Mechanical Debulking – Is it effective in endograft iliac limb occlusion

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I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Speaker for diverse companies

I do not have any potential conflict of interest
ILIAC LIMB OCCLUSION IS UNCOMMON - LESS THAN 10% OF PATIENTS

Open surgical thrombectomy
• Risk of graft dislodgment
• Component separation

Femoro-femoral bypass
• Avoid such graft manipulation
• Can restore perfusion of the affected limb
• 5-year patency rate ranges from 55% to 92%

Fabio Augusto Cypreste Oliveira1, Fabio Lemos Campedelli1, Carlos Eduardo de Sousa Amorelli1, José Eduardo da Costa Filho2, Daniel Resende Gibbon2, Juliana Caetano Barreto3, Philippe Moreira da Silva4 Endovascular treatment of iliac limb occlusion of a bifurcated abdominal aortic stent graft – rotational and aspiration thrombectomy followed by primary angioplasty and stenting  J Vasc Bras 2012, Vol. 11, No 3
145 patients AneuRx

• 39 (25%) had associated unilateral requiring endograft extension into the external iliac artery,
• 3 patients (1.9%) unilateral iliac limb occlusion
• interval from endografting (2 and 14 weeks, 5 months)
• Successfully treated with Angiojet


Laheij, R.J.F., Buth, J., Harris, P.L., Moll, F.L., Stelter, W.J., Verhoeven, E.L.G.

Although the EUROSTAR registry comprises a variety of aortic endografts, a review of secondary interventions demonstrates a reluctance of implanting physicians to use thrombolytic therapy.

A femoro-femoral bypass graft was placed in 21 of 1023 patients.
• 14 of these patients had iliac limb thrombosis
• 7 had either iliac stenosis or limb “kinking.”

No patient in this EUROSTAR report had thrombolysis performed for iliac limb occlusion.

In another endograft series, which used thrombolytic therapy,

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*a* EUROSTAR Data Registry Center, Department of Surgery, Catharina Hospital, Eindhoven, Netherlands  
*b* EUROSTAR Secretariat, Regional Vascular Unit, Royal Liverpool University Hospital, Liverpool, United Kingdom
<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>No. patients</th>
<th>30 days mortality</th>
<th>Re-intervention</th>
<th>Migration (%)</th>
<th>Occlusion (%)</th>
<th>FU (months)</th>
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KINKING IN TORTUOUS AND NARROW ILIAC ARTERIES
Greenberg I reports

- 5 iliac limb thromboses in follow-up of 528 patients with the Zenith endograft
- 3 of these patients underwent femoro-femoral bypass
- 2 limbs were successfully treated with thrombolytic therapy.
68 Years
Female
Excluder - Gore
OCCLUSION OF THE RIGHT LIMB

3 months later
Case 1

61 y  Male

Hypertension
Smoking
4 Month's
Claudication
Pulseless
Rotarex R 8 Fr
6 YEARS FOLLOW UP
In conclusion, acute iliac limb occlusion of aortic endografts can be successfully recanalized with endovascular techniques

- Minimize reoperation in the ipsilateral groin
- Avoid potential graft dislodgment with traditional balloon thrombectomy
- Avoid extra anatomic bypass.

However, more extensive thrombosis or emboli may also require distal thrombolysis or operative thrombectomy.