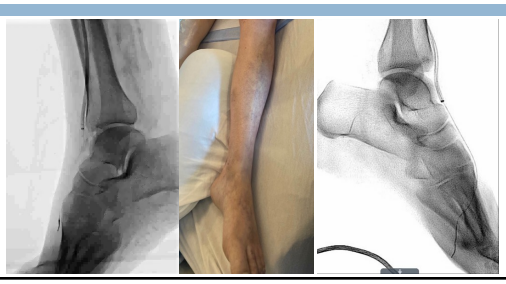
EndoVascular Mechanical Thrombectomy Is Obviating The Need For Thrombolytics In ALI: What Devices Are Available And What Are Their Advantages And Limitations

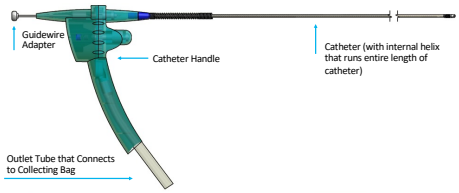
Patrick Muck Good Samaritan Hospital Cincinnati Ohio, USA



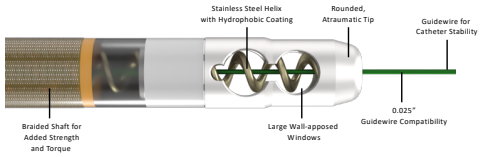
Disclosures

- PEN, ICHOR & BD Speaker's Bureau

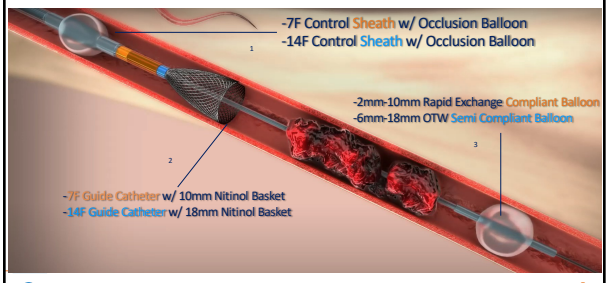
Aspirex™ Catheter Overview



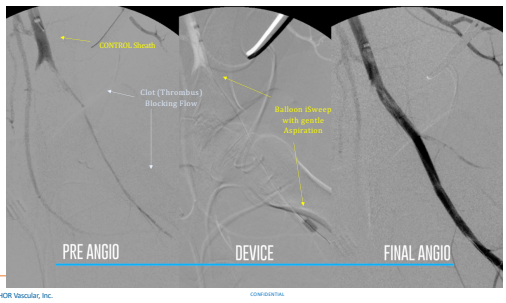
6 & 8F Aspirex™ Thrombectomy System Catheter Design

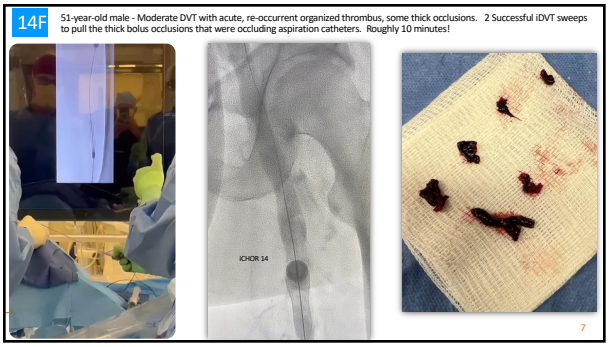


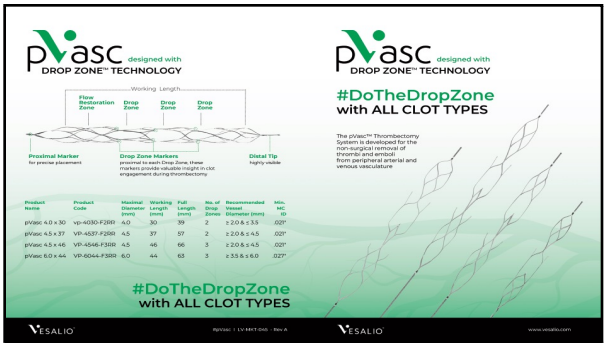
iCHOR Arterial (7F) and Venous (14F) Vascular Systems 1,2,3

