

Feasibility of a National Screening Program for Venous Disease

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National Venous Screening

The Problem

- Ten times more people have venous disease compared to arterial disease
 - 24 million – varicose veins
 - 6 million – skin changes
 - ½ million – stasis ulcers
- DVT: 1 in 20 persons over lifetime
- DVT: 600,000 hospital admissions
- PE: third most common cause of hospital death; 650,000 annually



National Venous Screening Background

- American Venous Forum
- American Vascular Association



National Venous Screening

Methods

- Venous Screening Instrument
 - Demographic questions
 - VTE risk assessment / score
 - (Caprini, et al)
 - Screening venous duplex (CFV, SFJ, PV)
 - Reflux
 - Obstruction
 - Lower extremity inspection (Class ₁₋₆)
 - Exit interview/ report card

Accommodate 5-7 people / hour

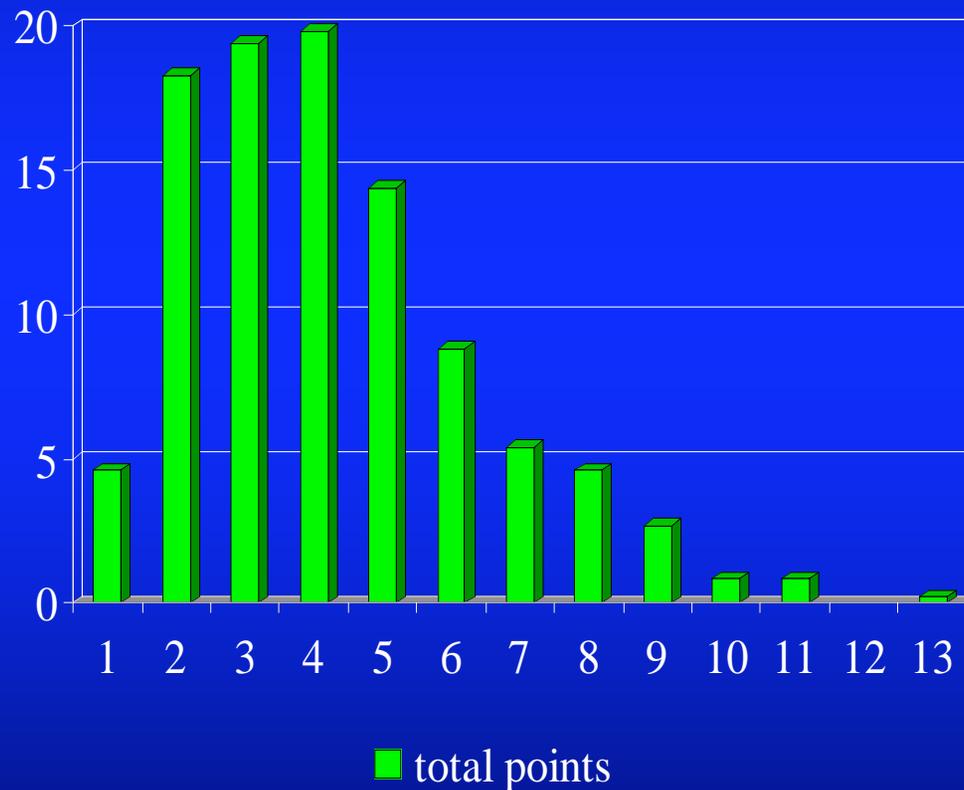
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Results: 476 People – 17 Centers

- Gender
 - Female: 78%
 - Male: 21%
- Race
 - Caucasian: 84%
 - African-Amer: 8%
 - Other: 5%
- Mean age: 59 (26-91)
- Mean BMI: 28 (16-51)
- Other demographics
 - Diabetes: 7%
 - HTN: 31%
 - CHF: 2%
 - Smoker: 5% Quit: 38%
- “Blood thinners”
 - Warfarin: 5%
 - ASA: 21%
 - Clopidogril: 2%
- Why are you here today?
 - Varicose veins: 43%
 - Free screening: 36%
 - Swollen leg: 13%
 - Blood clot: 3%
 - Cosmetic problem: 2%
 - Other: 1%

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Results: VTE Risk Assessment



Low (0-1)	4.6%
Moderate (2)	18.3%
High (3-4)	39.2%
Very high (>5)	37.7%

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Results: Obstruction and Reflux

5% with obstruction

	CFV	SFJ	PV
Right leg	1%	1%	2%
Left leg	0.2%	0.2%	0.4%

40% with reflux

	CFV	SFJ	PV
Right leg	12%	16%	7%
Left leg	11%	18%	10%

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Results: Clinical Class

- Class 0 (none) 15%
- Class 1 (spider veins) 33%
- Class 2 (varicose veins) 32%
- Class 3 (swollen leg) 11%
- Class 4 (skin changes) 8%
- Class 5 (healed ulcer) 1%
- Class 6 (ulcer) 0.2%

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Few Comparisons

- Increasing VTE risk points more likely to have SFJ or PV reflux ($p=0.01$)
- Caucasians more likely to be in high/very high VTE risk category compared to African-Americans ($p=0.02$)
- Significant correlation between VTE risk points and clinical class ($r=0.16$, $p=0.002$)
- Those with reflux more likely to have higher class rating ($p=0.0001$)

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Observations

- Abbreviated duplex screening exam is validated – significantly more likely to have reflux with increasing CEAP clinical class
- Scope of the risk and presence of venous disease necessitates continued action in the public arena
- Given the prevalence for the risk and presence of venous disease, public and private support is needed
- A National Venous Screening Program is feasible on a widespread scale and may lead to saving lives

National Venous Screening

Mission

- To provide a free comprehensive national screening program to the public that:
 - educates about venous thromboembolism, varicose veins, and chronic venous insufficiency
 - identifies those at risk for VTE, the presence of venous obstruction or reflux, and the presence of chronic venous insufficiency.
 - empowers those to inform their physician and family of their risk or presence of venous disease

National Venous Screening

Goals 2006-2007 and beyond...

- Venous screening to occur in every state
- Welcome government / industry partners
- Facilitate increased interaction with screening sites
- Provide more information for primary care physicians through education and empowerment of people screened