Management of Peripheral Vascular Disease

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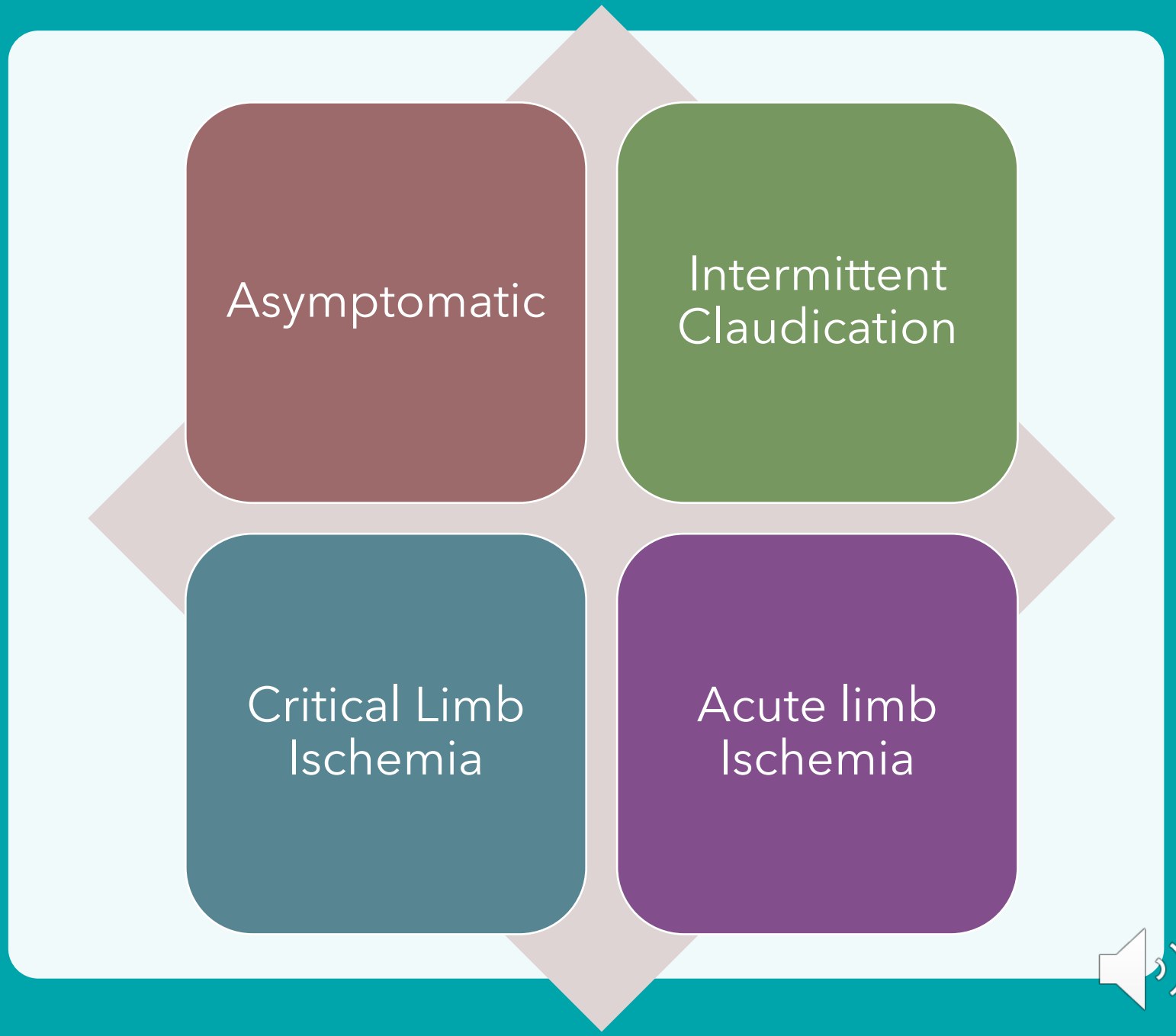
