JUSTIN HOUMAN MD
MEN'S HEALTH
TOWER UROLOGY

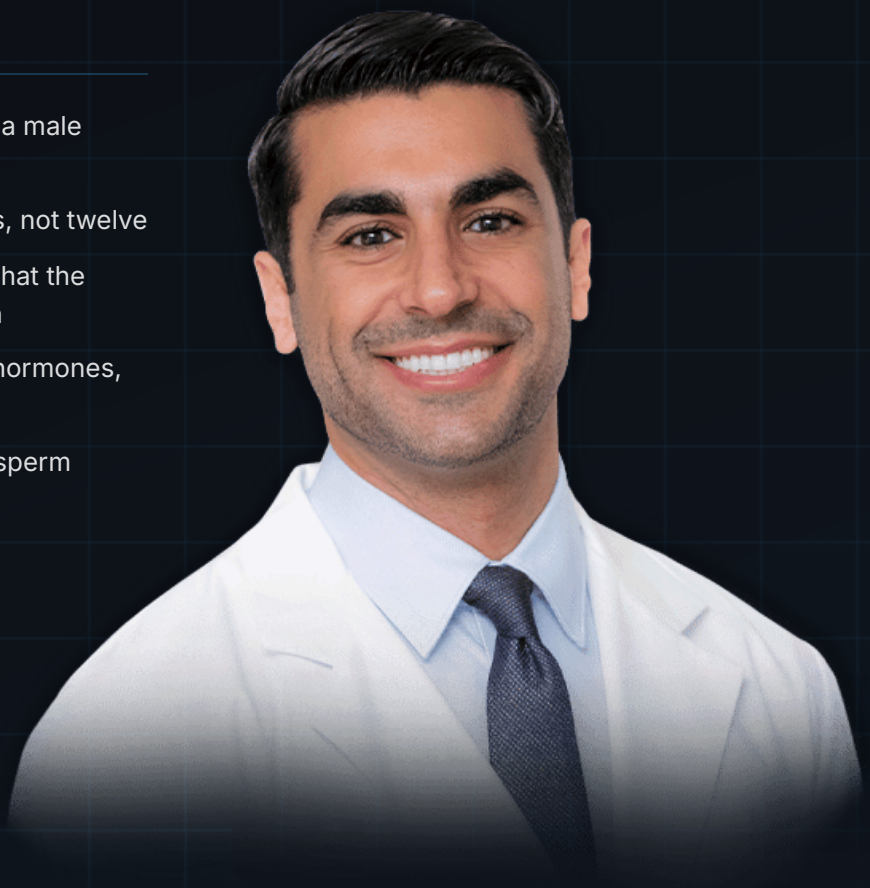
FREE GUIDE

MALE FERTILITY

Male infertility needs a real diagnosis.

Any couple struggling with infertility, whether it's three months, four months, six months, get evaluated. Both partners, male and female.

- Why about half of infertility cases involve a male factor
- When to get evaluated: I say three months, not twelve
- Your semen analysis: what it measures, what the numbers mean, and why one isn't enough
- The causes we can often fix: varicocele, hormones, testosterone use, heat and lifestyle
- Zero sperm, age, and when to bank your sperm



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01 START HERE

About half the time, it involves the man.

I see this all the time. A couple is trying to conceive for six months, sometimes a year, sometimes even 18 months, and they're struggling. Why? Because the male fertility evaluation has not been done.

It takes two to tango. Sometimes it's the male factor, sometimes the female factor. According to the American Urological Association and the American Society for Reproductive Medicine, male factors contribute to about half of all infertility cases. In 20 to 30 percent of couples, it's the only factor.

The problem with male fertility is you're not symptomatic from it. I saw a healthy guy who, just genetically, was unable to produce any sperm. Would he have known this otherwise? No idea. Because there are no signs, make sure you get evaluated, and get evaluated early.

02 WHAT CAUSES IT

Four main causes of male factor infertility.

I try to keep it as simple as possible.

NUMBER ONE

Abnormal hormone levels

The testosterone inside the testicle matters, not just for the number of sperm, but how they move, how they look, even the quality of the DNA within the sperm.

NUMBER TWO

Anatomy

Varicoceles, which are like the varicose veins you get in the legs. Testicular trauma. Infections within the testicle, like orchitis, that caused damage.

