Effectiveness Of Zilver PTX DES Placed Across
The Knee Joint For Occlusive Disease:
Long-Term Results

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Conflicts: Consultant COOK, Grant COOK.
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Table 1: Results of Angioplasty

<table>
<thead>
<tr>
<th>TASC</th>
<th>Patients N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>0</td>
</tr>
<tr>
<td>C</td>
<td>35.08%</td>
</tr>
<tr>
<td>D</td>
<td>94% TASC D</td>
</tr>
</tbody>
</table>

SFA angioplasty New Option?

94%

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Upper CI
Lower CI
0.8907
0.7844
0.7361
0.6870
0.6870
0
• Close-up of Zilver® stent showing Class 2 fracture of 3 struts (mid-strut, not apex)
• Stent within calcified Hunter's canal
• Difficulty encountered during deployment
• 684 days post-implant

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• No fracture.
• Stent located behind the knee.
• Overlap of 10mm just above the knee.
• 638 days post-implant.

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• No stent fractures.
• Stent located behind the Knee and at the hunter channel, continuously.
• 10 mm “overlap” proximal and distal with stents Zilver®
• 322 days post-implant.

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• No stent fracture.
• Stent in the right popliteal artery (located exactly on the retro patellar region)
• Overlap in the proximal segment Zilver® stents
• 1187 days post-implant.
15 Cases presented in Veith meeting 2007.
All TASC C&D NOT a single fracture behind the knee
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65y, male, nephrologist.
Heavy smoker.
03 failed surgical procedures.
Proposed an amputation RL

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PTX data = 5-year Stent Integrity

<table>
<thead>
<tr>
<th>Study Period</th>
<th>Number of New Events</th>
<th>Fracture Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>1-year</td>
<td>4</td>
<td>0.9%</td>
</tr>
<tr>
<td>5-year</td>
<td>3</td>
<td>1.9%</td>
</tr>
<tr>
<td>5-year</td>
<td>0</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Kaplan-Meier estimates
Zilver PTX has excellent durability in challenging SFA environment
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From 2011 to 2005
35 legs TASC C&D with Stents behind the Knee
Absolutely NO fractures
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• Disabling claudication in a Marine Officer, male patient of 24 y

Congenital PES

Angioplasty of popliteal artery;
Myotomy and resection of adhesions;

His follow-up
- Popliteal reocclusion in 01 y.
  REDO with PTX Zilver Stent.
- Massive stent fracture in 02 year.

The only fracture we had behind the Knee.
Popliteal Artery still open, what to do now?
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Case Study: White female, 52y-heavy smoker
1999, SFA Recanalization with Symphony Stents - 16ys.
2005 REDO with Zilver stents.
2008 Failed attempted bypass with another group.
2015 - MAY: Someone else propose her an amputation after a failed attempted to SFA recanalization.
2015 - September Successful SFA recanalization with ZILVER-PTX Stents BEHIND THE KNEE

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Design considerations for studies of the biomechanical environment of the femoro-popliteal arteries

Authors: (name redacted)

- Final comments.

A review of the current literature regarding the biomechanical environment of the SFA/PAT reveals large longitudinal studies that confirm the results of our study.

The level of heterogeneity limits our understanding of the stent deformations and prevents pooling and direct comparisons of the data.

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CONCLUSIONS.

The available data demonstrate that deformations vary according to the specific anatomic location within the SFA/PA.

Further, the amount of deformation will vary depending on host factors, such as age, presence of atherosclerotic disease, or the presence or absence of a stent, inherent to the vessel being studied.

Take home message!

• Young and very active patients have a great possibility to fracture stents in the Superficial Femoral Artery and/or in the Popliteal artery.

• AVOID IT!

• After “covering all the SFA/PA the patient should avoid heavily exercise.

• WE SAW 03 FRACTURES IN RUNNERS AFTER THE PROCEDURE!

• Our personal opinion is still the same: as long as the lesion looks to benefit of a stent behind the KNEE we will do it.

• IN GENERAL, OLDER PATIENTS COME TO US only TO RESTORE THEIR ABILITY TO WALK.

Finally

• We must do a randomized multicenter study to confirm our personal results.

• At the moment, there is no evidence to support or prohibit to put stents behind the Knee.

• Our personal opinion is still the same: as long as the lesion looks to benefit of a stent behind the KNEE we will do it.

Obrigado pela atenção

Thank you for your kind attention