IVC filters for prevention of VTE in Obese patients undergoing Bariatric Surgery – What is the evidence.

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No Disclosures

Disclosures

- Commercial support: Biolas, Vascular Insights, Urgo Labortoire, Acergy, Medtronic, Firstkind, Veniti.

DVT risk

BMI is a risk!

Guidelines

At risk, Score, Mechanical, Chemoprophylaxis, Ambulation

No RCTs in this field, hence comments based on cohort data.
Device complications and non removal

### Table 1. Complications of Inferior Vena Cava Filters in Varicose Surgical Patients (Published Case Series)

<table>
<thead>
<tr>
<th>Reference</th>
<th>Type of IVC Filter</th>
<th>Complications</th>
<th>Device Failure in Retros</th>
<th>% Filter Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coburn et al.</td>
<td>Crimped</td>
<td>9/8</td>
<td>No</td>
<td>12%</td>
</tr>
<tr>
<td>Cygnus et al.</td>
<td>Standard</td>
<td>6/8 (filter malposition)</td>
<td>No</td>
<td>5%</td>
</tr>
<tr>
<td>Pringle et al.</td>
<td>31</td>
<td>No</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Gaon et al.</td>
<td>G-T</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Herrmann et al.</td>
<td>G-T</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Mauer et al.</td>
<td>G-T</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Mancini et al.</td>
<td>G-T</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>online reference</td>
<td>G-T</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

% indicates no applicable; N/A indicates not available.

### Original Research

**Risks and Benefits of Prophylactic Inferior Vena Cava Filters in Patients Undergoing Bariatric Surgery**

Nancy J. Bloomey, MD*, Jonathan Y. Fukuoka, MD, Wayne J. Enright, MD, Arthur M. Carle, MD, Nicholas A. Howell, MD, FASMB, Jeffrey A. Geraci, MD, Michael R. Kozic, MD, David A. Shaw, MD, John W. Bloomey, MD for the Michigan Bariatric Surgery Collaborative

**Design:** Propensity-matched cohort study.

**Setting:** The prospective, statewide, clinical registry of the Michigan Bariatric Surgery Collaborative.

**Patients:** Bariatric surgery patients (n=35,477) from 32 hospitals during the years 2006 through 2012.

**Intervention:** Prophylactic IVC filter insertion.

**Measurements:** Outcomes included the occurrence of complications (pulmonary embolism, deep vein thrombosis, and overall combined rates of complications by severity) within 30 days of bariatric surgery.

**Conclusion:** We have identified no benefits and significant risks to the use of prophylactic IVC filters among bariatric surgery patients and believe that their use should be discouraged. Journal of Hospital Medicine 2013;8:173–177.