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Center of Excellence for Varicoceles

The Varicocele Guide

What it is. Why it matters.
What to ask your doctor.



TowerUrology



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SECTION 01

What Is a Varicocele?

A varicocele is an enlargement of the veins within the scrotum, similar to varicose veins in the legs. These dilated veins cause blood to pool around the testicles, raising the local temperature and directly damaging sperm quality, quantity, and DNA integrity. Varicoceles develop most often on the left side and are frequently seen in men presenting with infertility.



SECTION 02

Symptoms to Watch For

Many men have **no symptoms at all** and discover a varicocele only after struggling to conceive. Some men do experience:

- A dull ache or heaviness in one or both testicles, particularly after standing or exercise
- Visible or palpable enlarged veins under the scrotal skin ("bag of worms")
- One testicle appearing smaller than the other
- Signs of low testosterone: fatigue, low sex drive, brain fog

SECTION 03

How Is It Diagnosed?

Diagnosis starts with a physical exam by a urologist, performed while standing. A scrotal Doppler ultrasound may be added when findings are inconclusive. A semen analysis should always accompany the workup if fertility is a concern.

What the Workup Looks Like

1. **Physical Exam:** The primary tool. A trained urologist can identify a varicocele by feel; ultrasound may be added if unclear.
2. **Semen Analysis:** Measures sperm count, motility, and morphology.

SECTION 04

How a Varicocele Affects Fertility and Testosterone

The elevated scrotal temperature caused by a varicocele damages the Sertoli cells and Leydig cells in the testicle, responsible for both sperm production and testosterone synthesis. This is why varicoceles can affect two things simultaneously:

- **Sperm quality:** reduced count, poor motility, abnormal morphology, and increased DNA fragmentation
- **Testosterone levels:** the same heat disrupts Leydig cell function, suppressing testosterone production

Men with varicoceles and low testosterone who still want to conceive may find that varicocele repair alone can restore both testosterone and fertility, avoiding the need for hormone treatment entirely.

SECTION 05

Treatment: Microsurgical Varicocelectomy

The gold standard treatment is **microsurgical varicocelectomy**, a minimally invasive outpatient procedure performed under a surgical microscope. A small incision is made near the groin, and the dilated veins are tied off while preserving the testicular artery and lymphatic vessels. Most patients go home the same day and return to desk work within a few days.

Outcome	Result
Sperm parameter improvement	Upwards of 80% of men
Testosterone level improvement	Seen in majority of patients
Timeframe for improvement	3–6 months post-surgery
Return to normal activity	Within days

SECTION 06

Questions to Ask Your Doctor

Not all urologists subspecialize in male reproductive medicine. Use these questions to assess whether you are seeing the right specialist:

Q: Do I have a varicocele, and what grade is it?

Varicoceles are graded 1–3 based on size. Grade 2 and 3 are more likely to impact fertility and testosterone.

Q: Is my varicocele likely affecting my fertility or testosterone?

Your semen analysis and testosterone levels, combined with the varicocele grade, help answer this.

Q: What type of surgery do you perform?

Microsurgical varicocelectomy under an operating microscope is the gold standard. Ask specifically about their technique and annual volume.

Q: Should I get a semen analysis before and after treatment?

Yes, always. This is how you measure success and track improvement over the 3–6 month recovery window.

Q: Could this improve my testosterone without TRT?

In men with both a varicocele and low testosterone who still want to conceive, repair may raise testosterone and avoid TRT, which suppresses sperm production.

Q: What is your recurrence rate?

Microsurgical varicocelectomy has the lowest recurrence rate of any treatment option. Push for specific numbers.

WHY DR. HOUMAN

Why Dr. Houman's Approach Is Different

Not all varicocele surgeons are the same. The precision required for microsurgical varicocelectomy means that outcomes are directly tied to training volume and subspecialty expertise. Dr. Houman is one of a small number of fellowship-trained microsurgeons in the United States who subspecializes exclusively in male reproductive medicine.

Fellowship-trained microsurgeon

Dr. Houman completed subspecialty fellowship training in male reproductive medicine and microsurgery. This training is held by fewer than 2% of practicing urologists in the United States.

Center of Excellence for Varicoceles

Dr. Houman's practice is recognized as a Center of Excellence for varicocele treatment, drawing patients from across the country and internationally for microsurgical varicocelectomy.

High surgical volume

Outcomes in microsurgery are directly linked to case volume. Dr. Houman performs microsurgical varicocelectomy at a volume that places him among the highest in the country.

The Trifecta Approach

Dr. Houman's targeted technique optimizes sperm improvement while minimizing risk of testicular atrophy and preserving testosterone production. Not all varicocelectomy is performed this way.

Published research

Dr. Houman's work has been published in leading peer-reviewed journals including the Journal of the American Medical Association, shaping the field of male reproductive medicine.

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Ready to take the next step?

If you think you may have a varicocele, or you've been trying to conceive without success, the most important thing you can do is get evaluated by a subspecialist.

Book a Consultation

www.HoumanMD.com/contact

Website: HoumanMD.com

This guide is intended for educational purposes only and does not constitute medical advice. Please consult a qualified physician for diagnosis and treatment.