

# Infertility:

## A Male or Female Issue?

by Abbey Cappadonna

As the saying goes, “It takes two to tango,” but when it comes to diagnosing and treating infertility, women tend to take the lead while men reluctantly follow...



“Society still sees infertility as a predominately female issue,” says Dr. Michael Newell, a male infertility specialist with Urology San Antonio. “But the truth is it is really a couple’s issue.”

In 30 percent of infertile couples, the cause is attributed to the male alone. In another 20 percent, pathology is found in both the male and the female. Therefore, the “male factor” in infertility is found in approximately half of all infertile couples. Despite the frequency of male factor infertility, men are often unwilling or reluctant to participate in fertility testing and treatment.

“In some cultures, men see the ability to reproduce as a reflection of their manhood,” says Dr. Newell. “Having to confront the idea that one might be infertile, and thereby less of a man, causes many men to avoid testing. But it’s important that both partners participate.”

In fact, Dr. Newell says that evaluating the male partner first or at least concurrently with the woman is key to lessening the lengthy, time consuming, and expensive diagnosis and treatment process.

“Compared to those for the female, the tests for the male are relatively uncomplicated. Everything relates to the sperm,”

states Dr. Newell. “Two semen analyses, properly performed, define the essential first part in the evaluation of the male and provide the foundation for further testing.”

The semen analysis includes several characteristics, but the most important are semen volume, sperm quantity or concentration, sperm motility, and sperm morphology. When these parameters are compared to established “levels of adequacy,” the likelihood of pregnancy (in the absence of female factor) can be accurately predicted.

But before any laboratory testing, it is essential to obtain a thorough medical history with emphasis on any prior testicular insult or injury. For example, mumps infection after puberty may involve testes and, if bilateral, can permanently destroy the mechanism for spermatogenesis. Injury to the vas deferens during inguinal hernia repair can severely impair the sperm transport process and thereby promote infertility.

Male factor problems are classified into three broad categories: pretesticular, testicular, and post-testicular. As Dr. Newell explains, the testis is like a factory that takes orders from corporate headquarters (the hypothalamus and pituitary gland), fabricates the product (sperm), and then delivers it to market via the ductal system to the prostate and seminal vesicles.

## Pretesticular Problems and Treatment

Pretesticular problems are typically hormonal, having to do with either hypothalamic or pituitary diseases that affect the release of LH and FSH and consequently limit testosterone and sperm production, respectively. If the gonadotrophic hormones are inadequate, the result is insufficient sperm and testosterone production. This is called secondary hypogonadism, and if it is diagnosed properly, replacement therapy with the appropriate gonadotropin is often successful in rectifying the abnormality.

## Testicular Problems and Treatments

Testicular pathology adversely alters the environment of the developing sperm. Past or present illnesses such as mumps orchitis or renal failure; gonadotoxins such as recreational drugs and chemotherapy; and trauma to the testes can all impair the production of healthy sperm.

“A very common testicular problem is a varicocele, an enlarged vein on the left side of the scrotum that causes blood to pool and elevates the intratesticular temperature,” notes Dr. LeRoy Jones, a male infertility specialist who recently joined Urology San Antonio. “The condition doesn’t always cause infertility, but in cases where it does, it’s easily treated with outpatient surgery. In two thirds of men, the treatment doubles their fertility chances.”

Some men may suffer from chromosomal abnormalities that impair their sexual development. The most common example is Klinefelter’s Syndrome, a genetic disorder due to the presence of an extra X chromosome. Unfortunately, most of the infertility that results from chromosomal disorders is incurable.

## Post-Testicular Problems and Treatments

Post-testicular causes of infertility include not only disorders of sperm transport but also disorders of sperm

*Continues next page*

## *Up Close and Personal* by David Talley, M.D.

Doctors who treat infertility are deeply aware of their patients’ complex and often distressing emotions. They sense the frustration, anxiety, and sorrow and offer the best support they know how to provide; yet few can relate firsthand to their patients’ circumstance. But I can.