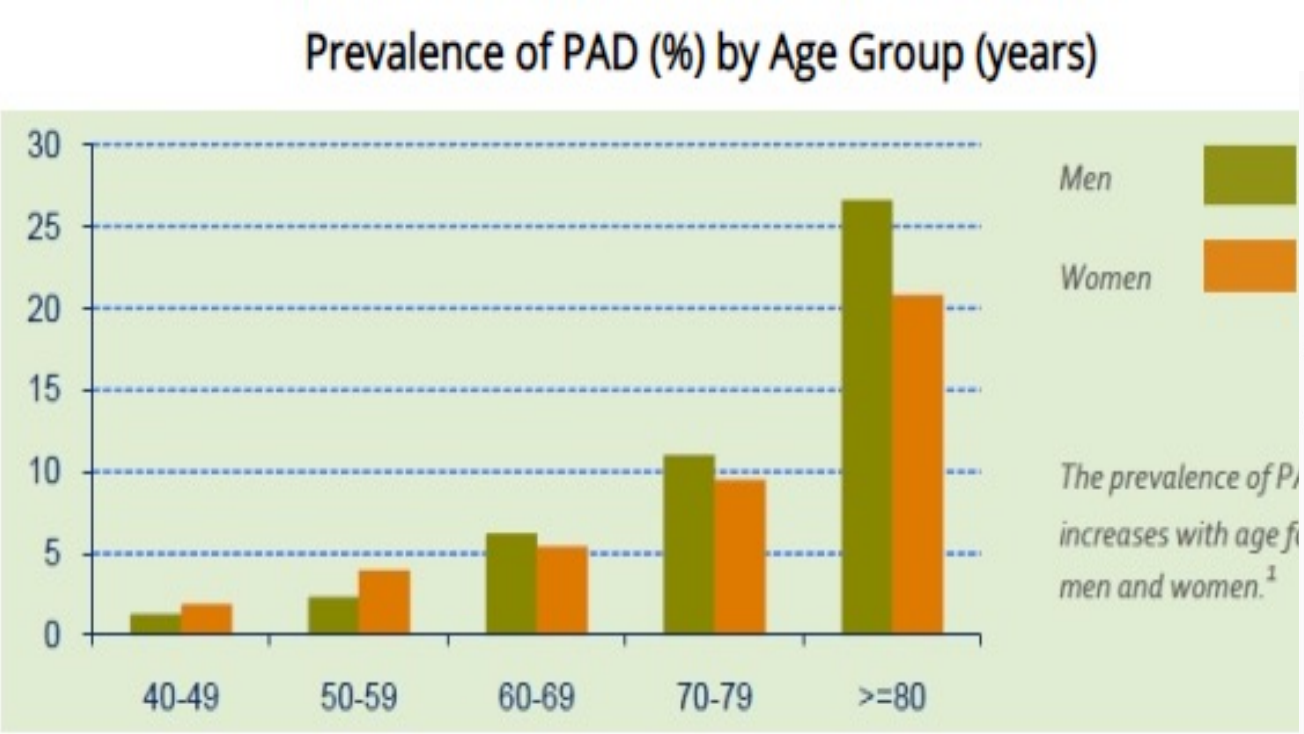
Peripheral Artery Disease (PAD) represents wide spectrum of presentation

