Cardiovascular Disease in CLI patients

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Disclosure

Speaker name: 

...............Lisa Singer .................

I have the following potential conflicts of interest to report:

■ Consulting
■ Employment in industry
■ Stockholder of a healthcare company
■ Owner of a healthcare company
■ Other(s)

☒ I do not have any potential conflict of interest
Female Patient, 75yrs

- Diabetes Type 2
- Arterial Hypertension
- Hx of Smoking ’til 60yrs
- Dyslipidemia
- Sedentary Life Style
- Minor Heart Attack 5yrs ago

„Problems with left foot - feels as if not part of her body“
Critical Limb Ischemia
Follow Up 1 Year

- Patient died
- Approx 9 months after revasc
- Extensive myocardial infarction
Atherosclerotic Disease Burden

Proportion of PAD patients with CAD and/or CBVD = 61%

Mortality in single & multiple affected vascular beds

- Death rates are higher the more beds affected
- Patients with 3-bed-disease (coronary, cerebral & peripheral) have worst survival rates

Figure 1. Kaplan–Meier Survival Curves Based on Mortality from All Causes among Normal Subjects and Subjects with Symptomatic or Asymptomatic Large-Vessel Peripheral Arterial Disease (LV-PAD).
How reduce the excess mortality risk?
Anti-Hypertensives in PAD (ACE-Inhibitors)

- 22% Risk Reduction for MI, stroke, death by Lowering BP 130/80mmHg
- Independent of BP-effects

Antihypertensive therapy should be administered to patients with hypertension and PAD to reduce the risk of MI, stroke, heart failure, and cardiovascular death (140-144).

The use of angiotensin-converting enzyme inhibitors or angiotensin-receptor blockers can be effective to reduce the risk of cardiovascular ischemic events in patients with PAD (143, 145, 146).

Smoking Cessation in PAD

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<tr>
<th>Smoking</th>
<th>Diabetes</th>
<th>Hypertension</th>
<th>Hypercholesterolemia</th>
<th>Hyperhomocysteinemia</th>
<th>C-Reactive Protein</th>
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<tr>
<td>COR</td>
<td>LOE</td>
<td>Recommendations for Smoking Cessation</td>
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<td>Patients at every visit who smoke cigarettes or use other forms of tobacco should be advised at every visit to quit (153-155). Patients with PAD who smoke cigarettes should be assisted in developing a plan for quitting that includes pharmacotherapy (i.e., varenicline, bupropion, and/or nicotine replacement therapy) and/or referral to a smoking cessation program (153, 156-158). Patients with PAD should avoid exposure to environmental tobacco smoke at work, at home, and in public places (159, 160).</td>
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Statins in CLI

Treatment with a statin medication is indicated for all patients with PAD (88, 135-139).

Westin GG et al JACC 2014;63:682–90
Anti-Platelet Therapy in PAD

- Aspirin/Clopidogrel reduce mortality in atherosclerotic disease.
- PAD patients are high-risk cardiovascular patients.
- Antiplatelet therapy with aspirin alone (range 75–325 mg per day) is recommended to reduce MI, stroke, and vascular death.

CAPRIE Investigators. Lancet 1996;348:1329
Diabetes Therapy in CLI

- No data on survival benefit with tight diabetes control in CLI
- Tight diabetes control reduces microvascular events
- Diabetic foot care should be stressed

Blood glucose levels should be monitored in patients with a hemoglobin A1c (HbA1c) goal of <7%

Patients with PAD and diabetes mellitus should be counseled about self-foot examination and healthy foot behaviors (177, 180).

In patients with PAD, prompt diagnosis and treatment of foot infection are recommended to avoid amputation (178, 179, 181-183).
Adherence to Guidelines & Survival

- Adherence to Guidelines with smoking cessation, antiplatelet, antihypertensive & statin therapy improves survival in PAD patients

- 56% Patients had CLI

Armstrong EJ et al. JAHA 2014;3:e000697
Summary

• Cardiovascular mortality in PAD patients is high
• Cardiovascular mortality in CLI patients is even higher
• Not every PAD/CLI patients receives full medical therapy

• Treat PAD patients accordingly to guidelines
  – Statins
  – Platelet-Inhibitors
  – ACE-Inhibitor
  – Anti-diabetic meds
  – Smoking cessation

Check on every visit upon compliance & therapy goals!
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