Cook Zenith Alpha System

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Disclosures

• Cook: consultant, speaker, research grants, patents

Zenith Alpha™ Grafts

• Shared design platform:
  • Nitinol z-stents
  • Low-Profile graft material
• Small caliber delivery system:
  • AAA = 16 & 17 Fr
  • TAA = 16, 18 & 20 Fr
• Simplified deployment:
  • New Rotational Handle
  • Captor Sleeve

Zenith Alpha™ Abdominal

• Three-piece modular system designed to accommodate varying patient anatomies
• Low-profile main body device:
  • Active suprarenal fixation
  • Gold marker at the flow divider for increased visualization under fluoroscopy
• New Alpha-Legs
  • Enhanced kink resistance and flexibility

New Alpha Legs

• Spiral z stent design with improved performance characteristics:
  • Lower profile introducer system (12 Fr)
  • Nitinol z-stent material
  • Thinner, tighter-weave fabric
  • Increased separation force from main body
  • Improved columnar strength in proximal seal

Improvements: Simplified Deployment

• Captor sleeve reduces deployment forces
• No top cap to retrieve
  • Improved trackability
• No trigger wires to manually remove
  • Trigger wires now remain contained within the new rotational handle
Improvements:
Simplified Deployment

- New rotational handle
  - Controlled, simple & precise deployment
- More intuitive system

Intuitive Introduction System

1. Position device
2. Pullback device
3. Rotate handle

Low profile & flexible introducer sheath enable percutaneous access and lesions vessel trauma

New Captor Sleeve reduces friction and pull-back forces for ultimate controllability

New rotation handle simplifies controlled deployment while maintaining precision

Patient #10
Positioning Partial Proximal Deployment Final Angiogram

Patient #6
Proximal deployment Catheterisation before ipsilateral limb opening

Patient #10
Postoperative X-Ray

Patient #6
STS1  copied this one from below to visualize simplicity
Stefan Schlueter, 3/6/2014

FT1  Ray & Scott - please note that picture three below is currently being updated to show the gray knob on
the black gripper. This will most likely not be caught by anyone but me (and, honestly, we could simply
say that this user has already rotated 180 degrees putting the gray knob on the backside of the device
thus being unable to be seen here). I would like to show the gray knob for AAA though. We can always
add it later.
Foley, Tim, 3/7/2014
Patient #7
Catheterisation & contralateral limb deployment before ipsilateral limb opening

Patient #7
Contralateral limb kinking - Relining with self-expanding stent

Patient #7
Final Angiogram

Patient #12
Stent-graft Positioning & Partial Proximal Deployment

Patient #12
Angio in RAO for L IIA origin

Patient #15
Discussion & Conclusions

• Clear improvement
  – Low profile
  – Easier and more controlled deployment
  – Flexibility/Conformability

• Points of attention
  – Lower visibility/Position of markers
  – Advice to position two limbs at same level
  – Durability to be proven with time