



## **Varicocelelectomy**

*We recommend that you read this carefully in order to prepare yourself or family members for the proposed procedure. If you still have any questions or concerns, we strongly encourage you to contact our office prior to your procedure. We may clarify any pertinent issues. "An educated patient is the best patient."*

**Definition:** Dilation of the veins within the scrotum and around the testicles.

In adults, there are a few reasons that a varicocelelectomy might be performed.

1. *Infertility:* A varicocele can lead to male infertility by disrupting the temperature regulation within the testicle. If you and your partner have been dealing with infertility, surgical correction of the varicocele can reverse male factor infertility. Your doctor will likely ask you to submit a semen analysis prior to the correction of your varicocele.
2. *Pain:* Large varicoceles can lead to pain within the scrotum and around the testicle. The pain is most often worse with activity and towards the end of the day. Pain associated with a varicocele is often described as a "dull, heavy ache."

### **Preoperative Evaluation**

*Scrotal Ultrasound:* This test is performed by an ultrasound technician. Cold lubricating jelly is placed over the scrotum and the dilated veins are measured. This allows your physician to assess the severity of the varicocele and to rule out other potential problems such as a testicular tumor.

*Kidney Ultrasound:* In rare circumstances, a varicocele can be the first clinical sign of a kidney problem. Therefore, it is not uncommon for the physician to evaluate the kidneys with an ultrasound prior to the varicocele repair.

*Semen Analysis:* This test is performed to determine if the varicocele is contributing to abnormal semen parameters such as low sperm count or abnormal sperm motility (movement). The specimen can be obtained by masturbation or with the assistance of your partner. A specimen cup will have been provided by the office. The semen sample should be delivered to the laboratory within 1 hour of the collection time.

## **Surgical Approaches**

*Laparoscopic:* A small incision is made near the umbilicus and a camera is inserted into the abdominal cavity. The dilated vein which drains the testicles is identified and divided with a surgical stapler. This approach is most often utilized in pediatric patients.

*Inguinal/subinguinal:* This approach is most commonly utilized in adults. A small incision is made over the groin and the veins which drain the testicle are identified and divided. The ends of the veins are secured with silk suture. Often your surgeon will use a microscope to more accurately identify the dilated veins contributing to the varicocele.

*Scrotal:* This approach is similar to the subinguinal approach outlined above, however, the success rate is not quite as high and therefore it is used less commonly.

*Percutaneous Coils:* This procedure is performed by an interventional radiologist. A wire is placed through the groin (similar to a heart catheterization). Several small coils are placed within the dilated vein.

## **Surgical Risks**

- Bleeding
- Infection
- DVT: Blood Clot within the leg or lung
- Recurrence of the varicocele
- Chronic Pain or Persistent Pain
- Injury to the testicle which can lead to atrophy or loss of the testicle
- Injury to surrounding structures: Vas Deferens, Epididymis, Blood vessels to the testicle
- Hematoma
- Anesthesia Complications: Heart Attack, Stroke, Coma, Death

\*Infertility is a product of the varicocele itself and not the surgery to correct it

## **Surgical Benefits**

- Treatment of the venous abnormality
- Restoration of Fertility
- Decrease or Resolution of the pain resulting from the varicocele
- Improvement in cosmetic appearance

### **Alternatives to Surgery**

- Observation (“Do Nothing”)
- Percutaneous coil placement by Interventional Radiology

*We provide this information for the patients and family members. It is intended to be an educational supplement that highlights some of the important points of what we have previously discussed in the office. Alternative treatments, the purpose of the procedure, and the points on this page have been covered in face-to-face consultation.*