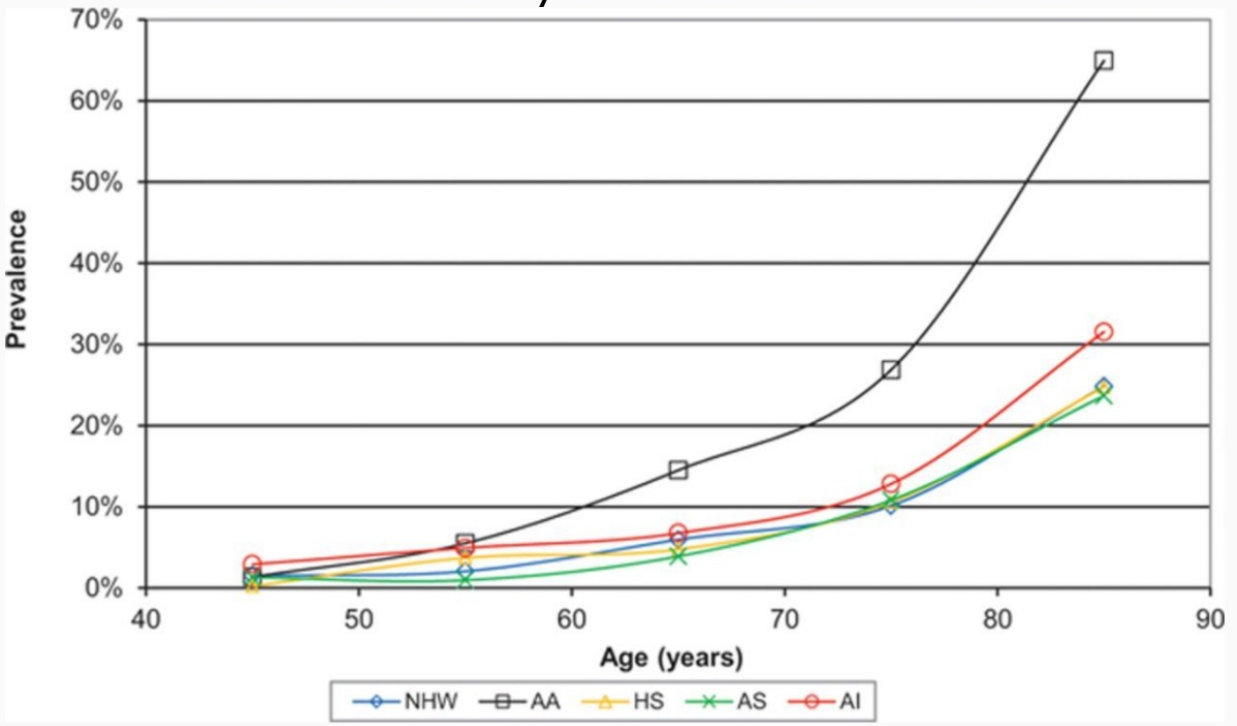
ABI <0.9 is sensitive and specific for arterial stenosis



