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Venous Care Partnership

Evidence Gaps in Venous Disease

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VANDERBILT UNIVERSITY



MEDICAL CENTER

Vanderbilt Heart and Vascular Institute



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Disclosures

Joshua Beckman:

- Consultant: Merck, Novartis, AstraZeneca, Bristol-Myers Squibb, Sanofi (>\$10K)
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- Ownership Interest: Janacare, EMX (>\$10K)
- Neither AHA nor I received funding to participate in today's meeting

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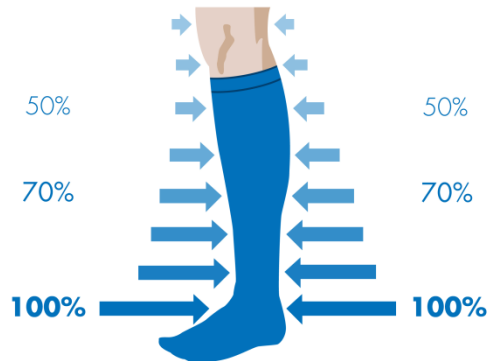
Identification of Evidence Gaps in Terms of Patient Centered Care

Epidemiology

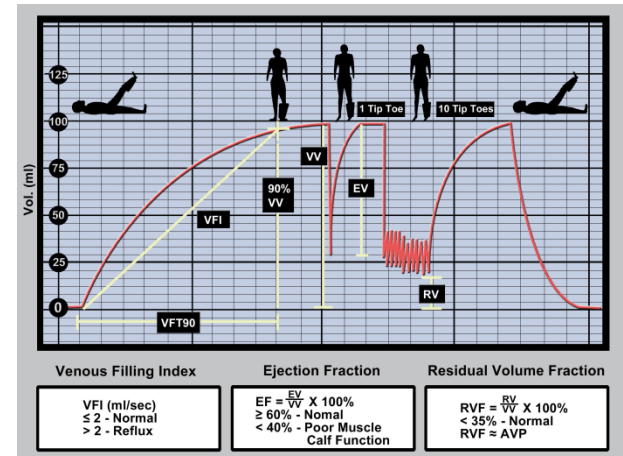


Treatment

Percentage of Graduated Compression



Screening/Diagnosis



Translation to PCP Community

There may be only 1
question on the 10 hour
Internal Medicine
Certification Examination!

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Evidence Gaps: Epidemiology

- Current descriptions:
 - Incidence of superficial venous insufficiency ranges from 1-74% in women and 2-56% of men.
 - 45 million CMS recipients by age in 2014
 - Chronic venous insufficiency in 1-17% of men and 1-40% of women. (Lohr JVS 2013)
 - Post thrombotic syndrome as a complication of DVT occurs in 23-60% of individuals. (Ashrani Thromb Thrombolysis 2009)
 - What are the factors that promote worsening from CEAP 0-2 to 4-6?
 - What are the *long-term* outcomes of therapies currently in use.

