

Shape Memory Polymer Embolization Devices To Treat Gutter Endoleaks After Parallel Grafts: Technique And Results

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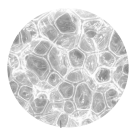
Disclosure:

WL Gore – Consultant

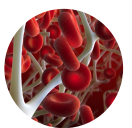
Terumo Aortic– SAB for Fenestrated Aortic Grafting and Educational Consultant

Shape Memory Polymer

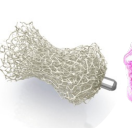
Porous, polyurethane foam



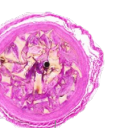
Open scaffold enables stasis and clot formation



Soft and conformable
Min radial force



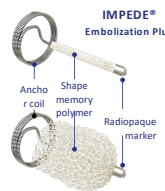
Cellular growth
Tissue infiltration¹



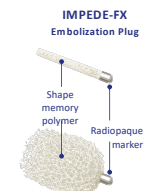
Embolized volume converts to durable, contractile collagen scar

Shape Memory Polymer Product Portfolio

IMPEDE®
Embolization Plug



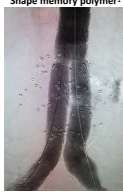
IMPEDE-FX
Embolization Plug



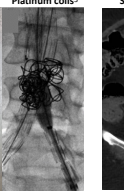
Expanded Plug Diameter	Vessel Diameter
6mm	2-5mm
8mm	4-7mm
12mm	6-10mm

Radiolucent, Minimal Artifact

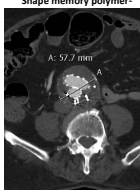
Shape memory polymer¹



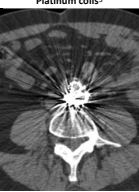
Platinum coils²



Shape memory polymer²




Platinum coils³

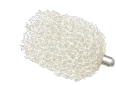


1. Image courtesy of Michael Robinson, MD, PhD, Anchorage, AK
 2. Image courtesy of Andrew Haidich, MRCR, Auckland, NZ
 3. Sonographic et al. et al. Vasc Surg. 2008;18(2):100-06


Shape Memory Polymer Embolization Plugs



IMPEDE Embolization Plug



IMPEDE-FX Embolization Plug



IMPEDE-FX RapidFill

Not available for sale in the United States

H&P

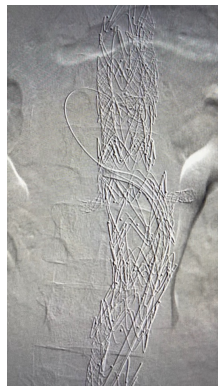
- ▶ 78 yo female with CAD and COPD
- ▶ 9 cm AAA
- ▶ 4 Vessel Thoracoabdominal repair 1 year prior
- ▶ Endoleak noted on CTA
- ▶ Possible Type 1A
- ▶ Could not find Type 1 on Angiogram

Transgraft Access

- 6F steerable Sheath
- 2mm Laser



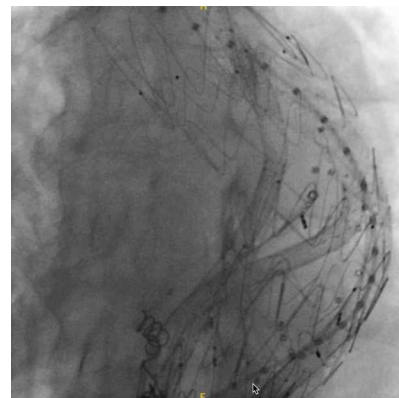
Diagnostic Angiogram confirming within endoleak



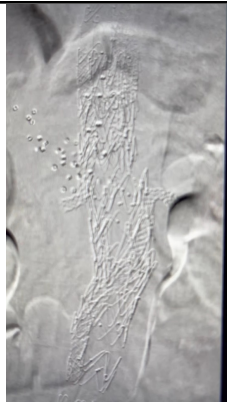
Type 1 A gutter leak



Deployment of the Shape Memory Plug



**Completion
Angiogram after seal
with Aortic cuff**



Completion and Follow up

- ▶ Patient tolerated procedure well
- ▶ AAA nontender and no pulsation
- ▶ CTA AAA sac reduction

Thank You