

Making a Varicocele a \$teal

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Learning Objectives:

To provide the practicing interventional radiologist with a fiscal understanding of the costs associated with varicocele embolization and to offer more cost effective alternatives to coil embolization.

Background:

Varicoceles are a cause of male infertility/subfertility and scrotal pain affecting 15% of the male population and 40% of the subfertile/infertile male population. Varicoceles are often left sided (85%) but can be bilateral (15%). Endovascular treatment of varicoceles classically involved the use of coils for venous embolization. Recent technological advances have seen a shift towards the use of endovascular plugs and occlusion devices. While a single coil is far cheaper than an occlusion device, varicocele embolization requires the use of multiple coils which can raise the cost of this procedure, especially when hospitals may not be reimbursed for every coil used. Furthermore, the additional use of microcatheters/wires and microcoils for more subselective embolization can further increase costs.

Clinical Findings/Procedure Details:

In this poster, we present the experience of a single center transitioning from the use of Interlock coils to vascular plugs (ArtVentive EOS) in the treatment of varicocele. Technically, the distal aspect of the varicocele is catheterized after venographic mapping and a single ArtVentive EOS plug deployed. Venography is then performed confirming occlusion. A slurry of gelfoam and sotradecol (between 1 and 3 cc) is then used to embolize the midportion of the varicocele. Finally, a second endovascular plug is used for proximal occlusion. Post embolization venograms are used to confirm successful

embolization. Infrequently, in complex anatomy, more than two plugs may be required.

Conclusion and/or Teaching Points:

Varicocele coil embolizations can become costly due to the number of coils needed to occlude the gonadal veins. Although newer endovascular occlusion devices are more expensive per unit, in our experience, successful varicocele embolization can be typically be performed using 2 of these devices per side. This exhibit will highlight the financial savings/fiscal considerations associated with endovascular occlusion plugs and the technical factors associated with achieving successful embolization.

Abstract Categories:

Venous Interventions: Embolization

Keywords:

Embolization, therapeutic
Occlusion
Varicocele

ARTVENTIVE EOS™ – COILS: COMPARATIVE DATA

