


What Devices Are Best For Enabling Laser Fenestration For The Endo Treatment Of Arch Lesions:

Is The Laser Hole In The Main Graft Made From Below Or Above:
How Is The Brain Perfused After The Aortic Graft Is Deployed And Before The Hole is made

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Disclosures

Consultant: Endospas, Getinge, Medtronic Inc, Penumbra, Terumo Aortic, Philips, WL Gore
Speakers' Bureau: Medtronic Inc., Penumbra, Terumo Aortic, WL Gore
Advisory Board: Endoron, Endospas, Medtronic Inc., Philips



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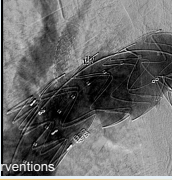
Arch In Situ Laser Fenestration

Case Study: Ruptured Arch Aneurysm

78 year old male patient
Ruptured 8cm arch aneurysm
Hypotensive, to hybrid room
On table CPR

After Zone 1 TEVAR
percutaneous retrograde laser
fenestration of the LCA

Completion arch study with
patent LCA fenestration and
no endoleaks

Patent fenestration neurologically intact
Now @ 1 year and 2 weeks follow up without re-interventions

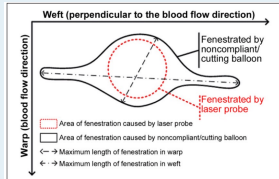
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Arch In Situ Laser Fenestration

Experimental Investigation

Laser Fenestration of Aortic Stent-Grafts Followed by Noncompliant vs Cutting Balloon Dilatation: A Scanning Electron Microscopy Study

Jing Lin, MS¹, Ning Panik, MD¹, Naval Udgiri, MD¹, Shaoxia Wang, MS¹, Daniel F. Miller, MD¹, Chong Li, MS¹, Jean Panneton, MD¹, Mark Nutley, MD, MS¹, Zi Zhang, PhD¹, Yuntao Huang, BS¹, Jun Lu, BS¹, Jingzi Zhang, BS¹, Lu Wang, PhD¹, and Robert Goudin, PhD¹



4 different polyester grafts
Low vs high energy laser 2.3
Noncompliant vs cutting balloons
Progressive balloon dilation at 6, 8, 10 & 12mm

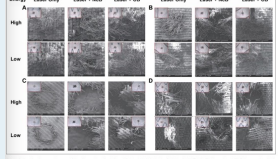
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Polyester grafts with multifilament yarn are preferable
There's no advantage in increasing the laser energy to create the fenestration
Avoid cutting balloon dilation b/c it increases fabric fraying and graft tearing

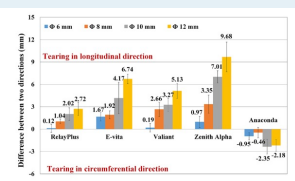
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Experimental Investigation

Optimal In Situ Fenestration Technique With Laser Fenestration and Balloon Dilatation for Aortic Stent-Grafts

Jing Lin, PhD¹, Linao E. Rodriguez, PhD¹, Mark Nutley, MD, MS¹, Lu Lu, MS¹, Ting Ma, BS¹, Ning Panik, MD¹, Franco Alfo-Casas, MD¹, Zi Zhang, PhD¹, Lu Wang, PhD¹, Jean M. Panneton, MD¹, and Robert Goudin, PhD¹



The maximum dilation that can be recommended is 6 to 8 mm to avoid major tears that could adversely affect the integrity and durability of the fenestration

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