

Embolotherapy Eases Pelvic Congestion

In 131 women who had the procedure, 85% reported improvement at a mean 45 months' follow-up.

BY MICHELE G. SULLIVAN
Mid-Atlantic Bureau

Pelvic congestion syndrome is a real disease entity that affects up to 16% of American women, and can be successfully treated with transfemoral embolotherapy, according to researchers who presented data at the annual meeting of the Society of Interventional Radiology.

About 10% of gynecologic visits are due to chronic, noncyclic pelvic pain of greater than 6 months' duration, and a third of gynecologic laparoscopies are performed to investigate such pain. The differential diagnosis usually includes endometriosis, fibroids, adenomyosis, cysts, and tumors, among other potential causes. Pelvic congestion syndrome (PCS)—pelvic vein insufficiency that causes pooling of blood in the uterine and ovarian veins—is not often on the list, said Hyun S. "Kevin" Kim, M.D., of Johns Hopkins University, Baltimore.

Even standard imaging studies don't always identify the disorder, Dr. Kim said in an interview.

"Only 40% of laparoscopic studies were able to visualize abnormal veins. On MRI, only 59% were diagnosed. This is because these venous abnormalities are caused by physiologic conditions that change during the exam; when you lie down, your heart is at the same level as your pelvis, and all the blood will be quickly decompressed," Dr. Kim said.

Because PCS is difficult to diagnose, many physicians write off the symptoms—dull, typically unilateral pain that worsens during the day and with standing, dyspareunia, and dysuria—as psychosomatic, said Dr. Kim.

Varicocele, the male counterpart of PCS, has no such stigma, he added. In men, the gonadal vein terminates in the testicle, so the painful venous abnormalities are usually visually apparent.

"This condition is accepted in men, because it occurs outside the body and we can see it. In women it's hidden, and this, I think, is part of the reason for misdiagnosis or underdiagnosis," Dr. Kim said.

Many women with chronic pelvic pain undergo ineffective therapies, including hormonal treatment, or hysterectomy with or without oophorectomy. Hysterectomy is not always

effective for pain relief in PCS; about 33% have residual pain by 1 year, and there is a 20% incidence of recurrent pain.

The best way to diagnose PCS is with direct venography, said Dr. Kim, who presented the results of his long-term follow-up study on transcatheter embolization for the disorder at the meeting.

He performed 262 transfemoral ovarian venographies on 131 women (mean age 34 years) with chronic pelvic pain. Twenty percent had a prior hysterectomy. About one-third of the patients

had previous pregnancies; the rest were nulliparous.

Venography confirmed the clinical suspicion of PCS in 127 of those women. The diagnostic criteria for OCS are:

- ▶ Ovarian vein, uterine vein, and utero-ovarian arcade venous engorgement greater than 5 mm in diameter.

- ▶ Free reflux of contrast in ovarian vein with in-

competent valves.

- ▶ Filling of veins across the midline or filling of vulvar and/or thigh varicosities.

- ▶ Stagnant clearance of contrast from pelvic veins (more than 1 minute).

Patients with a confirmed diagnosis underwent baseline levels of follicle-stimulating hormone, estradiol, and luteinizing hormone, and transcatheter embolotherapy of the insufficient veins. This was done as an outpatient procedure. There were no major complications.

By a mean 45 months' follow-up, there was a mean pain decrease of 4.7 points on a visual analog scale. Most of the patients (85%) reported improvement, which was significant in 80%, moderate in 14%, and mild in 6%. There was no change in 12%, and pain was worse in 3%.

Women who reported pain improvement also reported significant improvement in other symptoms, including dyspareunia, urinary frequency, and menstrual pain.

When patient subgroups were compared, there were no differences in outcome between the nulliparous women and those with prior pregnancy or those who had hysterectomy and those who had not.

There were no differences between preoperative and follow-up hormone levels; four patients attempted to conceive after the procedure, and two successful pregnancies resulted.

Because pelvic congestion syndrome is difficult to diagnose, many physicians may write off the symptoms as being psychosomatic.

Treating Pelvic Congestion Eases Leg Venous Reflux Pain

BY MICHELE G. SULLIVAN
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Pelvic pain related to pelvic venous congestion often occurs in women with symptomatic lower extremity venous reflux. Treating ovarian venous incompetence with embolotherapy can not only reduce associated pelvic pain, but can also significantly reduce the pain associated with lower extremity reflux, according to Carl M. Black, M.D.

Because the disorders often occur together, Dr. Black of Provo, Utah, recommends that those with complex nonsaphenous superficial lower extremity venous insufficiency be questioned regarding concomitant symptoms of pelvic congestion.

Symptoms of pelvic congestion syndrome are heaviness in the pelvis with standing, low abdominal pain, painful varicosities in branches around the labia and vulva, and varicosities that emerge from the gluteal region and extend into the legs. "About 16% of women with varicose veins will say they have pelvic pain that cycles with their leg pain," he said in an interview.

At the annual meeting of the Society of

Interventional Radiology, Dr. Black presented the results of a study evaluating transcatheter embolization in patients with both disorders and included 160 women with symptomatic lower extremity superficial reflux. Each patient received a lower extremity venous duplex ultrasound, which included evaluation of atypical transpelvic venous reflux. Clinical and ultrasonographic findings suggested pelvic congestion syndrome in 26 (16%) women. All 26 had complex nonsaphenous patterns of lower extremity venous reflux.

Twenty-four of these patients underwent venography, which confirmed ovarian venous insufficiency in 22. These 22 patients had embolotherapy on the insufficient pelvic veins. Embolization was successful in 100%. After embolization, 19 (86%) had relief or significant reduction in pelvic pain and 14 (63%) reported reduction of both pelvic and lower extremity pain. After subsequent comprehensive treatment of remaining identifiable sources of lower extremity venous reflux, 20 of the 22 patients reported sustained overall treatment satisfaction, with 60% of patients having been followed between 6 and 12 months. ■

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