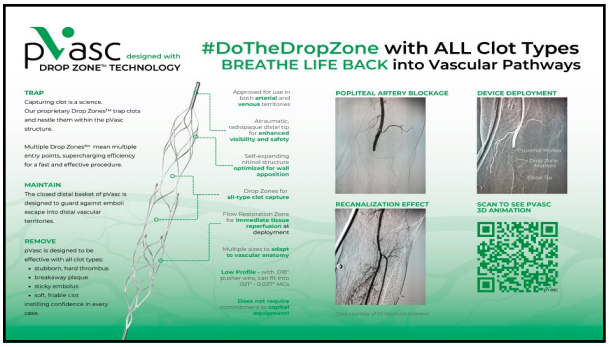


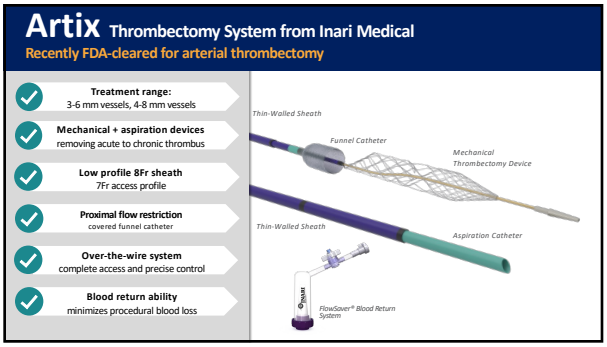
7F iSWEEP Arterial Clot Removal Procedure

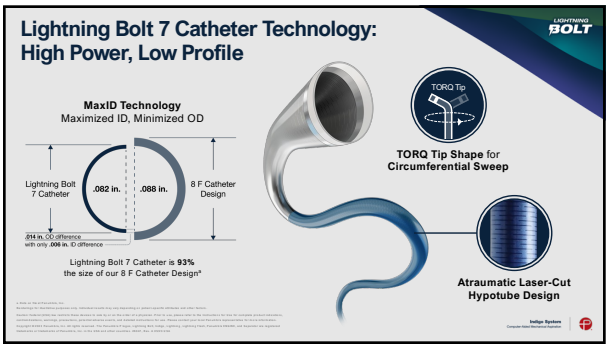


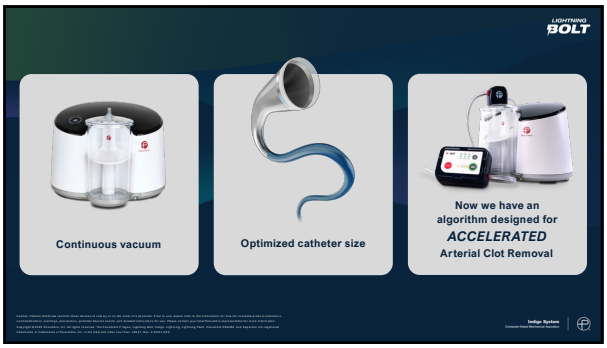

14F
51-year-old male - Moderate DVT with acute, re-occurrent organized thrombus, some thick occlusions. 2 Successful iDVT sweeps to pull the thick bolus occlusions that were occluding aspiration catheters. Roughly 10 minutes!
ICHOR 14
7


pVasc designed with DROP ZONE™ TECHNOLOGY
#DoTheDropZone with ALL CLOT TYPES
The pVasc™ Thrombectomy System is developed for the non-surgical removal of thrombi and emboli from peripheral arterial and venous vasculature
#DoTheDropZone with ALL CLOT TYPES
VESALIO

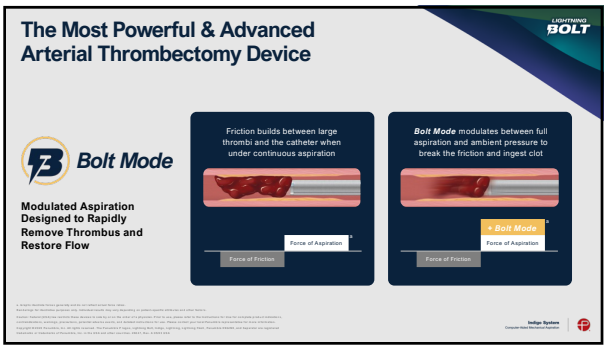

pVasc designed with DROP ZONE™ TECHNOLOGY
#DoTheDropZone with ALL Clot Types
BREATHE LIFE BACK into Vascular Pathways
TRAP
MAINTAIN
REMOVE
POPLITEAL ARTERY BLOCKAGE
DEVICE DEPLOYMENT
RECANALIZATION EFFECT
SCAN TO SEE PVASC 3D ANIMATION

