



Pediatric Surgical Associates, Ltd.

Patient and Family Education

## Varicocele and Varicocelelectomy Repair

### What is a varicocele?

A varicocele is swelling in the scrotal area caused by stretched or dilated veins next to the testicle. It is sometimes referred to as a “bag of worms” or a “bunch of grapes.”

### What causes a varicocele?

The spermatic cord is a structure that contains arteries, veins, nerves and tubes. It provides a connection and circulates blood to and from the testicles.

Normally, blood flows to the testicles through an artery, and flows out thru a network of tiny veins. Those veins then drain into a larger vein that goes up into the abdomen. Valves help regulate the blood flow. Faulty valves lead to a back pressure in the system and cause the blood to pool. This creates swelling and stretching of the veins around the testicle, resulting in a varicocele.

It is more common to have a varicocele on the left side than the right. This is due to the mechanism of the blood flow system in the body is larger on the left.

### What are some symptoms of a varicocele?

The varicocele is typically soft to the touch, and there may be a bluish tint to the skin. Some patients complain of a feeling of fullness or achiness in the area. A varicocele typically does not cause discomfort. There may be a size difference of the testicles.

**Varicoceles** have been divided into three classifications based upon physical examination:

**Grade I:** Only felt when the patient bears down

**Grade II:** Can be felt, but not seen

**Grade III:** Large enough to be visible

### What do the Doctors do?

The doctor will do a physical exam with the patient lying down and standing. This helps assess for any changes while the scrotum is relaxed.

A scrotal ultrasound may be ordered to evaluate the size of each testicle, along with measuring blood flow to the testicles.

### What are the indications for treatment?

Most varicoceles need no special treatment. For adolescents, a left testis which is 25% smaller than the right is considered significant. For an adult male, a varicocele should be corrected if there are semen abnormalities and issues of infertility. Other indications include very large testis size and or discomfort. The size of the varicocele may correlate with semen quality and testis growth.

### **What are the treatments for a symptomatic varicocele?**

Anti-inflammatory medications may be recommended. If the varicocele causes discomfort, wearing snug underwear or a jock strap for support may bring relief.

If there is pain or indication that the growth of the testicle is being affected by the varicocele, a varicocelectomy may be recommended.

There are multiple techniques for correcting a varicocele including retroperitoneal technique or a laparoscopic varicocelectomy clipping approach. Another common technique is an inguinal varicocelectomy.

All of these approaches require a small incision and clipping or tying off of the vein. An alternative procedure completed in the interventional radiology department may be recommended. This involves placing a small plastic tube into the vein to block the blood flow to the enlarged vein.

Risks include varicocele recurrence and hydrocele formation. The laparoscopic technique carries a very small risk of intra-abdominal organ injury or bleeding. Other smaller risks include testicular atrophy, wound infection and prolonged pain.

All procedures are done on an outpatient basis. General anesthesia is required if being completed in the operating room. The procedure takes about one hour and the patient may go home after recovery in the short stay unit.

Local sedation is used in the interventional radiology department. The patient will go home after the procedure.

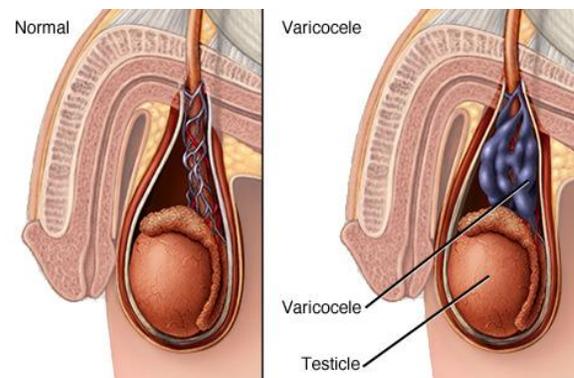
### **What care is required after surgery/procedure?**

Some slight discomfort or aches may be noticed for a period of time, but should improve over a few weeks with recovery. Bruising and color changes may be noted in the scrotal area and around the incision.

Oxycodone may be prescribed for a few days after the procedure. Tylenol and Ibuprofen may be taken for mild discomfort if needed.

Scrotal support is recommended. Use of a cold pack to the area may help with swelling.

Activity level may be increased as tolerated after the procedure. Light activity for the first 48 hours, more vigorous activities in 5-7 days. If an activity feels uncomfortable, slow down, stop or rest for a bit, then increase activity again as tolerated.



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