Prevalence of PAD



Prevalence of PAD by Ethnicity



https://www.cdc.gov/heartdisease/PAD.htm
https://www.ahajournals.org/doi/full/10.1161/circresaha.116.303849

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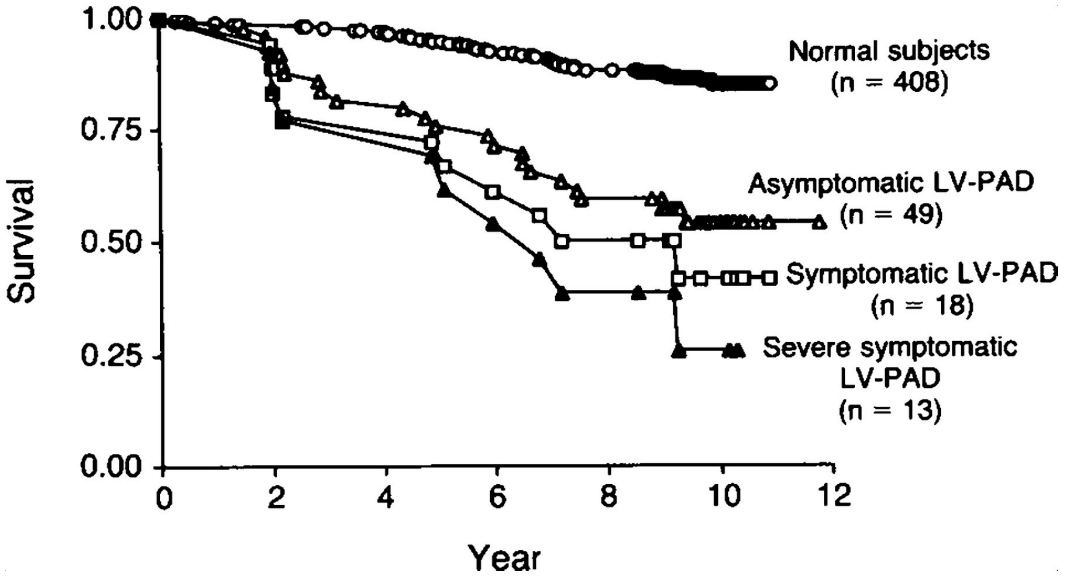
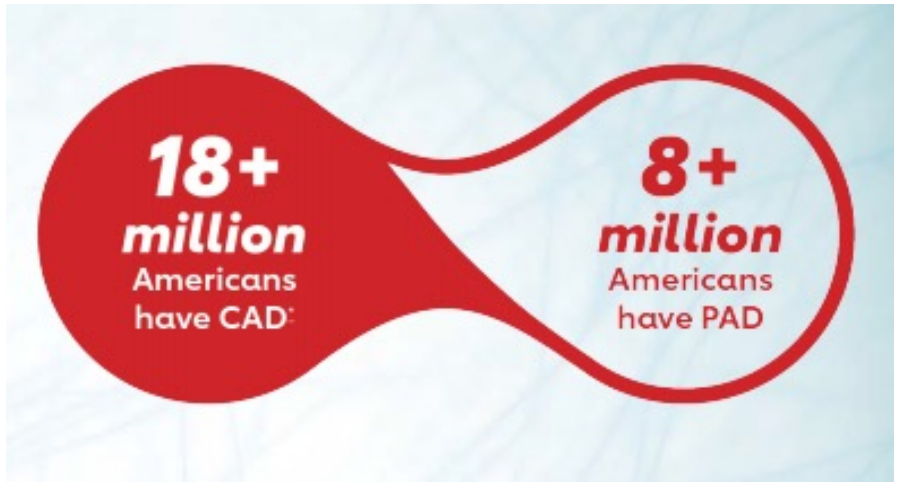
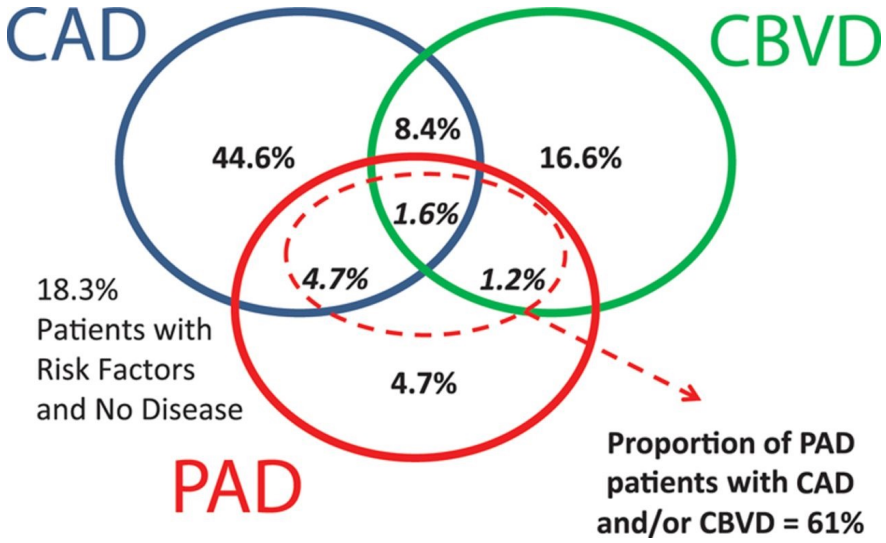
PAD is associated with Increased Risk of CAD and Mortality

