT IS THE BEST MEDICAL TREATMENT AFTER CAROTID, AORTIC AND LOWER EXTERMITY ENDOVASCULAR AND OPEN PROCEDURES

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Disclosure

- I have no actual or potential conflict of interest in relation to this presentation

Standard post procedure recommendation

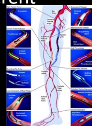
- Antiplatelets
- Statins
- Smoking cessation
- Anti-Hypertensives

Current Knowledge

- In patients with symptomatic PAD antiplatelet therapy after PVI shows positive clinical outcomes
- DAPT longer than 6 m after PVI is associated with low incidence of MACE and MALE without increase of major bleeding (S. Cho, JACC 2019)
- DPI (ASA + NOAC) therapy improves outcome after PVI (VOYAGER PAD)

Unanswered Questions

- Is DPI (ASA + NOAC) more effective than DAPT (or MT with P2Y12)?
- What is the optimal length of treatment?
- Should the treatment be the same after different interventions?
- Should the treatment be patients specific (different comorbidity/risk factors/genetic makeup)?
- What should be the primary endpoints?



Antiplatelet Therapy Guidelines (2019)

- - Infrainguinal PVI: DAPT for 1 month.
- - Repeated PVI: DAPT for up to 6 months.
- - Device Recommendations (DES):
- - Eluvia, Zilver PTX: DAPT for 60 days.
- - Angiolite BTK: DAPT for 180 days.

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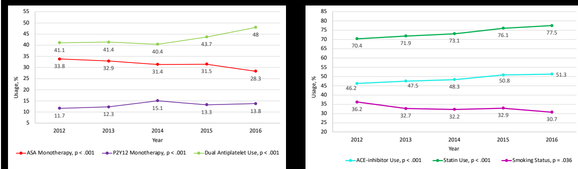
Challenges in Real-World Management

- - Physician Surveys:
- - 90% of Canadian physicians: insufficient evidence (2021).
- - 82% of European physicians: insufficient evidence (CLEAR, 2019).
- - VOYAGER PAD study indicates DPI (DOAC + ASA) effectiveness.

Endpoints By FU Antiplatelet Use In The Post-Propensity Score Matched Sample: Kaplan Meier Analysis

	ASA vs. P2Y12	P-Value	P2Y12 vs. DAPT	P-Value
Overall Survival	85.5 % vs. 87.8 %	.026	87.8% vs. 88.9%	0.62
Amputation Free Survival	74.8% vs. 79.6%	<.001	79.6% vs. 81.5%	0.33
Limb Salvage	86.8% vs 89.5%	.013	89.5 vs. 91.7%	0.03

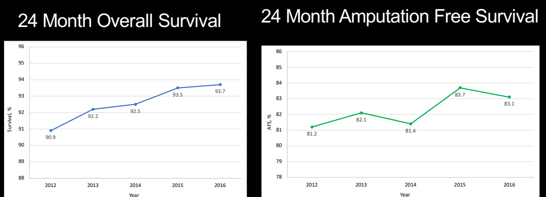
Trends in FU Medical Management 2012-2016



Trends in FU Medical Management 2012-2016

24 Month Overall Survival

24 Month Amputation Free Survival



Current recommendation for medical therapy after PVI for CLTI

- Antiplatelets
  - First PVI – 6 months MT with P2Y12 inhibitor follow by MT with ASA - indefinitely
  - Repeated PVI/complex cases DPI (DOAC + ASA)
- Statins – indefinitely
- Anti-hypertensive (ACE inhibitors) – indefinitely
- Diabetes control
- Smoking cessation

Aortic Procedures: Best Medical Treatments

- Antithrombotic therapy:
- - Antiplatelet MT therapy for graft maintenance
- - Consider anticoagulation for specific conditions (e.g., thrombus in grafts)
- - Blood pressure management:
- - Beta-blockers for aortic dissection cases
- - ACE blockers for chronic aneurysm stabilization
- - Statins universally recommended for all patients with aortic pathology

Carotid Procedures: Best Medical Treatments

- - Antiplatelet therapy:
- - DAPT for stenting (30 days minimum)
- - Long-term monotherapy with aspirin or clopidogrel
- - Lipid management:
- - High-intensity statins (e.g., atorvastatin, rosuvastatin)
- - Role of PCSK9 inhibitors in refractory hyperlipidemia
- - Blood pressure control - ACE
- - Smoking cessation

Conclusions

- Post-procedural medical management is as critical, if not more, than the intervention itself in ensuring optimal outcomes
- The interventionist should play a central role in overseeing and guiding post-procedure treatment