NUMBER THREE

Genetics

Sometimes the hand you're dealt means you're unable to produce sperm, or you produce severely low counts. It's a test we can do in the office.

NUMBER FOUR

Lifestyle

Probably one of the most important. Eating healthy, sleeping, exercise. Everything that's good for your heart is good for your reproductive health.

> **Reproductive health is a marker for your overall health. I always tell guys, it's not just about becoming a father. You want to be a healthy father, with the energy and the vitality to take care of your kids.**

03 WHEN TO GET EVALUATED

I think three months is the right number.

You'll often hear twelve months of trying. The twelve-month mark is a definition of infertility. It was never meant to be a trigger for a semen analysis. If you're unable to conceive after about three months, that requires some level of evaluation, for both partners, at the same time.

Set the expectations that this is going to be a process. Each time you try, your chances of actually conceiving are somewhere between 20 and 25 percent, which is pretty low. That's why it takes months and months. You're not going to have a kid in the first two months of trying.

Don't wait at all if you've had an undescended testicle, a torsion, chemotherapy or pelvic radiation, groin or scrotal surgery, or if you're taking testosterone in any form. Sperm takes about 72 days to develop, so nothing we do to fix it shows up in a sample for at least three months. Every month of delay gets added to the front of that timeline. The earlier you get evaluated, the better.

04 THE WORKUP

What the male fertility workup looks like.

1. **A conversation.**
   Your medical history, the medications you're on, how long you've been trying, any problems conceiving in the past, any successes. The first question I ask is: are you on testosterone?
2. **A semen analysis.**
   To see where your baseline fertility is now. It tells us whether the problem could be the concentration, the motility, the morphology. Sometimes we even get a sense that there may be an infection.
3. **A blood test.**
   Some of your fertility hormones, but more importantly your testosterone and your estrogen levels. All of these can affect your fertility, positively or negatively.
4. **A physical exam, and sometimes an ultrasound.**
   To see if you have a varicocele or any scrotal abnormality.

It's relatively straightforward, and it doesn't hurt. The DNA fragmentation index is something we can add in some situations, depending on those first results. After that, we have a great sense of where you are and what we can do to improve your fertility.

05 YOUR SEMEN ANALYSIS

What it measures, and what the numbers mean.

There are four things we look at in a semen analysis: the volume, how much is coming out; the concentration, how many sperm per milliliter; the motility, how they're moving; and the morphology, how they look.

Measure	WHO 2021 reference	What it tells us
Volume	1.4 mL or more	How much is coming out.
Concentration	16 million per mL or more	How many sperm there are per milliliter.
Total count	39 million or more	The number of sperm in the whole sample.
Total motility	42% or more	How many of them are moving.
Progressive motility	30% or more	The ones swimming in a particular direction. Some sperm look good but swim in circles.
Morphology	4% normal or more	How they look: a healthy head and a healthy tail. Believe it or not, only 4% have to look good for a normal semen analysis.

Reference values are the lower limits in the World Health Organization's 2021 laboratory manual. Your lab may print slightly different cutoffs.

A number below the reference doesn't mean you can't father a child. Each time you ejaculate, there are tens of millions, if not hundreds of millions, of sperm, and all you need is one. It means we look further. And a normal result isn't the end of the story either (next page).

You can order a semen analysis kit online and mail it in, and you're welcome to send those numbers before your visit. But a mail-in kit is not a substitute for an andrology lab. I've had to repeat almost every one I've been handed.

DON'T SAVE IT UP

If you're trying to conceive, a month off works against you. When sperm sits in the epididymis, where your sperm is stored, for long periods of time, it can damage the quality of the sperm and compromise its DNA integrity, which can make conception a lot harder.

06 THREE MYTHS

Three things about fertility testing that cost couples years.

1. **"A normal semen analysis is all you need." Not so much.**
Having a normal semen analysis is great, but it doesn't necessarily mean the DNA integrity of the sperm is good. If you have a normal semen analysis and you're struggling to conceive with your partner, get evaluated. That will give us more clues about what's going on.

2. **"Infertility is only a woman's issue." Absolutely not.**
Any couple struggling with infertility, whether it's three months, four months, six months, get evaluated. Both partners, male and female. The earlier you do it, the better off you will be, without question.

