

PAD Treatment and Practice Building: Guide for VIR Trainees



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BACKGROUND

- Peripheral arterial disease (PAD) is an atherosclerotic condition that causes decreased lower extremity arterial perfusion¹
- Prevalence is high: 8.5 million sufferers >40 y.o. in the United States²
- Associated comorbidities: obesity, diabetes, hypertension, hyperlipidemia¹
- The rise of these comorbidities in the United States will continue to drive future PAD volume for VIR graduates
- Building a successful PAD practice hinges on the VIR's knowledge of lifestyle and medical management of comorbidities, endovascular therapy, complication management, longitudinal follow-up, referral streams, and economic strategies

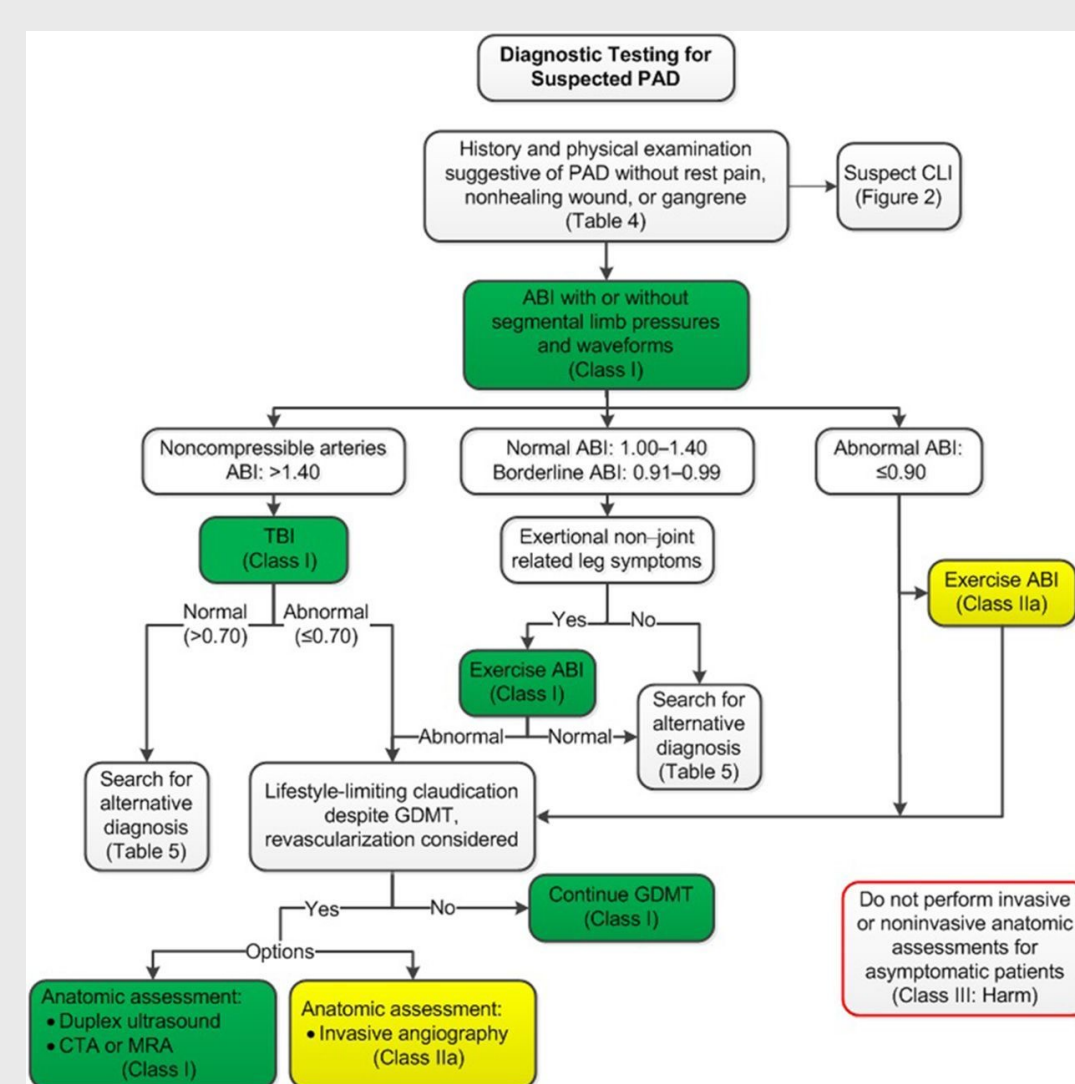
PURPOSE

- Introduce PAD practice building and associated concepts to VIR trainees who are underexposed through the current training paradigm

