Thrombosed IVC Filter: How To Recanalize The Cava And Manage The Filter

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Faculty Disclosure
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Stenting across an obstructed IVC filter is safe. Patency is related to the severity of postthrombotic disease

1997 to 2009
25 patients, an IVC filter was obstructed. The site was crossed by a guidewire and balloon dilated. A stent was placed across the IVC filter and redilated.

Conclusions:
Stenting across an obstructed IVC filter is safe. Patency is related to the severity of postthrombotic disease

IVC Filter Occludes Vena Cava
10 Years Out

Filter Struts In Aorta & Lumbar Vertebrae
Localized extravasation of contrast visualized after extraction. Patient remained hemodynamically stable.

Do Not Need Covered Stents To Control Caval Perforations.
Post Endovenous Reconstruction With Double Barrel Stents

If Cannot Remove IVCF
1. Endo-smash
2. Endo-trash

Occluded permanent IVC filter (Braun) traversed with sharp end of an .035 Amplatz super-stiff wire supported with 45cm 5F FR Cook sheath and 5 FR 55 cm Triforce system

Amplatz Superstiff Guidewire (back end – sharp)

Channel created between IVC and left common iliac vein to allowed passage of an .014 floppy tip wire from below without having to snares from above

Amplatz Superstiff Guidewire (back end – sharp)

Triforce for left iliac vein recanalization the 4 FR CXI Support catheter used to deliver the .014 floppy tip wire into IVC

With through-and-through access from left femoral vein to right internal jugular vein serial balloon dilatation begun

Here we “endosmash” the IVC filter using a 26 mm Bard Atlas balloon

Filter “endotrashed” to the caval sidewall

stenting across 24 mm Wallstent
Post-stent dilatation of IVC with 20 mm Bard Atlas balloon, inflations to 16 atm.

Stent fenestration initiated by traversing stent struts right iliac vein recanalized with .035 angled glidewire supported by Triforce system.

Stent fenestrum created with serial balloon dilatation; finishing with 14 mm Atlas balloon.

25 mm Z-stent in infrarenal IVC to correct para renal caval stenosis

24 mm Wallstent to endosmash IVC filter

15 mm Z-stent in fenestrum mitigates jailing of the left side

16 mm Wallstents in common and external iliac veins bilaterally

Caval Occlusion Bi-conical IVCF
“A Little Tougher Case”
Conclusion:

1. Try to get the filter out
2. Need a little "uncomfortable" force
3. Extravasation well tolerated

Thank you!