3. **"A single semen analysis is all you need." No.**
We know semen analyses vary from time to time. If yours is abnormal, repeat it in two to four weeks, with two to five days of abstinence, to get another data point. Maybe get a third. It varies depending on whether you're ill, whether you slept poorly, even the time of year. Just having one is not enough.

07 NORMAL NUMBERS, STILL NO PREGNANCY

The semen analysis is a good test, but it's not a perfect test.

Even though the semen analysis may look normal on paper, there are a number of other variables involved: your hormone analysis, even your DNA sperm fragmentation. Think of the semen analysis like a bird's eye view. The DNA fragmentation test looks at the sperm itself, the quality of the sperm, if you will.

For example, we could see a guy who has a mild varicocele and great semen parameters. He and his partner try to conceive, and they have a miscarriage, or two. We do a DNA fragmentation test, and the DNA is damaged. Then we examine him, and he has a varicocele.

SHOULD EVERYONE GET IT?

Not right off the bat

Not so much. But if you're struggling, depending on your age, the earlier you assess it, the better.

WHY SOONER IS BETTER

Changes take three to four months

Whatever we do, a hormonal change, a lifestyle change, a surgery, it takes a good three to four months to see the benefit on the semen analysis.

08 VARICOCELE

About 15 percent of men have a varicocele.

But when you're looking at infertile men, guys who are struggling to conceive, about 40 percent have a varicocele. So it's a very correctable cause of infertility, not just for the man, but for the couple.

A varicocele is basically varicose veins of your scrotum. The testicle needs to live within a very narrow temperature range. It has to be cooler than the rest of your body. The scrotum acts as a thermostat: it brings the testicles closer to the body and takes them away depending on that temperature. When you have a varicocele, blood pools around the testicle, increasing the testicular temperature and causing damage to the sperm. It can also lower your testosterone levels.

Not everyone has pain. Guys can have a severe grade three varicocele and not even know it. If you're struggling with fertility, check to see if you have a varicocele. It's a very easy thing to do.

Who needs it fixed? It's definitely not for everyone.

If you have a varicocele but a normal semen analysis, no testicular pain, your testicles are developing the way they should, and you have normal testosterone levels, there's no role for a varicocelectomy. There are three scenarios where a man should get it fixed:

NUMBER ONE

Abnormal semen parameters

Your concentration, your motility or your morphology. Fixing it can only help improve those counts.

NUMBER TWO

Testicular pain

A varicocele can cause pain from the congestion in the veins, and a varicocelectomy can improve it.

NUMBER THREE

A smaller testicle

When the smaller testicle has the varicocele, fixing it can help its function. Counts and testosterone can improve.

My honest take is that the microsurgical varicocelectomy is the gold standard, because under the microscope we see each individual vein and tie it off. The recurrence rates are anywhere from 0.5 to 1 percent. For embolization, they're anywhere from 10 to 13 percent.

WATCH ME EXPLAIN IT

Varicocele, male infertility and testicular pain

Scan, or **tap here** to watch on YouTube.

My varicocele guide goes deeper on the surgery, embolization and recovery: **go.houmanmd.com/varicocele-guide**

09 HEAT AND THE OTHER SPERM KILLERS

Five things that damage male fertility.

Most guys are doing at least one of them.

1. **Heat.**
Saunas, steam rooms, jacuzzis, laptops on the lap. Any of these things increase testicular temperatures, which not only decreases sperm counts, but damages the DNA of the sperm.

2. **Marijuana.**
Marijuana can be an aphrodisiac for some men, so they engage in more intercourse. However, it does damage the sperm counts as well as the sperm motility if you do it on a regular basis.

3. **Alcohol in excess.**
It's not just the occasional drink. It's when you binge drink. I'm talking four or five drinks in a given night on a regular basis. This can severely lower sperm counts as well as your testosterone levels.

4. **Poor sleep.**
Chronic poor sleep can really decrease your sperm counts, by lowering your intratesticular testosterone. The lower your testosterone is inside the testicle, the more it damages the architecture necessary to build healthy sperm.

5. **Chronic stress.**
When you have chronic stress, your testosterone levels are suppressed. As your testosterone levels get suppressed, your sperm counts and quality decrease as a result.