METHODS

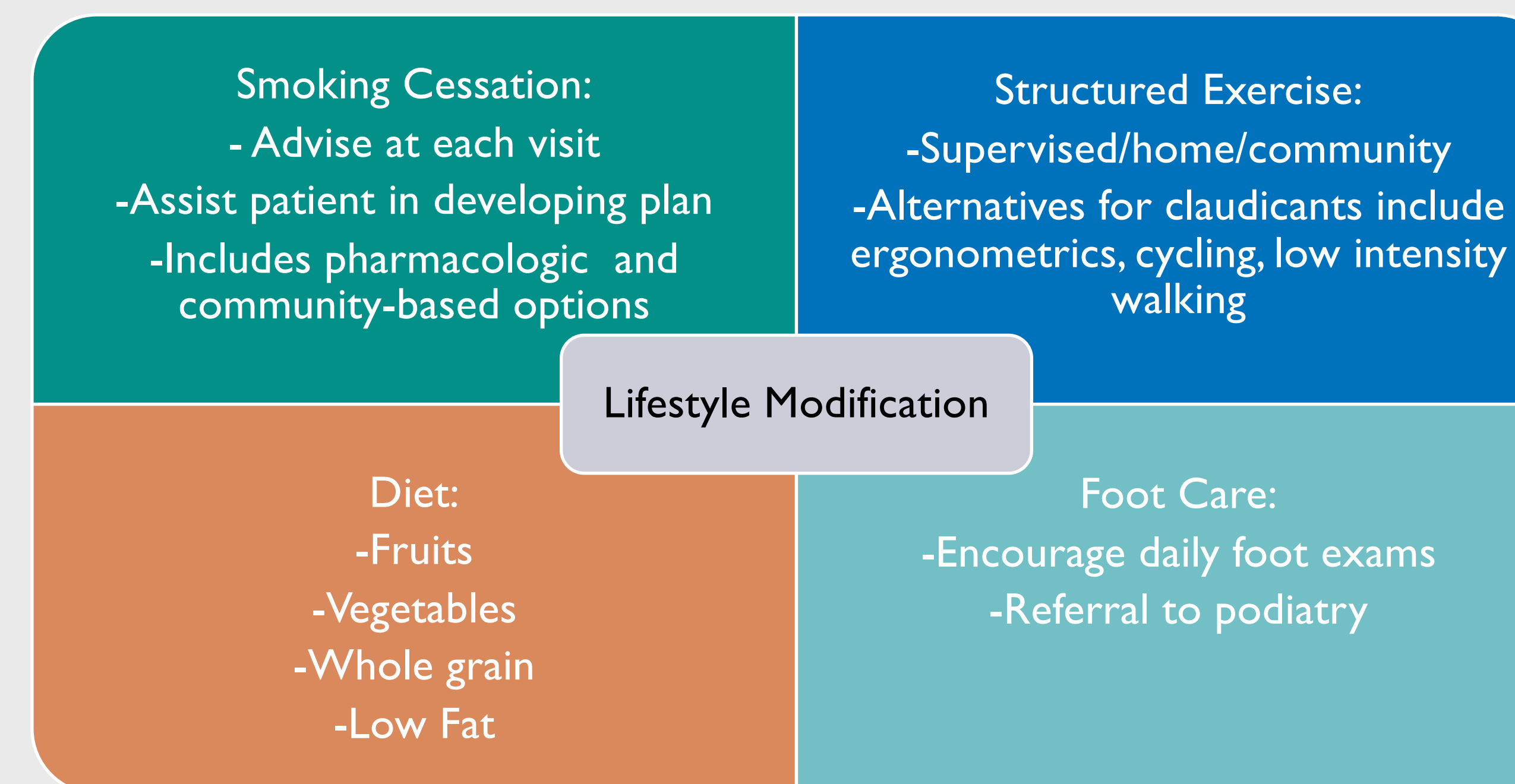
- PAD lifestyle, medical, and procedural management was reviewed via evidence-based literature
- Current guidelines regarding longitudinal management were evaluated
- Perspectives on referral streams and economic strategies in published sources were assessed

Figure 1: Diagnostic testing algorithm for suspected PAD from the American Heart Association's 2016 guidelines