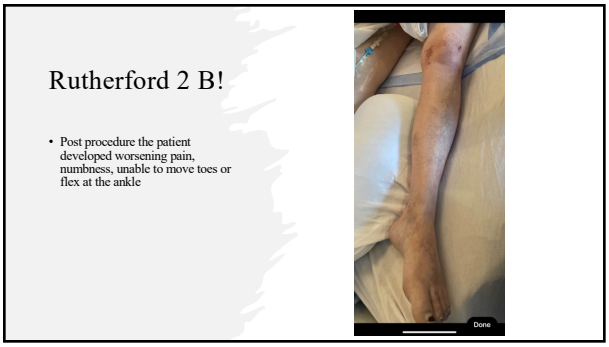

Artix Thrombectomy System from Inari Medical
Recently FDA-cleared for arterial thrombectomy
Treatment range: 3-6 mm vessels, 4-8 mm vessels
Mechanical + aspiration devices removing acute to chronic thrombus
Low profile 8Fr sheath 7Fr access profile
Proximal flow restriction covered funnel catheter
Over-the-wire system complete access and precise control
Blood return ability minimizes procedural blood loss
Thin-Walled Sheath
Funnel Catheter
Mechanical Thrombectomy Device
Thin-Walled Sheath
Aspiration Catheter
FlowSaver® Blood Return System

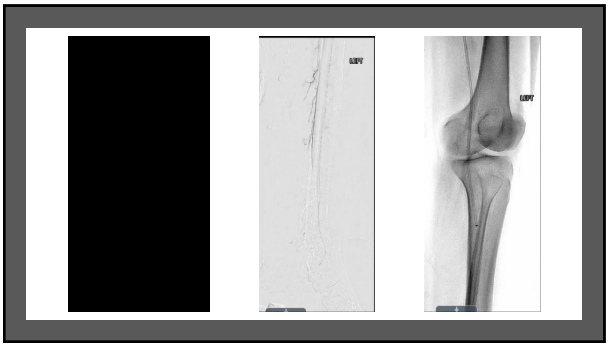

Lightning Bolt 7 Catheter Technology: High Power, Low Profile
MaxID Technology
Maximized ID, Minimized OD
Lightning Bolt 7 Catheter
.082 in.
.088 in.
8 F Catheter Design
.014 in. OD difference with only .006 in. ID difference
Lightning Bolt 7 Catheter is 93% the size of our 8 F Catheter Design*
TORQ Tip
TORQ Tip Shape for Circumferential Sweep
Atraumatic Laser-Cut Hypotube Design

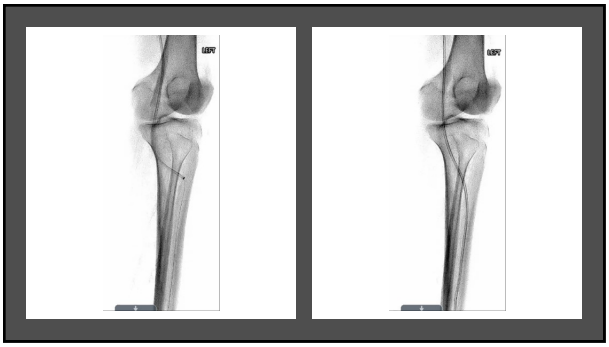

Continuous vacuum
Optimized catheter size
Now we have an algorithm designed for ACCELERATED Arterial Clot Removal

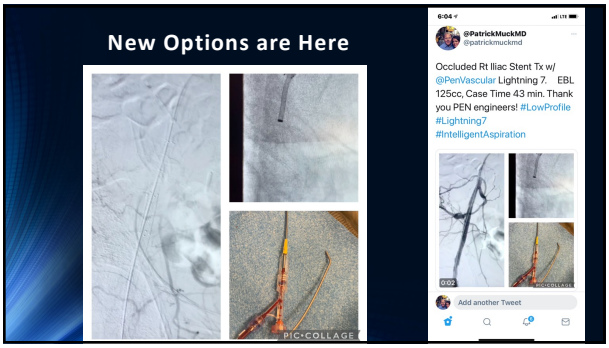

Designed for *Accelerated*, Endovascular Thrombus Removal
LIGHTNING BOLT
Bolt Mode
Modulated aspiration designed to rapidly remove thrombus and restore flow
MaxID Technology
Maximum ID, Minimized OD
Dual Clot Detection Algorithms
Pressure differential and flow-based algorithms designed for:
– Quicker clot detection
– Quicker patent flow detection
to reduce potential blood loss
Penumbra
Indigo System