IF YOU LOVE THE SAUNA

Bring a bag of ice

If you're going to do a sauna, it's actually fine, but go in there with a bag of ice or an ice pack, wrapped in a towel, to keep that area cool.

PHONES AND LAPTOPS

Back pocket, not your lap

Don't put laptops on your lap. Put the cell phone in the back pocket as much as possible.

THE 72-DAY CLOCK

The life cycle of a sperm is about 72 days, so about two and a half months. Whether you're reducing testicular temperatures, marijuana, alcohol or stress, or improving your sleep, you should notice an improvement in your sperm quality and your counts within about three months.

10 WEIGHT AND SUPPLEMENTS

Losing weight helps, no matter how.

Excess weight invariably lowers your testosterone levels and can only hurt your sperm counts and your sperm quality. Losing weight improves both of those things. If you could do it naturally, wonderful. If you do need the help of a GLP-1, that's great. The connection between GLP-1s and sperm health is still TBD, but early data suggests that it's helpful.

Supplements: they can only help.

Vitamin E and coenzyme Q10 are tried and true. They aren't going to swing the needle a lot, and they help some men more than others, but if you're struggling with fertility, a supplement can never hurt.

11 TESTOSTERONE AND FERTILITY

If you're on testosterone and want kids.

I can't tell you how many times in a given week a guy comes to me trying to have a kid. The first question I ask is, are you on testosterone? They're like, yeah, I've been on it for five years. They never told me my sperm counts go to zero.

Testosterone replacement therapy suppresses or really inhibits your ability to produce normal, healthy sperm. Taking testosterone for low testosterone is the exact opposite of what you want to do, because it lowers the testosterone inside your testicles. If you're interested in having kids, there's a whole different way of treating it.

If you're already on it, there's a regimen we put you on. We decrease the testosterone injections, while at the same time ramping you up with different medications, like HCG, Clomid or enclomiphene. These tell the testicle to produce more testosterone, which is good for testosterone and good for sperm count.

HOW LONG

About three to six months

Sometimes as early as three months. Other times it can take as long as seven or eight months.

HOW OFTEN IT WORKS

Almost 98% of men

We have one published study on this that says almost 98% of men are able to produce sperm again.

No one really feels as good on the other regimen as they did on testosterone, so those months can be rough.

WATCH

Raising testosterone while protecting fertility

Scan, or **tap here** to watch on YouTube.

12 ZERO SPERM

Zero sperm is not the end of the world.

It's called azoospermia, and it affects about 1% of men. When men have zero sperm on numerous samples, it comes down to two reasons.

REASON ONE

Something is blocked

You're producing sperm, but the outlet, the path outwards, is blocked, for example after a vasectomy. Sometimes we're able to do a vasectomy reversal.

REASON TWO

A production issue

The testicles themselves aren't producing sperm. After we've ruled everything else out, a microTESE is the treatment for this.

In a microTESE, we go under the surgical microscope and identify the small tubules within the testicle itself that contain sperm. We try to find those small pockets of sperm, pull them, and use them for IVF. Depending on the cause, we're able to fix this, or at least try to. We do have treatment options, but you do require a workup to see what the next best steps are. And if you're on testosterone, that's the first thing we look at.

13 AGE AND BANKING

Sperm counts decline after your mid-20s.

Men are having kids at an older age, and with that, sperm can be a little less healthy the older you get. You can have healthy babies at a late age, absolutely.

If a guy is in his 30s, even his mid-30s, and he's single, banking your sperm is probably a good idea. Not only will you have sperm, but you'll have healthier sperm, because it's sperm from a younger period of your life. It's very easy to do these days. There are websites that let you do it at home: you ejaculate into a cup, you mail it in, and they keep it frozen for you.

AN INSURANCE POLICY

It's the same way you insure your car or your home. Banking also matters before a vasectomy, and for men facing fertility decisions before cancer treatment.

14 HOW I PRACTICE

The Male Fertility Restoration Program.

I launched this program around a complete evaluation of the male partner, and treatment of the causes we can correct, before a couple turns to assisted reproduction.

WHY I STARTED IT

"A varicocele, a hormonal imbalance, an obstruction. These are specific, identifiable problems, and in many men they are correctable. What I want this program to do is make sure every man has a real diagnosis before a couple commits to assisted reproduction."