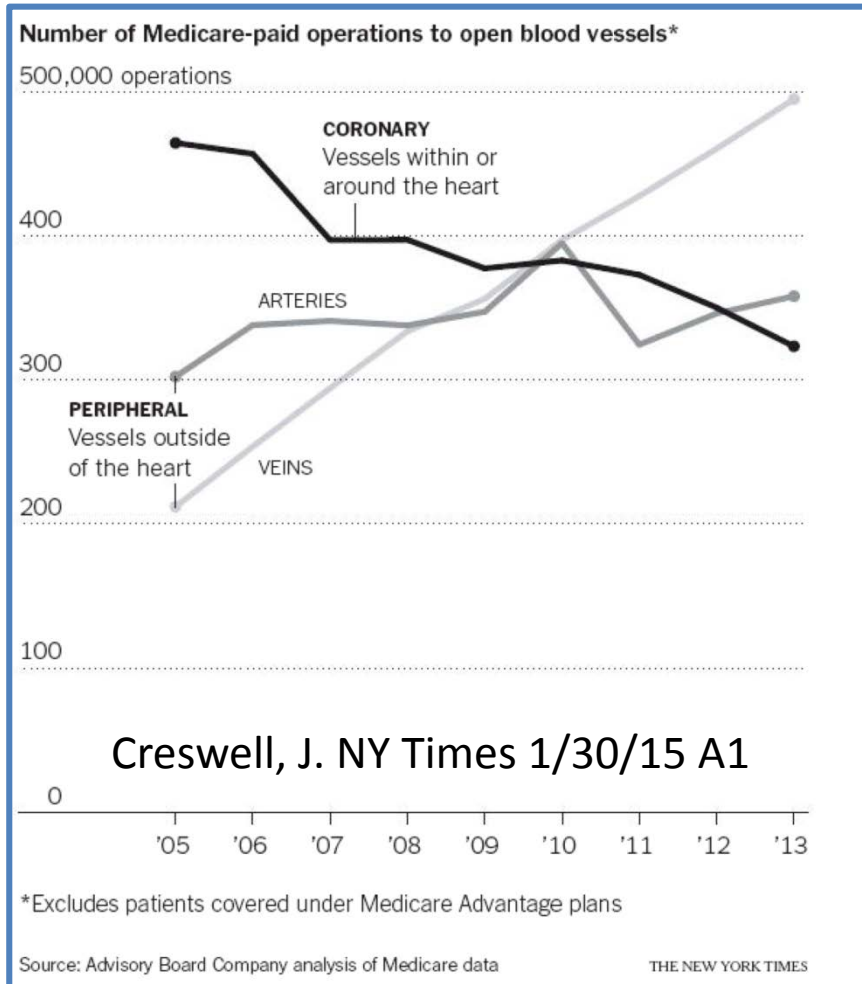
Evidence Gaps: Medical Therapy

- What is the role of
 - Anti-inflammatory agents in wall remodeling and valve failure?
 - So called “venoactive” medications like flavonoids and horse chestnut seed extract?
 - Thrombolysis in iliofemoral thrombosis?
 - Exercise to improve calf muscle pump function?
 - What is the benefit and role of compression therapy? How should it be applied?

Evidence Gaps: Invasive Therapy

- Comparative effectiveness trials. Each therapy compared with compression
 - Role of catheter-directed therapy in acute and chronic venous obstructive disease
 - Role of invasive therapy in combined arterial occlusive disease and venous insufficiency
 - Causative role of multiple catheterizations in children with congenital heart disease in superficial and deep vein insufficiency

Medicare Procedural Volume 2005-2013



Publications in PubMed by Topic

Year	CVI	PAD	MI
2014	268	1376	3706
2013	334	1437	3901
2012	290	1341	3480
2011	273	1206	3139
2010	285	1097	2893
2009	226	1136	2980
2008	218	1126	2552
2007	191	1081	2321
2006	176	889	1994
2005	171	736	1751
2004	141	718	1512

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Summary

- The field of acute and chronic venous disease is rife with evidence gaps that limit
 - Prevention
 - Diagnosis
 - Treatment
- Endpoints need to be standardized to permit assessment across studies.
- The acquisition of this data may be pursued through a variety of mechanisms that CMS

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Question 3:

Discuss important venous disease evidence gaps that have not been previously or sufficiently addressed.

Answer:

The evidence base is decades behind arterial disease in almost all aspects and calls out for novel solutions.



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American Heart Association

- Nation's oldest and largest voluntary organization dedicated to fighting heart disease and stroke
- 30 million volunteers and supporters
- Working to improve the cardiovascular health of all Americans by 20%, and reduce deaths from CVD and stroke by 20%, by year 2020
- Focus on research, education, community-based programs, and advocacy
- Largest funder of CVD/stroke research outside of NIH

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