**YOUR TEEN BOY AND ADOLESCENT VARICOCELES**

**What is a varicocele?**

A varicocele is a dilated (enlarged) group of veins in the scrotum; it can occur in one or both sides. Just like some people have dilated or “varicose” veins in their legs, some adolescents have dilated veins in their scrotum.

Varicoceles most commonly develop during adolescence when the testicles grow dramatically. Such growth increases the need for oxygen and nutrients, and means that more blood is flowing in and out of the testicles. If the valves that drain blood from the scrotum are not functioning properly, blood pools in the scrotum. This may cause discomfort, embarrassing enlargement, and damage to testosterone and sperm production.

Many adolescents know they have a varicocele because they can feel the mass of dilated veins in the scrotum. This feels like a sac of worms or spaghetti and is often accompanied by a heavy, dragging sensation, fullness in the scrotum, and a smaller damaged testicle.

- Fifteen percent of all adolescents have varicoceles.
- Of those adolescents who have varicoceles, 45% have varicoceles on both sides.

**How will we know if our son has a varicocele?**

If your son does not bring it to your attention, a varicocele may be diagnosed by his doctor during a physical examination. It can most clearly be felt when he is standing and will feel like a bag of spaghetti. It may disappear when he lies down as the weight of the blood in the veins is no longer pushing down past the malfunctioning valves into the scrotum.

**How will a varicocele affect my son?**

While a varicocele may not cause discomfort or a medical problem in all adolescents, it frequently impacts mature men in a number of ways.

**Infertility**

Varicoceles are a common cause of future male factor infertility.

- 40% percent of men who have never fathered a child have varicoceles.
- 80% percent of men who have difficulty conceiving, after having fathered children, have varicoceles.

Varicoceles cause progressive damage to the testicle and a progressive decrease in the quality and quantity of sperm produced.

Varicoceles may also cause damage to the testicles in adolescents. If an adolescent has a one-sided varicocele, often the testicle on that side may not develop as well, and may be smaller than the other side. Smaller testicles generally produce significantly less sperm.

If the varicocele is repaired during adolescence, the testicles usually experience catch-up growth and normalize in size. If it is repaired at a later age, sperm production may improve, however the testicle will not catch up in growth, and ultimately may not produce as many sperm as if it had been repaired earlier.

**Decreased Testosterone Production**

Besides making sperm, the testicles also make testosterone, the main male hormone. Testosterone is responsible for an adolescent’s secondary male characteristics such as increased muscle mass and tone, level of sexual interest and body hair.

Varicoceles can damage the cells that make testosterone and may lead to a decreased overall testosterone level, which may adversely affect the adolescent now or in the future.

**Pain and Embarrassment**

Many adolescents will complain of pain in the side of the scrotum with the varicocele. This is usually described as a heavy, dragging feeling, worse with standing, lifting, or straining.

If one side of the scrotum is abnormally large, with obvious looking veins, it is often embarrassing or worrisome to an adolescent at an age where he is often acutely aware of how his genitals look.

**Treatment**

While fertility and testosterone production may seem like issues to be dealt with years from now, treating boys when a varicocele is diagnosed promises the most successful long term outcome.

A varicocele treated through microsurgery has the best results as measured by fewest recurrences, lowest occurrence of hydrocele formation (build up of fluid around the testicle), and ultimately the highest spontaneous pregnancy rates.

The procedure is performed in the hospital under a local anesthetic with sedation on an outpatient basis. The scar is hidden by pubic hair and there is only mild postoperative discomfort because no muscle is cut. Recovery and resumption of normal activity is three days to one week.
Our Practice

Dr. Werner is a urologist with fellowship training in two subspecialties: male infertility and sexual dysfunction. He has chosen to limit his practice to these two complex and technical areas. Dr. Werner strongly believes that you need to have a complete understanding of the medical options available to you and a full understanding of the benefits and risks involved in each decision. Together, you will decide on the course of treatment that makes the most medical and personal sense for you.

Dr. Werner is committed to communicating promptly, thoroughly and frequently with both you and the other professionals involved in your care.

Erectile Dysfunction and Andropause

Dr. Werner has treated thousands of patients who suffer from erectile dysfunction (ED) and other conditions related to male sexuality.

Our practice has extraordinary success in helping men achieve their goals when addressing issues of impotence and erectile dysfunction. Thirty percent of men suffer from premature ejaculation, a condition which usually has a very negative effect on his and his partner’s sexual satisfaction. Fortunately, this can almost always be managed successfully with a combination of behavioral and medical treatments.

Expert in the assessment and treatment of Andropause and reduced sex drive, the practice includes testosterone replacement therapy among the variety of solutions offered to our patients.

Dr. Werner provides the spectrum of solutions for Peyronies Disease, delayed Ejaculation, and hormonal imbalance related to male sexual health.

Infertility Evaluation and Treatment

Often couples will come to Dr. Werner and M.A.Z.E. Laboratories for male fertility testing while the female partner is being tested by her Ob/Gyn. This saves time and effort and can uncover male factors in a couple’s fertility challenges. Since M.A.Z.E. Laboratories is on site, comprehensive and clinically appropriate testing often can be conducted on the same day as an office visit. This is particularly useful for patients coming from long distances.
as it decreases the number of appointments Werner uses leading edge technology to create the most accurate picture of the male factors that may hinder a couple’s ability to conceive. This may include treatments to improve sperm production, or if necessary, procedures to retrieve sperm.

Up to one-third of male fertility problems go undetected by a conventional lab. Dr. Werner’s Laboratory can save patients time because the fully comprehensive fertility testing allows a couple to develop a treatment plan quickly and professionally.

Dr. Werner favors a microsurgical approach to varicocele repair given its higher success rate and shorter recovery. He is also a specialist in the area of sperm mapping, a procedure that can detect sperm in the testes prior to IVF, so that couples only embark on that path when positive results are possible.

Most importantly, Dr. Werner is an easy-going and empathetic practitioner who devotes as much time as it takes to maximize a couple’s chances for success.

Related areas of specialization
- Adolescent Varicocele
- No Scalpel, No Needle Vasectomy
- Vasectomy Reversal
- Female Sexual Dysfunction
- MAZE Fertility Laboratory
- Complex Semen Analysis
- Hormone Testing
- Sperm Processing for IUI
- Sperm Banking
- Cord Blood Banking

State-of-the-Art Medical Care

Medical advances in the areas of male infertility and sexual dysfunction are continually evolving, and these developments can significantly impact your treatment. Dr. Werner has highly specialized training in these areas and his practice is devoted exclusively to cutting edge solutions, safe and carefully considered treatment options, and successful outcomes.

Dr. Werner’s practice also houses a state-of-the-art laboratory, M.A.Z.E. Laboratories, on site. Directed by Dr. Werner, the laboratory is the only local lab that provides precise, comprehensive semen analyses and sperm banking as well as sperm processing and cord blood banking. Because the lab is on site, its services can be coordinated with your clinical care, making your evaluation and treatment more thorough, effective, and convenient.

© Michael A. Werner, MD, FACS, 2010