What The Surgeon Should NOT Do To Preserve Options For Future Endovascular Therapy And Vice Versa

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Faculty Disclosure
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-I have no financial relationships to disclose.

General considerations

Sequence of endovascular and surgical techniques may vary

So interventionalist and surgeon need both to think of subsequent procedures

What The Surgeon Should NOT Do To Preserve Options For Future Endovascular Therapy

Occluded femoropopliteal bypass
Degenerated femoropopliteal bypass
Degenerated or distal restenosed anastomosis

Textbooks show mostly end-to-side anastomoses
Reality: also end-to-end anastomoses - ligating the native artery

This profundaplasty technique is even part of German vascular surgery guideline

Performed also in combination with femoropopliteal bypasses (end-to-end)

Excision of occluded arteries

If bypasses failed and cannot be rescued......

Interventionalist mostly go for the native arteries

Therefore, please DO NOT LIGATE or EXCISE those, even if they are occluded!

- Iliac arteries
- Proximal or distal SFAs
- Popliteal arteries
- Or any other artery, which could be recanalized

Also please always prefer end-to-side anastomoses over end-to-end anastomoses

- And please do not use parts of occluded arteries als patch

What The Interventionalist Should NOT Do To Preserve Options For Future Surgical and Endovascular Therapy
The issues of......

- stents extending from iliacs to distal aorta
- stents in access arteries for intervention
- long stents in arteries for bypass insertions

Iliac stent too far in aorta for cross-over maneuver

Long stent in external iliac, common femoral and superficial femoral artery

Kissing stents common femoral artery

Stent graft for common femoral bleeding

<table>
<thead>
<tr>
<th>Stents common femoral arteries: better than balloon alone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Failed</td>
</tr>
<tr>
<td>Complications</td>
</tr>
<tr>
<td>Restenosis</td>
</tr>
<tr>
<td>5-Year TLR</td>
</tr>
</tbody>
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Stents do still allow for access ....

Sheath placement in a Supera stent in the common femoral artery

...but, they are of a problem in case of insertion of bypasses, particularly, if they are long

Stenting in common femoral artery ....

...is not a problem for future intervention, but may represent a problem for future surgery

Therefore,

- Choose stents as short as possible
- Try to stay with stent inside superficial femoral artery - if possible
- Consider alternative techniques if possible (DEB, atherectomy)

Stent not exceeding superficial femoral artery

CFA

DFA

SFA

Atherectomy: alternative to stent in access arteries / arteries for bypass insertion

Segments of popliteal artery

P1 important für insertion of bypasses

CTO of P1 segment of popliteal artery: stent
Stent in SFA and P1 segment of popliteal artery:
Possibly a problem for future bypass

Supera Stent: maximum flexibility

Innova/Eluvia drug-eluting SX stent

...has become frequent due to new generation stents and improved long-term results and have replaced bypass surgery for popliteal CTOs to a large extent.

Yet, stenting of P1 segment can be avoided in some cases by balloon angioplasty (DEB) alone or atherectomy

And stents used should be as short as possible to allow for future surgery
Thank-you