Classification Of Chronic Venous Disease: CEAP, VCSS And Beyond

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**No Disclosures**

What is the best way to follow outcomes after venous intervention?
- Surrogate outcomes?
- Clinically important outcomes?

Venous Assessment Tools - Problem

Compare Outcomes?

Venous Assessment Tools -

CEAP

Revision of the CEAP classification for chronic venous disorders: Consensus statement


Clinical Classification (C):
- 0: No visible signs of venous disease
- 1: telangiectasies or reticular veins
- 2: varicose veins (>3mm)
- 3: edema
- 4: chronic venous skin changes
  - 4a: pigmentation, eczema
  - 4b: lipodermatosclerosis, atrophie blanche
- 5: healed venous ulcer
- 6: active venous ulcer

Venous Assessment Tools - CEAP

Prevalence of venous disease by CEAP

<table>
<thead>
<tr>
<th>CEAP</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>12.5%</td>
</tr>
<tr>
<td>1</td>
<td>25.0%</td>
</tr>
<tr>
<td>2</td>
<td>37.5%</td>
</tr>
<tr>
<td>3</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

Venous Assessment Tools - CEAP – Upsides

- Assist in the evaluation of various treatment modalities
- Allow comparison of results from multiple institutions; universal language
- Enhanced understanding of the potential etiologic factors; pathogenesis of the disease
- Improved scientific standards of the published literature.
- Allows for meaningful research and comparison of cohorts
Venous Assessment Tools
CEAP – Proposed Revision 2019

Limitations CEAP
- Complexity
- Limited as a severity classification
- Relatively static
- Lack of Reversibility
- No differentiation in clinical findings (example: varicose veins, edema, corona phlebectacica)
- Clinical use of C / Limited use EAP
- Limited correlation with impact of treatment
- Reclassification after treatment

AVF Task Force – Revision CEAP - Ongoing

Venous Assessment Tools
Venous Clinical Severity Score (VCSS)

2000 AVF, Ad Hoc Committee on Venous Outcomes Assessment
Venous Severity Scoring
- Venous Disability Score (VDS)
- Venous Segmental Disease Score (VSDS)
- Venous Clinical Severity Score (VCSS)

Complement CEAP
- Compare outcomes treatment of chronic venous insufficiency
- Clinical utility
- Research
- Revised 2010

Venous Assessment Tools
Venous Clinical Severity Score - VCSS

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Absent (0)</th>
<th>Mild (1)</th>
<th>Moderate (2)</th>
<th>Severe (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>None</td>
<td>Occasional</td>
<td>Mild</td>
<td>Severe with meds</td>
</tr>
<tr>
<td>Varicose Veins</td>
<td>None</td>
<td>Few</td>
<td>Multiple</td>
<td>Extensive</td>
</tr>
<tr>
<td>Venous Edema</td>
<td>None</td>
<td>Gaping</td>
<td>Slight</td>
<td>Severe</td>
</tr>
<tr>
<td>Skin Pigmentation</td>
<td>None</td>
<td>Mild</td>
<td>Moderate</td>
<td>Severe</td>
</tr>
<tr>
<td>Ulceration</td>
<td>None</td>
<td>Few</td>
<td>Moderate</td>
<td>Severe</td>
</tr>
<tr>
<td>Active Ulcer Size</td>
<td>None</td>
<td>&lt; 2 cm</td>
<td>2 – 6 cm</td>
<td>&gt; 6 cm</td>
</tr>
<tr>
<td>Wound Duration</td>
<td>None</td>
<td>&lt; 3 months</td>
<td>3 – 12 months</td>
<td>&gt; 1 year</td>
</tr>
<tr>
<td>Compression</td>
<td>None</td>
<td>Intermittent</td>
<td>Most days</td>
<td>Fully compliant</td>
</tr>
</tbody>
</table>

Venous Assessment Tools
VCSS – Clinical Utility

Before treatment

After treatment

From Vasquez MA. Phlebology. 2008

Venous Assessment Tools
Revised VCSS - Validation

Venous Assessment Tools
VCSS – Clinical Utility

Figure 6: The clinical interpretation of the Revised CEAP scoring system. A grade was assigned to each parameter for each limb as C, E, or U.

Venous Assessment Tools
VCSS – Clinical Utility
Venous Assessment Tools

VCSS – Clinical Utility

Guideline 6.1:
- Recommend CEAP classification be used for patients with chronic venous disease.
- The basic CEAP classification is used for clinical practice, and the full CEAP classification system is used for clinical research. [Grade 1A]

Guideline 7.1:
- Recommend revised VCSS used for assessment of clinical outcome after therapy for varicose veins and more advanced chronic venous disease. [Grade 1B]

Venous Disease Classification
All patients with venous leg ulcer should be classified based on venous disease classification system including clinical CEAP, revised venous clinical severity scoring (VCSS), and venous disease specific quality of life (QOL) assessment. [BEST PRACTICE]

Venous Procedural Outcome Assessment
Recommend procedural outcome assessment including reporting of outcome success, venous hemodynamic success, procedure-related minor and major complications, and impact on outcomes. [BEST PRACTICE]

No Universal Tool
- Use Venous Assessment Tools:
  - Progression of CEAP
  - Progression of VCSS

Not just a Research Tool
- Assess Impact of Therapy
- Reported Outcomes – Improved Quality of Care

Venous Assessment Tools
Are they Helpful? - Conclusion

Evidence Guidelines – Venous - Sources