



# Prevention of Male Infertility

## Preventable causes inhibit conception for many couples

BY SAMUEL T. THOMPSON, MD

Many physicians, when questioned by their patients concerning fertility issues, don't know what advice to give besides "keep trying." Many are not aware of the multitude of modern-day factors that can inhibit a couple's fertility; such factors are preventable reasons for infertility but are often unknown or overlooked. Some of the factors take effect when a couple is trying to conceive. Others occur months to years before a man even thinks about becoming a father.

### Scope of the problem

Young couples often perceive infertility as a larger or smaller problem than it is. So what are the facts? Approximately 15% of couples in the U.S. who are trying to conceive will be unsuccessful in the first year and be considered infertile. A male factor etiology is solely responsible in 20% of cases and contributes in combination with a female factor in another 30-40% of couples. That means the male will be implicated in at least 50% of cases.

### Preventable testicular factors

Well-known conditions that affect the testicle can occur at almost any age. Treating these conditions promptly and appropriately will prevent future infertility in the men affected. Proper treatment of undescended testicles, testicular torsion, epididymitis, and testicular trauma can minimize the potential damage of these conditions. Prostatitis and many STDs affect accessory sex glands and can lead to male infertility if not properly treated. There is a growing body of evidence that correcting varicoceles, even before reproductive age, helps prevent the often deleterious effect of this condition on a man's ability to conceive. Primary care providers are the frontline for diagnosing and providing swift treatment of these conditions with a potentially major impact on a patient's future fertility.

Numerous preventable factors that can affect a man's fertility while trying to conceive can be divided into coital factors, gonadotoxins, and infections.

### Coital barriers to conception

Coital factors that affect a couple's fertility often result from a lack of information and understanding concerning reproduction. Many couples are unaware of the importance of timing intercourse to maximize chances of conceiving. Timing intercourse around a woman's ovulation is crucial for success. Since the average life span of a sperm in the female reproductive tract is about 48 hours, having intercourse every two days around the time of ovulation is the optimal timing for conception. With more frequent

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intercourse, a man's ejaculate will be poor because of lack of time for the sperm to accumulate. Infrequent ejaculation leads to more sperm but less motility because the sperm are older. Educating couples on these crucial facts often improves their chances enough to conceive.

Other coital factors include stress-induced erectile dysfunction as well as retrograde ejaculation or complete lack of ejaculation such as that seen in spinal cord injury patients and other neurologically impaired men with diabetes and MS. Short term use of PDE inhibitors is often the only treatment necessary to help a man with stress-induced ED trying to conceive. A urologist with an interest in male infertility will have a number of options to offer the neurologically impaired patient with more permanent ejaculatory problems.

### The heat factor

The top of everyone's list when discussing gonadotoxins is heat, this will be the question the infertile couple most likely will ask their physician. "Does environmental heat really make a difference? Should my husband change the type of underwear he wears?" Sorting through the myths and half-truths to give your patients valuable advice on this issue can be a challenge.

Scientific studies show that only three forms of heat can significantly affect fertility in men. A fever can temporarily reduce a man's sperm count, and the effect will take as long as 3 months to wear off. Soaking in a bathtub, hot tub, or sauna has been shown to reduce



male fertility temporarily. Finally the heat caused by an untreated varicocele is the most common correctable cause of male infertility. While it causes no harm, having a man switch to boxer shorts has not been shown reliably to improve semen parameters.

### Drugs and alcohol

While most men in the reproductive age group are not on prescription medicine that would affect their fertility, some are unwittingly using drugs that reduce their chances of conceiving. Tobacco is the most common drug that can affect male fertility. Improving their chances to conceive is another reason to encourage your patients to quit this habit. Alcohol use has been shown to have an effect only with heavy use over an extended length of time. Topping the list of illegal drugs is marijuana, which has a far more potent effect on fertility than tobacco.

The most overlooked recreational drugs are anabolic steroids, which always affects male fertility during use. The effect can

## UroPoint Centers for Male Fertility Open in Carmel and Greenwood

UroPoint, a division of Urology of Indiana LLC, is pleased to announce the addition of UroPoint Centers for Male Fertility. Through these centers, we will work with couples who have difficulty conceiving. Approximately 40% of infertility cases are related to male reproductive problems.

Samuel T. Thompson, MD, a fellowship-trained male infertility specialist, will serve as Medical Director. UroPoint Centers for Male Fertility are located at 12188-A North Meridian St., Suite 200, Carmel, and at 679 East County Line Road, Greenwood. For more information about the UroPoint Centers for Male Fertility or to schedule an appointment, please call (877) 362-2778.

be permanent given high enough doses. Unfortunately, doctors prescribing testosterone to men with low testosterone levels can contribute to delay in conception if these men are trying to have children. Testosterone should be considered a male contraceptive, whether prescribed by a physician or abused by men in the gym.

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Infections of the urinary tract or prostate also can prevent a man from conceiving. While many of these infections are symptomatic and easily treated, asymptomatic infections are often detected only by looking carefully for evidence in the semen analysis.

Whether by a patient, family member, or neighbor, couples often ask physicians for advice about improving their chance of conceiving. There is a multitude of helpful answers to give beyond "keep trying." Besides advice, referral to a urologist with an interest in male infertility will help your patient on the road to fatherhood. ■



**Samuel T. Thompson, MD** is a native of Indianapolis. He graduated from Indiana University and earned his medical degree from Indiana University School of Medicine. He served in the Indiana Army National Guard and in the Ohio Army National Guard. He completed his residency at Case Western Reserve University in Cleveland, Ohio, and his fellowship in Male Infertility at Baylor College of Medicine in Houston, Texas. Dr. Thompson is the only fellowship-trained specialist in male infertility in central Indiana. He holds American Board of Urology certification and is a Fellow of the American College of Surgeons. He specializes in the comprehensive evaluation of male infertility, including in-office semen analysis and hormonal evaluation. Treatments include microsurgical reconstruction of the male reproductive tract, vasectomy reversals, sperm aspiration, surgical repair of varicoceles, treatment of ejaculatory dysfunction, hormonal imbalance, and infectious complications. Dr. Thompson is the medical director of UroPoint Center for Male Fertility.