



PATIENT FACT SHEET

Varicocele

The veins in your testes -- like those in your legs -- have valves that help blood to flow upward toward your heart. If the valves stop working, blood pools in the veins, which bulge or dilate. This is called a varicocele and varicoceles may make it difficult for you and your partner to have a baby.

About 15% of all men have a varicocele. For many, it's not a problem. But nearly 40% of men who have fertility problems have a varicocele. If it is associated with infertility, it may need to be treated.

Why do varicoceles cause fertility problems?

Varicoceles raise the temperature in the testicles, which may affect the production of sperm, as well as sperm movement and/or shape. It may also affect other aspects of sperm function. However, it is unknown by what mechanism varicoceles may impair fertility.

How will the doctor check for a varicocele?

The doctor will do a physical exam to check for a varicocele. Most likely, you will first stand in a warm room for several minutes. The doctor might ask you to increase the pressure in your pelvic region by pushing down as if you were trying to have a bowel movement. (This is called a Valsalva maneuver.) This will cause the varicocele to increase in size and become apparent, as the blood flows backward toward the testicle.

Does treatment work?

Varicoceles are typically treated with surgery, particularly those with large varicoceles. After treatment, semen parameters are improved in more than 2/3 of patients. Also, surgery helps 30% to 50% of couples achieve pregnancy naturally. There is no guarantee that treatment will improve chances of fathering a child.

How is the surgery done?

Surgery will route blood away from the dilated vein to normal veins. The surgeon will make a small surgical opening in the area of the groin. Then, the doctor ties off the dilated veins.

Most men prefer to have general anesthesia, but the surgery can also be done under local anesthesia with intravenous sedation. Usually, you can go home the same day. Most men are able to go back to work within 3 or 4 days after surgery and resume full activity within 7 to 10 days.

An alternative procedure is called radiologic ablation. This is a procedure in which a radiologist inserts a small tube into the vein in your groin and then injects small coils or alcohol to block the veins. Most studies show that this method has a higher chance of the varicocele returning, but it may be a reasonable alternative for some patients.

What are the risks of surgery?

The surgeon may use an operating microscope or special glasses to see the important structures around the testicles.

Problems that could occur during or after surgery include:

- Build-up of fluid in the scrotum (hydrocele)
- Damage to an artery
- Return of the varicocele

Although these complications are uncommon, the procedure is most likely best performed by a physician experienced in varicocele repair. Your physician can give you more details about the right choice for your situation.