Thromboembolic Events in Elective Vs. Non-Elective Foot & Ankle Surgery

Nicholas Yohe, MD
David Choueka, BA
Cassidy Iannariello, BA
Amy Moore, Mmed
Dov Kolker, MD
Maimonides Medical Center
Brooklyn, New York
Disclosures

NO CONFLICTS TO DISCLOSE

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Our disclosures are in the Final AOFAS Mobile App

We have no potential conflicts with this presentation
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- The reported incidence of DVT in foot and ankle procedures varies widely from 0.01% to 23.4%.
- Currently, there is insufficient evidence to recommend for or against chemical prophylaxis.
- The purpose of this study was to examine the rates and risks for thromboembolic events within the first 30 postoperative days.
Methods

- The NSQIP database for the years 2011-2014 was queried for patients undergoing various foot and ankle procedures based on CPT code
- A total of 72 CPT codes were included for analysis
- Patients undergoing procedures for malignant processes identified by CPT, ICD-9 or ICD-10 codes were excluded
- Patients were separated into elective or non-elective cohorts based on designation in the NSQIP database
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• Results
  • A total of 18,632 patients were included for analysis
    • 11,744 (63.03%) patients underwent elective foot & ankle surgery
    • 6,888 (36.97%) patients underwent non-elective foot & ankle surgery
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• DVT
  • 39 (0.33%) Elective Group
  • 32 (0.47%) Non-Elective Group
  • No statistical significance between groups (P = 0.3651)

• PE
  • 20 (0.17%) Elective Group
  • 24 (0.35%) Non-Elective Group
  • There was a higher risk of PE in the non-elective group (P = 0.0156)
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• CVA
  • 6 Total Occurrences (0.03%)
    • 5 Males and 1 Female
      • No difference between elective and non-elective groups (P = 0.5084)
      • Trend toward higher risk in males vs females (OR 7.13 [95% CI 0.88-57.96])
  • Patients under age 65 years old had an OR of 0.132 [95% CI 0.024-0.721] (P = 0.0194)
## Thromboembolic Events in Elective Vs. Non-Elective Foot & Ankle Surgery

<table>
<thead>
<tr>
<th>Thromboembolic Event</th>
<th>Elective Surgery</th>
<th>Non-Elective Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVT</td>
<td>39 (0.33%)</td>
<td>32 (0.47%) (P = 0.3651)</td>
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<tr>
<td>PE</td>
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<table>
<thead>
<tr>
<th>Age</th>
<th>Neurologic Complication</th>
<th>CVA</th>
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<tbody>
<tr>
<td>&lt;65</td>
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<td>Odds Ratio/95% CI</td>
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<tr>
<td>&gt;65</td>
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<td>Reference Group</td>
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</tbody>
</table>

- 0.132 [0.024-0.721]**
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<table>
<thead>
<tr>
<th>Table 3</th>
<th>Thromboembolic Event</th>
<th>DVT</th>
<th>PE</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Odds Ratio/95% CI</td>
<td>Odds Ratio/95% CI</td>
</tr>
<tr>
<td>Type of Surgery</td>
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<tr>
<td>Non-Elective Surgery</td>
<td></td>
<td>1.40 [0.88-2.24]</td>
<td>2.05 [1.13-3.71]**</td>
</tr>
<tr>
<td>Elective Surgery</td>
<td></td>
<td>Reference Group</td>
<td>Reference Group</td>
</tr>
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- Discussion
- The rates of 30 day DVT/PE remain low in our study
- Patients undergoing non-elective surgery are 2x more likely to experience a PE
  - Surgeons should strongly consider chemical ppx in this scenario
- The rate of CVA is exceedingly low, but male patients over the age of 65 remain at an increased risk
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• References
  • Solis G, Saxby T. Incidence of DVT following surgery of the foot and ankle. Foot Ankle Int. 2002 May;23(5):411-4.