

Father's Day Not Possible for Many Infertile Men

Highly Effective, Nonsurgical Treatment Is Underutilized for Treating Male Infertility

Fairfax, Virginia (May 16, 2005) – Thousands of men are needlessly undergoing surgery each year to treat a major cause of male infertility. Among infertile couples, 30 percent of the men have varicoceles – varicose veins in the testicle and scrotum that may cause pain, testicular shrinkage and fertility problems. And, as many as 70,000-80,000 men in America annually may undergo surgery to treat their varicocele, rather than nonsurgical embolization. Open surgical ligation, performed by a urologist, is the most common treatment for symptomatic varicoceles. Varicocele embolization, which is performed by an interventional radiologist, is a highly effective, widely available technique to treat symptomatic varicoceles that is greatly underutilized in the United States. Varicocele embolization is an outpatient procedure with a two-day recovery period, compared to surgery that has an overnight hospital stay and two-to-three weeks of recovery.

Additional benefits of embolization include no surgical incisions or stitches, no general anesthesia, and no infection. Most men with varicoceles are candidates for embolization and should obtain a second opinion with an interventional radiologist to understand their options.

About Varicoceles

Veins contain one-way valves that work to allow blood to flow from the testicles and scrotum back to the heart. When these valves fail, the blood pools and enlarges the veins around the testicle in the scrotum to cause a varicocele (pronounced var-ah-co-seal).

Decreased sperm count, decreased motility of sperm, and an increase in the number of deformed sperm are related to varicoceles. Some experts believe these blocked and enlarged veins around the testes cause infertility by raising the temperature in the scrotum and decreasing sperm production.

Efficacy of Nonsurgical Embolization

Embolization is equally effective in improving male infertility and costs about the same as surgical ligation. Pregnancy rates and recurrence rates are comparable to those following surgical varicocelectomy. In one study, sixty percent conceived who were treated for infertility.

In another study, sperm concentration improved in 83 percent of patients undergoing embolization compared to 63 percent of those surgically ligated. Patients who underwent both procedures expressed a strong preference for embolization.

Treatment

Currently, there are two treatment options for men with varicoceles: catheter-directed embolization or surgical ligation.

Catheter-directed embolization – This is a nonsurgical, outpatient treatment performed by an interventional radiologist using imaging to guide catheters or other instruments inside the body. Through mild IV sedation and local anesthesia, patients are relaxed and pain-free during the approximately two-hour procedure.

For the procedure, an interventional radiologist makes a tiny nick in the skin at the groin using local anesthesia, through which a thin catheter (much like a piece of spaghetti) is passed into the femoral vein, directly to the testicular vein. The physician then injects contrast dye to provide direct visualization of the veins so he or she can map out exactly where the problem is and where to embolize, or block, the vein. By using coils, balloons or particles, the interventional radiologist blocks the blood flow in the vein, which reduces pressure on the varicocele. By embolizing the vein, blood flow is redirected to other healthy pathways. Essentially, the incompetent vein is “shut off” internally by preventing blood flow, accomplishing what the urologist does, but without surgery.

Surgical treatment of varicocele – After the patient receives anesthesia, an incision is made in the skin above the scrotum, cutting down to the testicular veins, and tying them off with sutures. Although patients leave the hospital the same day, there is a two- to three-week recovery period.

About Interventional Radiologists

Interventional radiologists are board-certified physicians who specialize in minimally invasive, targeted treatments performed using imaging for guidance to treat diseases nonsurgically through the blood vessels or through the skin. By combining diagnostic imaging expertise with advanced procedural skills, interventional radiologists perform minimally invasive treatments that have less risk, less pain, and less recovery time than open surgery. Interventional radiologists pioneered minimally invasive modern medicine with the invention of angioplasty and the catheter-delivered stent, which were first used to treat peripheral arterial disease. More information can be found at www.SIRweb.org.

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