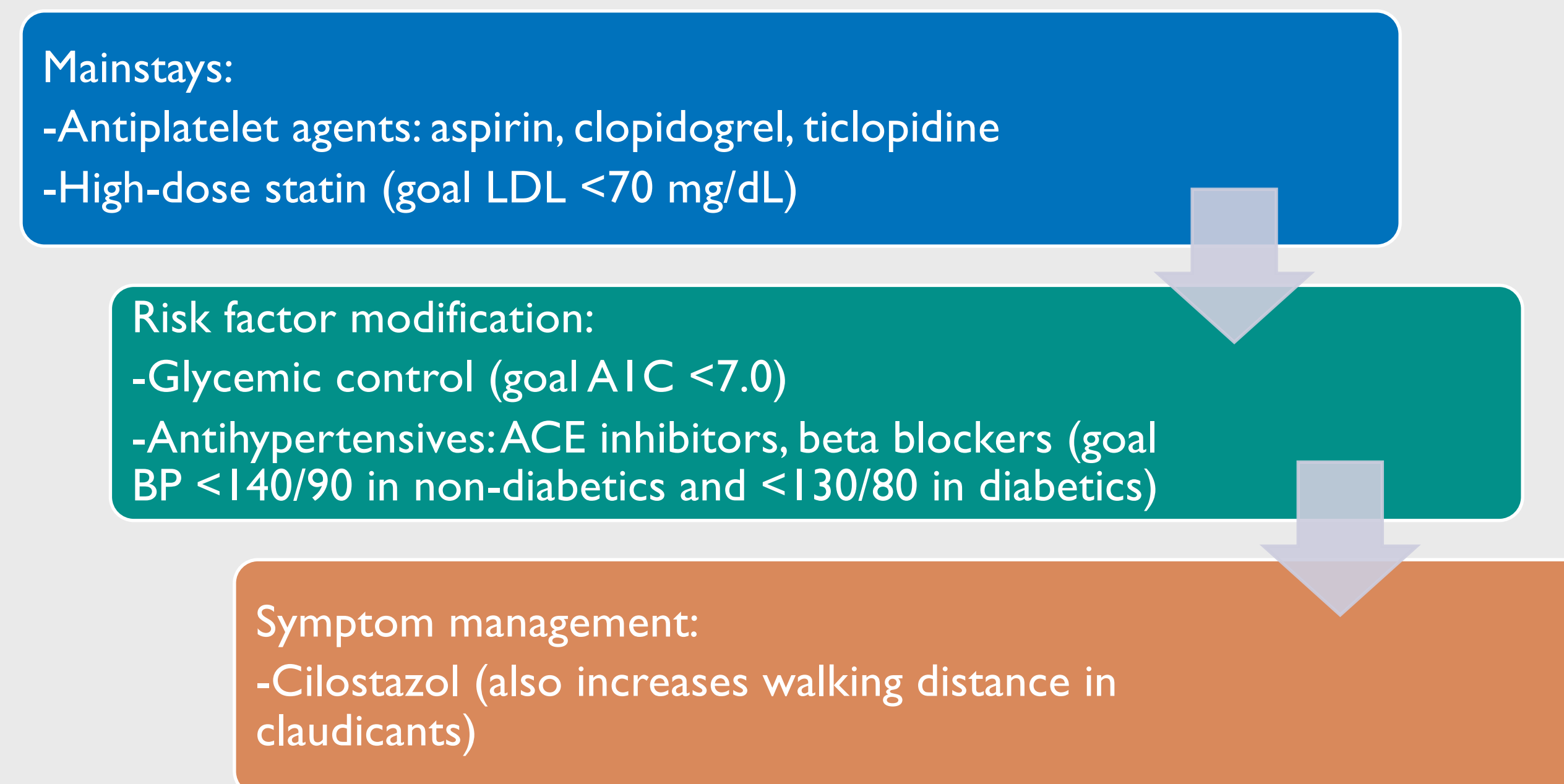


RESULTS

- Longitudinal Management: After a thorough history and physical exam, workup a diagnosis (**Figure 1**). Better patient outcomes result from the VIR's coaching of lifestyle modifications including structured exercise and knowledge to optimize the medical management of comorbidities
- Lifestyle Modifications include:²



- Medical Management: mainstays of treatment plus customization for additional comorbidities present:^{2,3}



- The VIR's clinical skillset is indispensable when evaluating and managing patients with PAD
 - If disease impairs daily functioning despite optimization of and adherence to medical therapy and lifestyle modifications including adherence to a structured exercise program, the VIR must be comfortable with endovascular management and surgical options
- Percutaneous Revascularization
 - Prerequisite: strong knowledge of vascular anatomy
 - Alternative: surgical revascularization
 - Perform diagnostic angiogram
 - Endovascular skillset
 - Prepare for potential complications: Access site; hematoma, pseudoaneurysm, AV fistula, retroperitoneal hemorrhage
 - Minor: contrast allergy, lymphocele; Major: anaphylaxis, contrast-induced nephropathy, air/atheroembolism, vessel perforation, limb loss, death³

RESULTS (CONT'D)

- Practice:
 - Admit patients to your own service
 - Prioritize dedicated clinic time
 - Learn the disease well
 - Perform thorough history and physical, especially pulse and Doppler
 - Get comfortable prescribing medication and exercise programs
 - Understand non-invasive and invasive treatment options
 - Office space, staffing, and equipment
- Referral Streams
 - Goal: make it easy for external physicians
 - Build relationships with physicians likely to encounter at-risk patients: family medicine, cardiology, endocrine, internal medicine, podiatry, surgery, infectious disease
 - Multimedia advertising: TV, radio, internet, newspaper
 - Community-based outreach: places of worship, retirement homes, etc
- Economic Strategy
 - Strengths, Weaknesses, Opportunities, Threats

CONCLUSION

- Successful PAD treatment necessitates the VIR to master lifestyle coaching and the medical management of comorbidities
- The VIR must develop his or her clinical skills, and technical skills for when endovascular interventions become necessary
- Market success requires the VIR's knowledge of referral streams, practice infrastructure, and VIR's economic impact
- Opportunities to expand and reinforce one's knowledge of these topics should be sought during medical school, residency, and beyond

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