As a urologist and male infertility specialist who has undergone fertility treatments, I understand exactly what my patients are thinking and am all too aware of their fears in dealing with infertility. My personal experiences in the area I treat have added an emphatic element of care that few others can offer.

Seven years ago, my wife Kathy and I began trying to conceive. We never suspected that we might be infertile, but after many unsuccessful months, we initiated a medical search for answers. Under the care of our physicians, each of us underwent the gamut of tests and medical evaluations that I, ironically, had been administering to my patients.

Like many couples, our results indicated “unexplained infertility.” Learning this outcome was incredibly frustrating for Kathy and me. If we had had an identifiable problem, we were prepared to treat it, but our diagnosis left us with nowhere to begin. We intensified our search for the cause and solution and underwent more evaluations and lab tests and even had intrauterine insemination (IUI) and in vitro fertilization (IVF) all without success.

During the entire experience, we couldn’t help but feel that, “This is not fair.” The stress of the situation taught me to understand what I have always known in my practice: a couple’s attitude toward treatment

and ability to depend on each other will determine whether or not the treatments draw them together or tear them apart.

When I counsel patients about the treatment process, I always recommend they set guidelines and seek outside support. I also point out that in our case, prayer played a supreme role in enduring and healing from the fertility process.



**The Talley family**

Once we accepted that having biological children was not medically possible, we were able to explore the option of adoption. Though we had many fears and trepidations about the adoption process, all of them were unfounded. After completing enough paperwork to merit Top Secret Clearance in the CIA, we waited for a birth mother to select us. One did, and on July 20, 1999, my son Bryce was born. Six days later, he came home to live with us.

Bryce is a treasure. I have met many people who fail to appreciate their children for the amazing gifts they are. But because of our experiences, we realize more than ever what a blessing children are and the unexpected ways they may come into our lives. ☞

motility and function. A blocked, scarred, or absent vas deferens will not allow even a healthy sperm to reach its final destination. Conversely, a patent and normal transport system does nothing to assist a sperm with impaired motility.

Cystic fibrosis exemplifies a congenital condition wherein the ductal system (epididymis, vas deferens, and seminal vesicles) is severely hypoplastic or completely absent. Acquired disorders of sperm transport are usually the result of bacterial infection with subsequent scarring and obstruction of the ductal system. By far the most common cause of ductal obstruction is the intentional voluntary vasectomy.

“With the high instances of divorce and remarriage, we see many couples wanting a vasectomy reversal,” says Dr. Newell. “Vasectomy is rightfully considered a permanent method of birth control. However, modern microsurgical technique allows reversal of vasectomy with a high degree of success. If the procedure is performed successfully within ten years of the man’s vasectomy, there’s a very high likelihood his sperm production will return to fertile levels, but it may take two years to do so.”

### **Idiopathic Infertility**

Idiopathic infertility is defined as infertility wherein no pathologic process is revealed in either the female or the male partner. “Approximately 20 percent of couples have this type


of unexplained infertility,” says Dr. Newell.

In the case of the male, he may be “subfertile” with a sperm count that is inadequate to produce a pregnancy in the usual manner. Consequently, empirical therapy is used with the hope of improving the semen quality to a point that pregnancy can occur. Clomiphene is an example of a drug used empirically to improve the semen quality. It is also used in females to enhance egg production.

### **Efficacy of Male Testing**

Whether the cause of infertility is identified or not, a urologist can typically make a confident diagnosis of the male in a matter of six to eight weeks — a relatively short amount of time compared to the time it takes to evaluate a woman.

“Men are the easier partner to troubleshoot,” states Dr. Newell. “If we can rule out any problems with the man, then we can treat them before having the woman undergo more costly, complicated, and time consuming treatments.

“The key is educating men about the evaluation process and stressing the importance of their participation for the couple’s sake. Most men imagine the procedure to be much worse than it is and don’t realize that fertility is a male problem too,” says Dr. Newell. “Usually, the best way to get these messages across is for the woman’s doctor to educate her so she can in turn educate her partner.” 

---