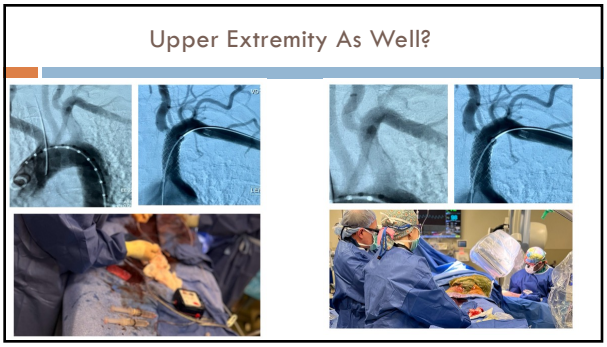

The Most Powerful & Advanced Arterial Thrombectomy Device
LIGHTNING BOLT
Bolt Mode
Modulated Aspiration Designed to Rapidly Remove Thrombus and Restore Flow
Friction builds between large thrombi and the catheter when under continuous aspiration
Force of Aspiration
Force of Friction
Bolt Mode modulates between full aspiration and ambient pressure to break the friction and ingest clot
Bolt Mode
Force of Aspiration
Force of Friction
Indigo System

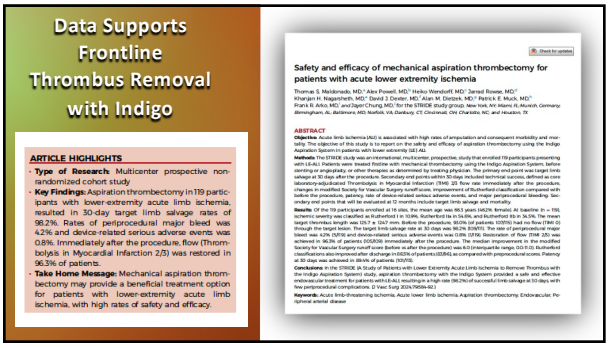

Rutherford 2 B!
• Post procedure the patient developed worsening pain, numbness, unable to move toes or flex at the ankle
Done

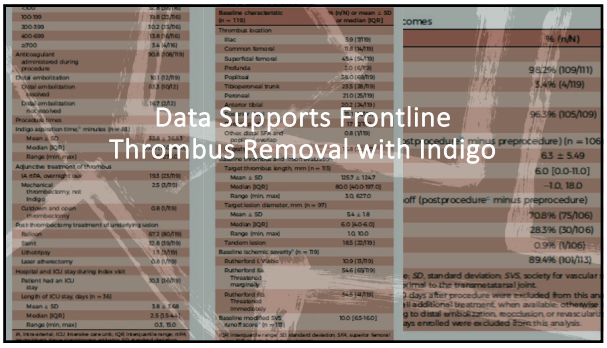





New Options are Here
@PatrickMuckMD
@patrickmuckmd
Occluded Rt Iliac Stent Tx w/ @PenVascular Lightning 7. EBL 125cc, Case Time 43 min. Thank you PEN engineers! #LowProfile #Lightning7 #IntelligentAspiration
Add another Tweet


Upper Extremity As Well?

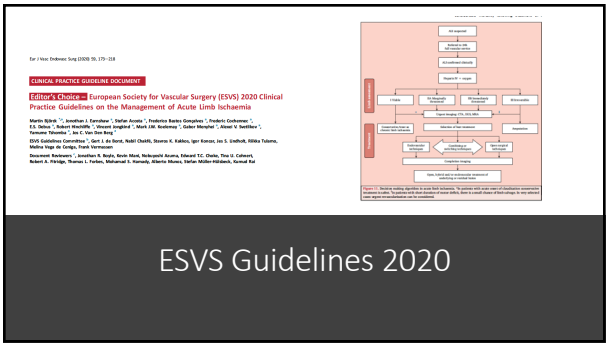

Data Supports Frontline Thrombus Removal with Indigo
ARTICLE HIGHLIGHTS
Safety and efficacy of mechanical aspiration thrombectomy for patients with acute lower extremity ischemia
ABSTRACT


Data Supports Frontline Thrombus Removal with Indigo

Conclusion

Aspiration is effective

Modulated Aspiration is the new standard



ESVS Guidelines 2020