Unblinded Engineering Consult

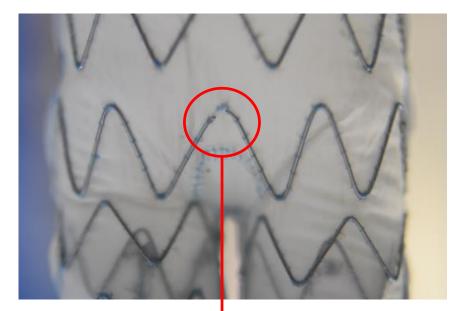
Craig Myers Medtronic

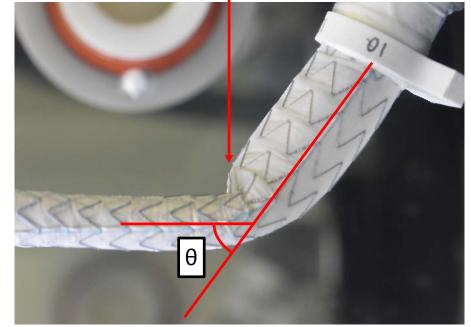
Cleveland Clinic

Greenberg Stent Summit XII EPTEMBER 6-8, 2017 InterContinental Hotel & Conference Center | Cleveland, Ohio

Transition Stent Fracture

- Function Kink resistance
 - Fully intact stent not necessary for function
- Does the device failure lead to potential clinical failures?
 - Fractured stent leading to graft material holes and possible type III
 - Fatigue testing (accelerated) demonstrated no increased risk out to 10 years
- Adjunctive devices likely not needed to remediate the fracture

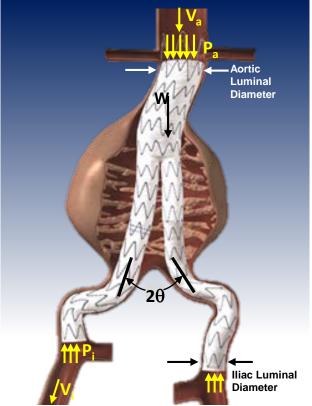




Suprarenal Partial Detachment

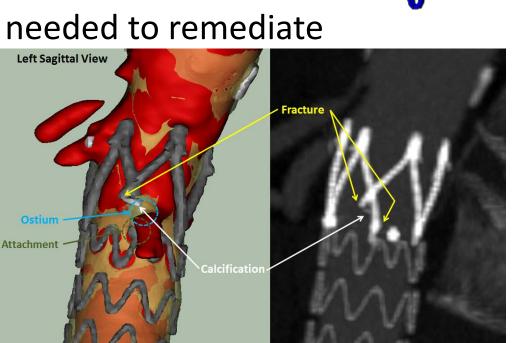
- Function Secures graft position
- Clinical failure modes
 - Sac enlargement due to migration and loss of seal
- Abrasive wear of attachment suture
 - A single attachment failure shown to lead to successive failures
- Remediation testing investigated potential intervention options
 - Endoanchors
 - Relining with cuffs or AUIs

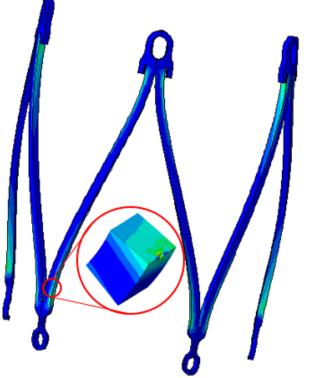




Suprarenal Stent Fracture

- Function Secure graft position
 - Single fracture unlikely lead to functional failure
- Multiple stack-up of factors required for fracture
- Given factors, progression of fractures not likely
- Adjunctive devices likely not needed to remediate the fracture





Conclusions

- Does a device failure lead to a clinical failure?
 - Transition stent fracture potentially
 - Suprarenal stent partial detachment yes
 - Suprarenal stent fracture unlikely
- Remediation options and testing required for device failures that potentially lead to a clinical failure