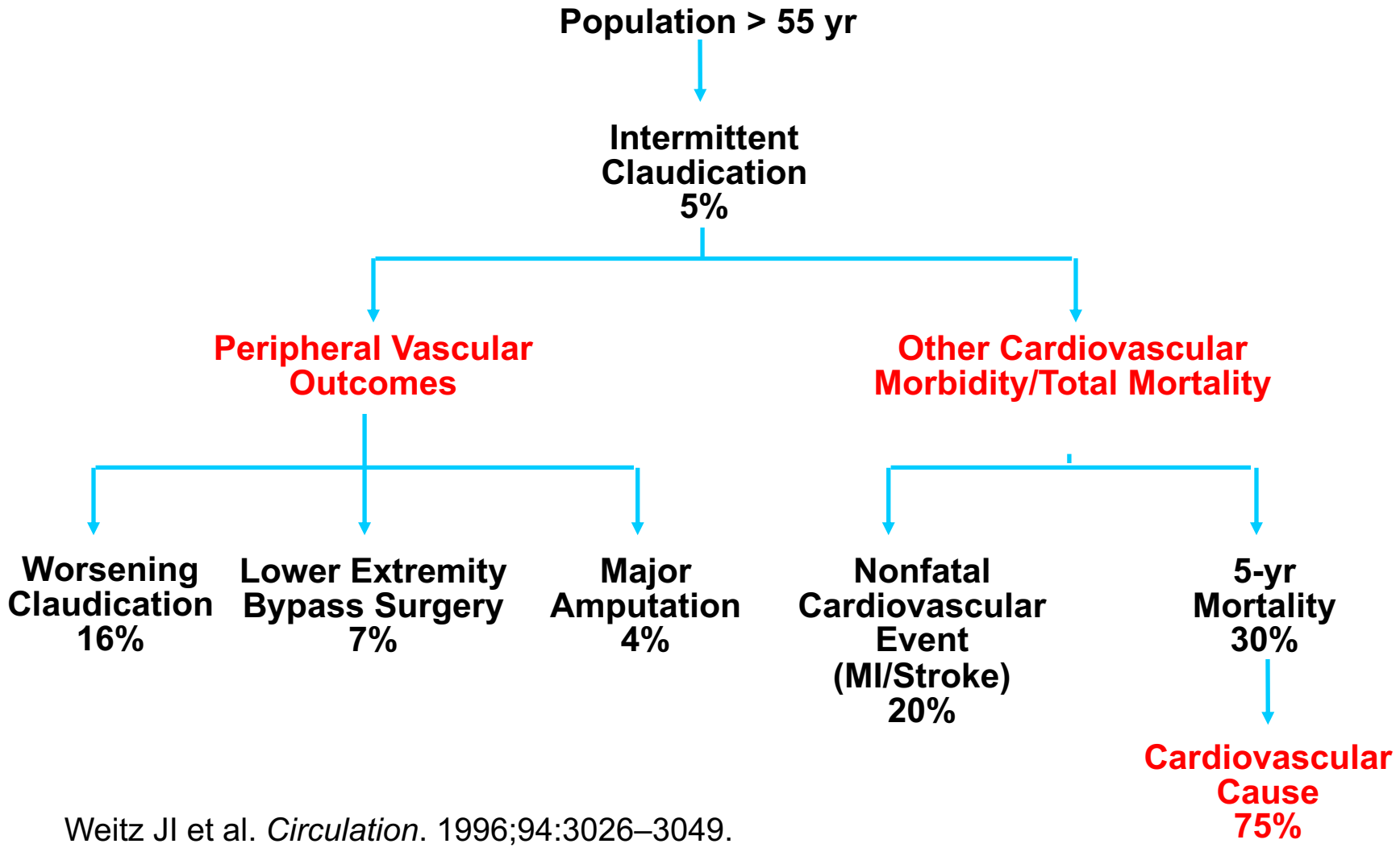






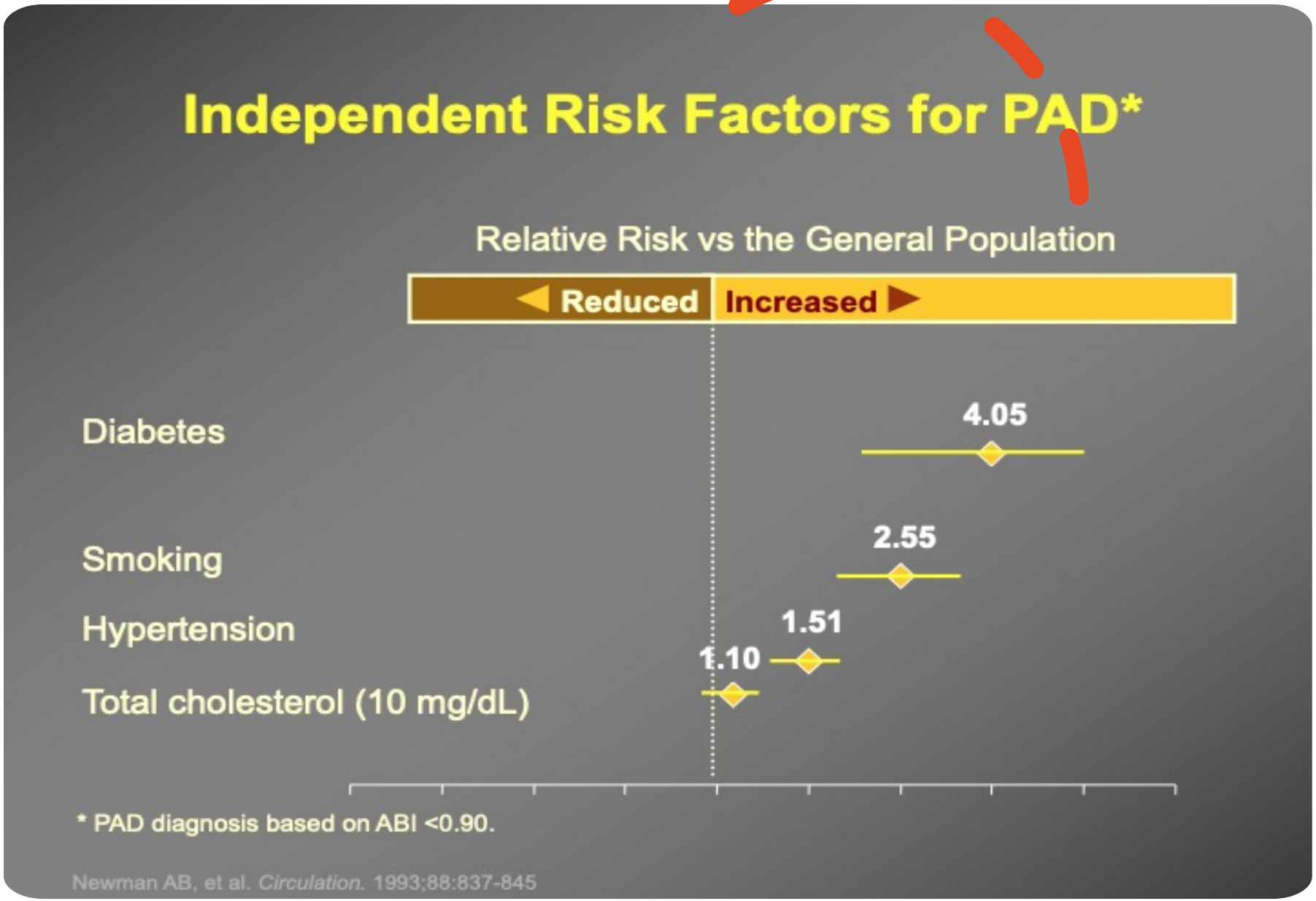
Criqui, M. https://www.nejm.org/doi/full/10.1056/NEJM199202063260605
https://www.ahajournals.org/doi/10.1161/CIRCRESAHA.116.303849

Natural History
Intermittent Claudication



Weitz JI et al. *Circulation*. 1996;94:3026–3049.

