Hybrid management for common femoral artery (CFA) disease

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Disclosure

• Speaker name:
• Ahmed Sayed

• I do not have any potential conflict of interest
Rising percentage of endovascular revascularizations! CFA ..Is it feasible?
Challenges with CFA lesions

- Site of frequent mobility (stent fracture)
- Profunda ostium coverage! (usually the plaque extends into it)
- Bulky, eccentric, and heavily calcified plaque
- Burn the bridges for future access/ open repair
Challenges with open surgery

- Hematoma/seroma
- Surgical site infection
- Pseudoaneurysm

- Wound!
- Longer hospital stay

- Small incision
- Low morbidity and mortality
- Enlargement of the CFA and ostia of the SFA and profunda femoris
Challenges with hybrid procedures

• Challenges with open surgery
• Hybrid procedure = hybrid setup
• Surgical instruments in the imaging field
• Longer operative time
• Hospital stay > endo
## Patients & Methods

<table>
<thead>
<tr>
<th>Total number of patients</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>55</td>
</tr>
<tr>
<td>Sex</td>
<td>1:8</td>
</tr>
<tr>
<td>DM</td>
<td>8</td>
</tr>
<tr>
<td>IHD</td>
<td>2</td>
</tr>
<tr>
<td>CKD</td>
<td>0</td>
</tr>
<tr>
<td><strong>Site of lesions</strong></td>
<td></td>
</tr>
<tr>
<td>Iliac</td>
<td>5</td>
</tr>
<tr>
<td>SFA</td>
<td>8</td>
</tr>
<tr>
<td>Tibial</td>
<td>3</td>
</tr>
<tr>
<td><strong>Complications</strong></td>
<td></td>
</tr>
<tr>
<td>Wound infection</td>
<td>2</td>
</tr>
<tr>
<td>Hematoma</td>
<td>0</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td></td>
</tr>
<tr>
<td>Technical success</td>
<td>9/9</td>
</tr>
<tr>
<td>Primary patency</td>
<td>8/9</td>
</tr>
<tr>
<td>Assisted primary patency</td>
<td>9/9</td>
</tr>
<tr>
<td>Limb salvage</td>
<td>9/9</td>
</tr>
<tr>
<td><strong>Type of CFA patch</strong></td>
<td></td>
</tr>
<tr>
<td>Saphenous</td>
<td>9/9</td>
</tr>
<tr>
<td><strong>Additional procedures</strong></td>
<td></td>
</tr>
<tr>
<td>Fem-fem bypass</td>
<td>1</td>
</tr>
<tr>
<td>Kissing iliac stents</td>
<td>1</td>
</tr>
<tr>
<td>Initial CFA angioplasty</td>
<td>1</td>
</tr>
</tbody>
</table>
Technique:
Under local anesthesia with sedation
Femoral endarterectomy patch angioplasty
Sheath inserted in the patch

Contralateral sheath
From Hyun Joh et al 2014

*Operating with a clamped artery*
Hybrid CFA endarterectomy + snaring the wire from the subintimal plane + flossing & iliac stenting
Hybrid Fem-fem bypass + SFA stenting
• NWPT
• Perform any necessary debridements
Hybrid Revascularization Combining Iliofemoral Endarterectomy and Iliac Stent Grafting for TransAtlantic Inter-Society Consensus C and D Aortoiliac Occlusive Disease

Juliet J. Ray, Sarah A. Hilene DeAmorim, Le

Ann Vasc Surg

Conclusions: The hybrid approach of covered stents/stent grafts with imaging is paramount to the success.

Simultaneous hybrid revascularization for symptomatic lower extremity arterial occlusive disease

JIN HYUN JOH, SUN-HYUNG JOO and HO-CHUL PARK

Department of Surgery, Kyung Hee University Hospital at Gangdong, Kyung Hee University School of Medicine, Seoul 134-727, Republic of Korea

In conclusion, hybrid procedures are a feasible option for multilevel peripheral arterial occlusive disease, with favorable patency and limb salvage rates. The observations of the current study indicate that femoral endarterectomy plays an important role in hybrid surgery.
Hybrid and Open Surgery of Trans-Atlantic Inter-Society II Type C and D Iliac Occlusive Disease and Concomitant Lesion of Common Femoral Artery

Vladimir Starodubtsev, Andrey Karpenko, Pavel Ignatenko

Affiliation

1 Academicians E.N. Meshalkin No Pathology, Ministry for Public Health starodub@mail.ru.

Conclusions: Hybrid surgery including endarterectomy and angioplasty of common iliac arteries in the mid-term period) minimally invasive surgery. This single-center study supported limited cohort of patients, thus emphasizing the role of aortofemoral bypass instead of open bypass.

Hybrid Revascularization of Complex Multilevel Disease: A Paradigm Shift in Critical Limb Ischemia Treatment

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Affiliation

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Almost replaced open bypass. Most series for a variety of hybrid procedures report good limb salvage rates, with morbidity and mortality data considered equal to or better than open bypass procedures. Careful patient selection and detailed preoperative planning are essential to achieve these excellent results. Studies have reported on prospective series or retrospective analysis for various hybrid.
Combining CFA endarterectomy with a peripheral endovascular procedure didn’t increase the rate of SSI.
EDITORIAL COMMENT:
These results highlight, however, that balloon angioplasty alone with or without stent implantation is not ready to replace surgery as the “gold standard” treatment for CFA occlusive disease.

Conclusion

• Hybrid interventions combine the advantages of open and endovascular repair
• Better outcome for patients with multilevel disease than total endo repair
• Less morbidity, mortality & hospital stay than open bypasses
Thank You for Your Attention
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