Depending on what we find, treatment can include varicocele repair, hormonal therapy, vasectomy reversal, or microsurgical sperm retrieval, including microTESE, for men with zero sperm. After any treatment, we recheck the semen analysis about every 90 days. It isn't against IVF. I coordinate directly with reproductive endocrinologists, and when IVF or ICSI is the most direct route for a couple, the work shifts to improving the quality of the sperm that cycle depends on.

Who it's for: men starting a first fertility evaluation, men with an abnormal semen analysis and no explanation, men considering a vasectomy reversal, men facing fertility decisions before cancer treatment, and couples told to go straight to assisted reproduction without a male workup.

15 WHERE TO START

Three things that matter, wherever you go.

1. **The full fertility evaluation.**
   A semen analysis, a hormone evaluation, and a physical exam to rule out a varicocele.
2. **A sub-specialist in male fertility.**
   A reproductive urologist who can do all of those things and give you the comprehensive workup.
3. **A plan for the couple.**
   As much as male fertility is a science, it's also an art. His age, her age, her reproductive potential, his, and your goals. Not every couple is treated the same way.

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Visit, in person or by video	**The workup**	**Find the cause**	**Treat it**	**Recheck**
Your history, and any results you've had.	Semen analysis, blood test, exam.	Hormones, a varicocele, a blockage, lifestyle.	A plan built around both of you and your goals.	A new semen analysis in about three months.

ABOUT WHO WROTE THIS

I'm Dr. Justin Houman.

I'm a board-certified men's health urologist and assistant professor of urology at Cedars-Sinai Medical Center in Los Angeles. I practice at Tower Urology.

When I was in residency, very few urologists specialized in men's health. Men's health is really three buckets: sexual health, fertility health and hormonal health. These are the things that bring men to the doctor for the first time. Men won't tell you when they have high blood pressure, but they'll tell you when they can't get an erection.

A typical urology visit is no more than ten minutes. Patients are meant to be pushed through, not dug into to figure out what is actually going on. My practice is different. I like to figure out what the cause is, so it has better long-term outcomes. Being at Tower Urology at Cedars-Sinai, I have the background of an academic medical center, but with my own practice inside it I'm not on a corporate clock.

TRAINING

Fellowship-trained microsurgeon

Board-certified urologist with fellowship training in male reproductive medicine and microsurgery.

VOLUME

1,000+ varicocelectomies, 800+ implants

Microsurgery for fertility, pain and sexual health is a big part of my practice.

RECOGNITION

Super Doctors® Rising Stars℠

Selected for inclusion in 2027 Southern California Super Doctors® Rising Stars℠, Urology.

DESIGNATIONS

Centers of Excellence

Endo Xiaflex Center of Excellence (Peyronie's) and Boston Scientific AMS 700 Center of Excellence (penile implants).

VISITS IN PERSON OR BY VIDEO

You don't have to live in Los Angeles.

Telehealth is how a lot of my patients actually start. The first visit for a lot of patients, especially patients who are outside of Los Angeles, is a video call from home. We go through your symptoms, your history, and any labs or imaging you've had. Sometimes patients send those in beforehand. A lot of patients come to me for second opinions on results from other urologists, and we figure out what's missing, what hasn't been done. Many times an exam needs to be done in person before figuring out the next steps.

YOUR NEXT STEP

The earlier you get evaluated, the better.

I see patients from all over when it comes to male fertility issues, whether you're in the city, the state, nationwide, even outside the country. We're happy to do telemedicine visits. We can review your records and your results, and figure out what the next best steps are.

REQUEST A VISIT

Book online

Scan, or tap here.
houmanmd.com/contact

CALL MY OFFICE

310-854-7822

Monday to Friday, 8:30am to 5pm
Tower Urology at Cedars-Sinai

Not in Los Angeles? If distance is what's stopping you from coming to see me, a video visit is a great alternative.

BEFORE YOU BOOK

I see patients Wednesday through Friday, and new-patient openings are limited each week.

One practical note so there are no surprises: I'm in-network with Medicare. Other insurance is out-of-network, and my office provides a superbill you can submit to your plan for reimbursement. My team will walk you through costs before you book anything.

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