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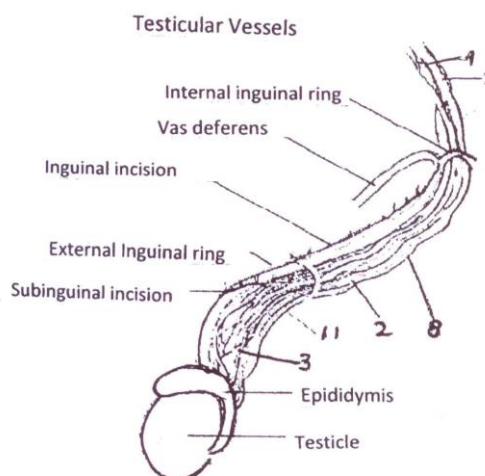
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VARICOCELE

Male infertility has been found to be the major cause of a couple's inability to conceive in 50% of childless marriages. There are many reasons for male infertility, including deficiencies in sperm production, blockage of the sperm conducting system, antibodies against sperm, injury to the testicles with resultant loss of size and function; hormone problems; poor descent of one or both testes, and finally, the presence of a varicocele.

In order to understand what a varicocele is, one must be aware of some basic anatomy and physiology. (See fig.) The testicles are the paired male genital organs that contain not only sperm, but also cells that produce and nourish the sperm (Sertoli cells), as well as the cells (Leydig cells) that produce the male hormone, testosterone. The testes are located in a sac called the scrotum. It is a reservoir where the sperm mature and are stored.



The vas deferens connects the epididymis to the prostate gland and is the tube through which sperm travel during ejaculation. The vas deferens is not situated by itself within the scrotum, but is part of a large tissue bundle called the spermatic cord. The spermatic cord contains many blood vessels, as well as the vas deferens, nerves, and lymphatic channels.

The veins of the spermatic cord are known as the pampiniform plexus. These veins drain blood from the testes, epididymis, and vas deferens, eventually becoming the spermatic veins that drain into the main circulation at the level of the kidneys. The pampiniform plexus of veins may, at some time, become tortuous and dilated, much like a varicose vein of the leg. In fact, a scrotal varicocele is simply a varicose enlargement of the pampiniform plexus around the above testicle. There are two other veins – the cremasteric and deferential – that also drain the testicles. These veins are rarely involved in the varicocele process.

The varicocele is a well-recognized cause of decreased testicular function and is present in about 40% of infertile males. In order to understand the significance of this abnormality in the infertile patient, a brief review of the historical background, current concepts of its anatomy and function, and methods and results of surgical repair must be considered.

History

Varicoceles have been recognized as a clinical problem since the 16th century. Ambroise Pare (1500-1590), the most celebrated surgeon of the Renaissance, described this vascular abnormality as containing “melancholic blood”. It was not until the late 19th century that the relationship between infertility and varicocele was first proposed by the British surgeon, Barfield.

POSTOPERATIVE INSTRUCTIONS AND INFORMATION FOR VARICOCELECTOMY

1. Varicocele surgery is usually performed as an outpatient through a day surgery unit. The average time off from work is 2 ½ days.
2. Remove all the outer dressing 48 hours after surgery. Leave small strips of tape (Steri-Strips) in place for 7-10 days. These may be removed at that time.
3. Bathing or showering is permitted 48 hours after surgery.
4. A normal, well-balanced diet can be resumed when you return home. Be sure to start with fluids and gradually increase to solid foods.
5. A prescription has been given to you for “pain medication” – take as directed. Two days postoperatively, Extra-Strength Tylenol or ibuprofen (Advil or Motrin) should be sufficient to relieve discomfort. These are non-prescription medications.
6. Normal, non-strenuous, activity can be resumed when you feel “up to it”. If some activities cause discomfort, do not continue. Activities such as weight lifting and jogging can be resumed in 2 weeks.
7. Refrain from intercourse for 1 week.
8. You may return to work after 2 days.
9. Return to the clinical office for wound evaluation in approximately 7-10 days. You will be seen again in 8 weeks for a wound check and varicocele examination. Four months following surgery, a semen analysis and consult should be planned. You will be informed then when subsequent appointments are needed. Please call (650) 962-4662 for an appointment.
10. You may experience some postoperative discomfort. Complications are rare but can occur. Common discomforts or symptoms may include the following and do not require a doctor’s attention:
 - Minor bruising and slight discoloration around the groin incisions. This will be absorbed spontaneously.
 - Sensations of “hardness” around and beneath the incision site. This resolves in about 3 weeks.
 - Slight redness and tenderness around the incision. This is due to the normal healing process and should resolve in a few days.
 - A very small amount of thin, clear, pinkish fluid draining from the incision for a few days after the procedure. Keep the area clean and dry.
 - A sore throat, headache, nausea, constipation, and general “body ache” due to the anesthetic and surgical procedure may be present. These problems should resolve in 24 hours.

POST-OPERATIVE COMPLICATIONS THAT REQUIRE PROMPT MEDICAL ATTENTION:

- Wound infection (3-5 days after surgery): You may develop fever. The wound could become warm, swollen, red and painful, with significant drainage from the incision site. Antibiotics may be necessary.
 - Hematoma: Extreme discoloration around the abdominal incision due to bleeding underneath the skin, causing throbbing pain and a bulging wound.
11. Call our office at 650-962-4662 if any problems develop.