Isolated Soleal and Gastrocnemius Vein Thrombosis

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DISCLOSURES

No financial relationships to disclose
Will not be discussing nonapproved uses/techniques of devices or medications

Isolated Soleal and Gastrocnemius Vein Thrombosis

- Why the confusion?
- Little Consensus
- Recent studies

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**Is this a DVT?**

**ANATOMIC**
Below the fascia

**PHYSIOLOGIC**
Extension or Embolization

**DEEP VEIN**

**Why The Confusion?**

- **Trivial Rate of Propagation**
  - MacDonald 2003
  - Solis 1992
  - Meibers 1988
  - Sales 2010
  - Schwartz 2010

- **Beneficial Effect of A/C**
  - Deitcher 2003
  - Meissner 1997
  - Schwarz 2001
  - Gillet 2007

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**METHODOLOGY**


- All venous duplex scans (ICAVL lab)
- Only patients with follow-up scans
- Medical Record review
- Duplex scans reviewed: Regression, No change or Progression of clot
- All scans re-reviewed

**RESULTS**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ISGVT</td>
<td>n=1,935</td>
<td>n=2,288</td>
</tr>
<tr>
<td>No DVT Study</td>
<td>n=61</td>
<td>n=61</td>
</tr>
<tr>
<td>No DVT available</td>
<td>n=61</td>
<td>n=61</td>
</tr>
<tr>
<td>A/C (TX)</td>
<td>n=67</td>
<td>n=125</td>
</tr>
<tr>
<td>No A/C (NoTX)</td>
<td>n=125</td>
<td>n=125</td>
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</tbody>
</table>

Failed to address the management of soleal and gastrocnemius thrombosis.
RESULTS

Multivariate Logistical Regression Model for Progression of Thrombosis

<table>
<thead>
<tr>
<th>Factor</th>
<th>OR</th>
<th>95% CI</th>
<th>p-value</th>
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</thead>
<tbody>
<tr>
<td>Anticoagulation</td>
<td>1.28</td>
<td>(0.95, 3.30)</td>
<td>0.07</td>
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<tr>
<td>Age (per 10 yrs)</td>
<td>1.0</td>
<td>(1.00, 1.05)</td>
<td>0.03</td>
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<tr>
<td>Hypertension</td>
<td>1.0</td>
<td>(1.00, 3.72)</td>
<td>0.96</td>
</tr>
<tr>
<td>Positive TAP</td>
<td>1.0</td>
<td>(1.00, 1.00)</td>
<td>0.99</td>
</tr>
<tr>
<td>Length of Stay (days)</td>
<td>1.0</td>
<td>(1.00, 1.00)</td>
<td>0.99</td>
</tr>
</tbody>
</table>

VALUE OF A/C IN TREATMENT OF ISGVT

- NO REDUCTION IN PROGRESSION OF THROMBUS

CONCLUSIONS

- ISGVT is different!
- Technology improvements
- Anatomically different
  - Smaller diameter and length than deep veins
  - Soleal connect with tibial veins first then popliteal
- Clinically different
CURRENT TREATMENT ALGORITHM

• Watchful waiting
• Sequential Compression Device on uninvolved limb
• Repeat duplex in 2-3 days (even w/A/C)
• Early ambulation, if possible

PRACTICAL IMPLICATIONS

SHOULD ISGVT BE CONSIDERED A DVT?

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