Which stent would I use in......

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Disclosures

• Consulting contracts
  – Cook
  – Medtronic
  – Bard
  – Boston Scientific
  – Marvao Medical
  – Vetex
  – Mermaid
  – Creganna

Stent choice:

• Malignancy
• Across the Inguinal Ligament
• IVC
• Into PFV
• Rupture

Patency

Stent Choice
Placement
Errors
Mistakes
Flow
Clotting
Inflow
CFV
Calf Muscle Pump
Anti-Phospho-Lipid Synd
Behcet’s
Anti-coagulation

Radial Force v Crush Resistance

Trade off between strength and flexibility

Cook Zilver Vena
Bard Venovo

Medtronic ABRE

Optimed Sinus-Venous

Optimed- Sinus Obliquus

Veniti Vici

Competitive Designs

<table>
<thead>
<tr>
<th></th>
<th>Closed Cell</th>
<th>Open Cell</th>
<th>Typical</th>
<th>ArenaCell</th>
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</thead>
<tbody>
<tr>
<td>Crush Resistance</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>-</td>
</tr>
<tr>
<td>Flexibility</td>
<td>+</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Radial Strength</td>
<td>+</td>
<td>-</td>
<td>++</td>
<td>- (unless constrained)</td>
</tr>
<tr>
<td>Deployment</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Scaffolding</td>
<td>++</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Diameters &amp; Lengths</td>
<td>+</td>
<td>-</td>
<td>+</td>
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</tbody>
</table>
High pressure balloons are very important

Stent crushing and fractures: Does the inguinal ligament matter?

Compression

Flexibility leg in foetal position

Current day:

- Existing knowledge is pretty basic
- Think of current technology v abdominal aortic stent grafts (pre EVAR terminology)
## My choices:

**Europe**
- Malignancy: Veniti
- Rupture: Gore Viabahn
- Across Inguinal Ligament: Bard Venovo/Cook ZV
- Prior stent fracture: Wallstent
- IVC Sinus XL (Optimed)
- IVC/Iliac Reconstruction: Sinus XL and kissing Veniti/Medtronic ABRE
- Into Profunda: Cook Zilver Vena

**USA**
- Wallstent
- Gore Viabahn
- Wallstent
- Wallstent
- Z stent
- Z stent + Wallstent
- Wallstent

## Conclusions
- Pre and post dilatation to nominal stent diameter is CRUCIAL
- Dedicated stents potentially improve treatment
- First generation of stent design
- The stent alone is not the panacea (anticoagulation/stockings/boots etc)
- Know each device and technical issues
- We need long term patient outcome data to support use