How to Incorporate A Dedicated Cardiovascular Disease Prevention Program Into A Vascular Practice and Make It Work

Ahn, Samuel S. MD; Richmond, Jasmine L. MS; Edmonson, Robert E. MD; Tran, Kay, PA-C

DFW Vascular Group, Dallas, TX
VEITH Symposium
November 20th, 2015
New York, NY

WHY?

Patency

Rate of Revascularization

Mortality rates and mortality predictors in patients with symptomatic peripheral artery disease stratified according to age and diabetes

Typical Patient Population

Co-morbidities
Prevention works
- CAD can be reversed when caught early and treated
- Combining cardiovascular care with vascular care is beneficial
- Improving lipid and blood pressure levels improves overall health

Why Prevention Program is Needed
- High rate of restenosis
- Inflammation drives atherosclerosis
- Prevention can keep arteries open
- Patient education is vital to instill lifestyle changes
- Can lead to less surgical interventions in future

DFW Vascular Prevention Program
- Identify high risk patients for heart disease
- Comprehensive blood test (Boston Heart)
- Additional diagnostics as appropriate
- Quarterly appointments for compliance
- Repeat until goals are met

ICAVL- accredited vascular lab

Patient Waiting Area
- Generous space to ensure patients don’t feel cramped
- Purified water station and a variety of coffee to help patients feel comfortable and cared for

Patient Exam Room

Blood Draw Station
Comfortable physician’s office with roundtable for group discussions and meetings—promotes EXCELLENT team environment!

Services
• Diagnostic Testing
• Cardiac clearances and evaluation
• Long-term cardiology follow-up
• Prevention

Prevention
• Strict management of hypertension
• Advanced lipid panel
  • Absorption of the liver
  • Absorption of GI tract
  • Genetic cholesterol Lp(a)—very atherogenic
  • LpPLA—inflammation marker, shows plaque activity
  • Homocysteine—damages endothelium
  • Vitamin D

Boston Blood Test

Prevention
• Home sleep tests
  • Obstructive sleep apnea is risk factor for CAD/PAD
• Holter and event monitors
• Carotid intima media thickness (CIMT)—measures intimal thickening and indicator of vascular age

Prevention
• Recommended plant-based diet for all patients due to benefits including endothelial health, reversal of disease
• Discuss stress reduction techniques
• Patient education emphasized and VERY important

“We are as old as our arteries.”
Sir William Oster

Niccolo Machiavelli (1469-1527)
“...at the beginning a disease is easy to cure but difficult to discover, but as time passes, not having been recognized or treated at the outset, it becomes easy to diagnose but difficult to cure.”
Who to Refer to Prevention Program

Patients with:
- Family history of CVD (stents, CABG, MI)
- Hypertension
- High Cholesterol
- Diabetes / Pre-diabetes
- Insulin resistance

Program Targets
- Lifestyle: smoker, exercise, obesity, poor lifestyle
- Inflammation
- Weight Loss


<table>
<thead>
<tr>
<th>Year</th>
<th># New Patient Visits</th>
<th># Established Patient Visits</th>
<th># Consults (could be new or est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>28</td>
<td>96</td>
<td>1</td>
</tr>
<tr>
<td>2014</td>
<td>370</td>
<td>1,115</td>
<td>76</td>
</tr>
<tr>
<td>2015</td>
<td>228</td>
<td>1,438</td>
<td>71</td>
</tr>
</tbody>
</table>

Conclusion

- Full benefits of cardiovascular disease prevention program deserve further consideration and investigation
- Potential benefits are significant
- Vascular surgeons should consider incorporating a prevention program into their practice