How to Preserve Hypogastric Artery flow with Nellix EVAS in Patients with iliac aneurysms

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- Clinical Investigator for Endologix Inc.

AAAs with Common Iliac Aneurysm (CIA)

- 20-40% of AAAs have CIA which require repair
- Current Treatment options
  - Hypogastric occlusion with extension to EIA
  - Parallel grafts
  - Iliac branch devices
- Limitations
  - Increased procedural complexity and cost
  - Hip and buttock claudication from hypogastric occlusion

Concept of EndoVascular Aneurysm Sealing (EVAS)

Constrained liquid polymer seal at attachment sites
Ability to treat a range of anatomies while maintaining seal
Allows treatment of iliac artery aneurysms

Preservation of hypogastric flow and control of iliac aneurysm size in the treatment of aortoiliac aneurysms using the Nellix EndoVascular Aneurysm Sealing endograft

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68 patients 101 CIA 5 year follow-up (mean 24.7 months)
Internal iliac flow preserved in all patients

Partially excluded aneurysms had 3 x higher rate of enlargement compared to untreated

Transmission of pressure through aorto-iliac mural thrombus pressurizes AAA sac

Revised anatomic criteria for most predictable outcomes

Optimal treatment option: total exclusion by one stent preserving hypogastric artery

Left iliac aneurysm 34.6 mm
Treated with 1+1 Nellix device
Total exclusion of left common iliac aneurysm
Preserved left hypogastric artery

Left hypogastric artery remains patent
Left common iliac aneurysm shrunk by 3 mm in 5 years

Common Iliac Aneurysm
without Involvement of Hypogastric Artery

Alternative treatment option: total exclusion by two Nellix stents preserving hypogastric artery

Pre treatment CTA
Common iliac aneurysm 36.8 mm

After AAA treatment with 1st Nellix

Post treatment
Treatment of CIAs

Summary
- EVAS can be used to treat AAA with CIAA
- Hypogastric artery can be preserved
- Full coverage of aneurysmal iliac is advised
- Distal iliac seal is recommended

Thank You