Aorfix Endograft with the New IntelliFlex Delivery System for EVAR: Technique and Advantages
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VEITH SYMPOSIUM
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Disclosures and Disclaimers
- Andrew Holden MBChB, FRANZCR, EBIR
  - Clinical Investigator for Lombard Medical Inc.
  - No other relevant disclosures

Aorfix™ Endovascular Stent Graft
- Unique design
- Only device with FDA Approval to treat severe infra-renal neck angulation and severe iliac tortuosity
- Pythagorus US Pivotal Trial has shown excellent results beyond 2 years
- ARCHYTAS Registry – 500 patient global registry collecting “real world” clinical data on Aorfix

First ARCHYTAS Registry case performed at Auckland Hospital

Why a Delivery System Design Change?
- Lower profile
- Integrated 18F/16F sheath (can be used as an exchange sheath to deliver limb extensions, moulding balloons etc)
- Intuitive deployment and ergonomic design
- Allows device applicability to expand beyond challenging anatomy to routine use in conventional anatomies

IntelliFlex™ Delivery System
- Flush both lumens
- Activate hydrophilic coating on sheath
- Flush tube anteriorly marks contralateral limb
Orientate the Device in the Patient
- Select view that profiles renal arteries (eg 15°CC, 15° LAO)
- Actively reposition and reorientate while deploying (can reposition at least until half the Y mechanism is open)

Step 1 – Deployment of Y Mechanism
- Rotate towards operator
- Deployment geared so ~1mm/click at cranial aspect of graft, faster for caudal aspect

Step 1 – Deployment of Y Mechanism
- Note: during deployment the troughs don’t move, the peaks hinge off the troughs

Step 2 – Remove Release Wires
- Usually do this after releasing the cannulation socket but can release the entire ipsilateral limb

Step 3/4 – Recapture Y Mechanism
- Fully deploy ipsilateral limb
- Withdraw protective shroud (Step 3)
- Rotate back handle away from operator – this retrieves the centre tube/nose cone as well as the attached Y mechanism (Step 4)
- Rotate distal end of the handle towards the operator and remove the back end, exposing a hemostasis valve
Hemostatic Valve
- Can introduce sheath dilator, limb extension or compliant angioplasty balloon and remain completely hemostatic

Contralateral Gate Cannulation
- Anterior cannulation socket easy to cannulate

Ipsi/Contralateral Limb Deployment
- Deploy graft, remove release wires, retrieve delivery system

Conclusions
- Aorfix already has an established role in EVAR for challenging abdominal aortic anatomies
- The IntelliFlex™ Delivery System provides improved control and confidence during deployment in these challenging anatomies
- The profile reduction, intuitive deployment and ergonomic design expands the applicability of this device to more routine anatomies