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## CASE REPORT

# Gonadal Vein Embolization for Pelvic Congestion Syndrome

BY DAVID FELDSTEIN, MD

68-year-old woman presented with persistent pelvic pain and pressure predominantly on the left side that she had experienced for several years. The symptoms were exacerbated upon prolonged standing, and would improve after lying down and in the morning hours. There was no reported postmenopausal bleeding. Her symptoms were consistent with pelvic congestion syndrome. Treatment options included conservative hormonal therapy (eg, medroxyprogesterone), hysterectomy with oophorectomy, and gonadal vein embolization. After discussing the efficacy of the provided treatment options, the patient decided to proceed with gonadal vein embolization.

### **PROCEDURE**

Embolization was performed via a right transfemoral vein approach. The left renal vein was selected utilizing a 5-F cobra catheter. Digital subtraction venography demonstrated significant reflux throughout a dilated left gonadal vein (Figure 1). Multiple distended collaterals were visualized draining across midline into the right hemipelvis. Delayed imaging also revealed collateral drainage into the left internal iliac vein. A Renegade® STC-18 Microcatheter (Boston Scientific Corporation) with a Fathom<sup>™</sup>-16 Steerable Guidewire (Boston Scientific Corporation) were advanced through the 5-F base catheter into the distal gonadal vein. Embolization of the left gonadal vein and associated tributaries was then performed using multiple Interlock™-18 Fibered IDC Coils (Boston Scientific Corporation) ranging in diameters of 10 to 12 mm. Coils were placed within 3 to 5 cm of the left gonadal/renal vein confluence. Postembolization venography demonstrated successful occlusion of the left gonadal vein and its tributaries/collaterals (Figure 2).

## **RESULTS**

At 2-week follow-up, the patient demonstrated significant improvement in pelvic pain/pressure. There were no reported access site complications. If symptoms recur, the likelihood of right gonadal vein embolization was discussed. Right gonadal vein embolization was not performed at the



Figure 1. Initial digital subtraction venography.

time of initial therapeutic intervention, due to predominantly left-sided symptoms.



Figure 2. Postembolization venography showed successful occlusion of the left gonadal vein and its tributaries and collateral vessels.

# **DISCUSSION**

The 0.018-inch coil delivery system is preferred for this procedure, as it allows for preferential selection of the distal gonadal vein branches, as well as the smaller tributaries/collaterals. Literature suggests that lack of embolization of these tributaries/collaterals can lead to clinical failure and/or recurrence.

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