Risk factors of PAD are common



Treatment options for PAD

MEDICAL THERAPY

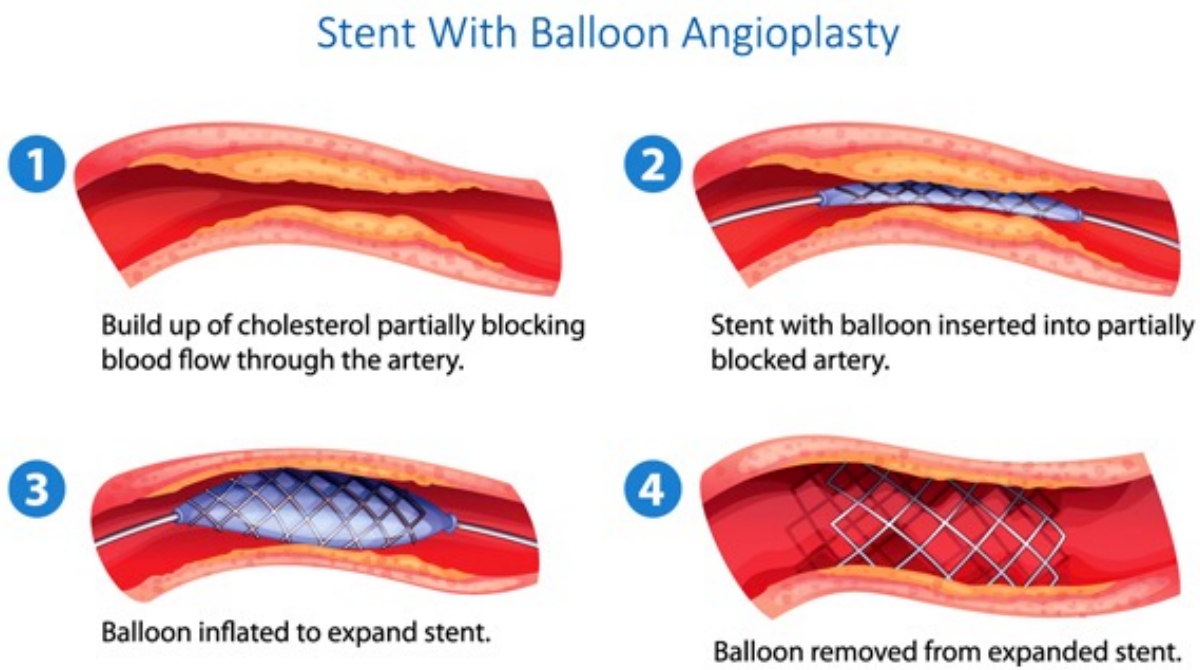
PERCUTANEOUS INTERVENTION

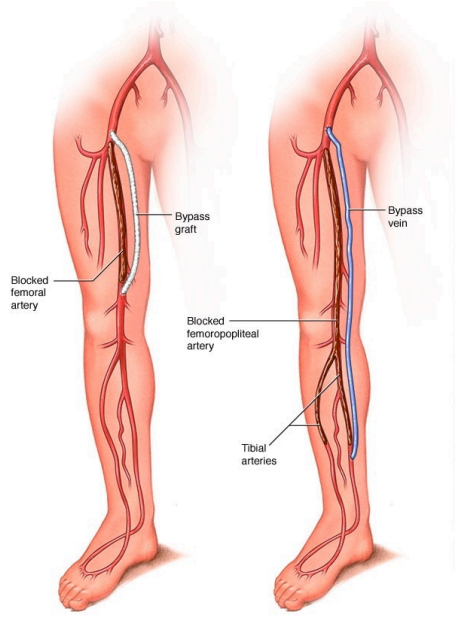
OPEN SURGICAL BYPASS

Goals of treatment include improving quality of life and prevent limb loss

- Smoking cessation
- Exercise
- Treat Hypertension
- Treat Hyperlipidemia
- Control Diabetes

Percutaneous interventions are less invasive but often not as durable as bypass Open bypass can be a reasonable option for those who failed other options





Endovascular Intervention: Overview

- It can be performed in an interventional suite
- Obtain arterial access
- Perform initial arteriography and determine whether to proceed with the intervention.
- Anticoagulation
- Treat the diseased segment(s) to achieve a patent lumen followed by completion arteriography (Balloon, stent etc).
- Access site management

Open Surgical Interventions

- Arterial exposure and control
- Vein exposure/harvest
- Systemic anticoagulation
- Proximal anastomosis
- Graft tunneling
- Distal anastomosis
- Completion imaging

Summary

- PAD is common and has a significant impact upon cardiovascular outcomes
- Treatment of PAD, even asymptomatic, should focus on risk factor modification/risk reduction
- Treatment of intermittent claudication should include exercise therapy, drug therapy and selective use of revascularization
- Treatment for critical limb ischemia warrants aggressive efforts at revascularization, including surgery, to reduce the risk of amputation

Thank you

Questions?