

Evaluating Male Infertility

These tests include:

- When there is low volume of ejaculate, an examination of the urine after ejaculation to check for evidence of retrograde ejaculation (semen moving backward into the bladder)
- A white blood cell evaluation to check for infection in the semen
- Antisperm antibody testing to see if sperm are coated with molecules that prevent normal function such as penetration through the mucous of the cervix or the zona pellucida of the egg
- A more critical evaluation of sperm morphology that correlates well with success with in vitro fertilization
- DNA fragmentation to assess the ability of the sperms for normal pregnancy and if assisted reproduction is planned the best option between IUI and ICSI

Other tests which may be part of the male evaluation are:

- Measurement of circulating hormones in the blood
- Ultrasound studies to evaluate the testis, to confirm varicoceles or problems of the epididymis, and to examine the vas deferens and seminal vesicles for blockages in the ejaculatory ducts
- Testis biopsy, which is rarely necessary



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Q: Why test for male infertility?

A: Although people sometimes think of infertility as a woman's problem, a couple's infertility may be due to a male factor, a female factor, or both. In fact, research has shown that a male factor is involved in up to 50 percent of all cases of infertility. Because the correction of a small problem in either partner can lead to pregnancy, it is important that both partners in an infertile couple be evaluated. While male infertility testing is generally neither invasive nor painful; it is important to seek a sensitive healthcare provider who will offer supportive care.

Q: When should the male evaluation be done?

A: The male evaluation should take place along with the evaluation of the female partner. Because the male evaluation involves fewer tests than the female evaluation, it can often be completed first.

Components of the male evaluation

Minimally, a male fertility evaluation should include three components:

- Medical history
- Complete physical examination by a physician familiar with male fertility disorders and
- Semen analysis

Medical History

The history should begin with a review of the couple's fertility. Questions typically asked include:

- How long has the couple been trying to achieve a pregnancy?
- Have they been timing intercourse appropriately?
- Have there been any previous pregnancies together or with other partners?
- Is the couple experiencing problems with intercourse?

A thorough review of the male partner's health history is also important. As is a thorough review of any medications the male partner is using. Problems with sperm production, transport and delivery may result from:

- Undescended testes
- Childhood injuries to the testes
- Hernia, hydrocele, bladder, prostate or urethral surgery
- Changes in the valves at the base of the penis
- Disease of the colon, high blood pressure, mumps occurring after puberty, recent high fevers or viruses, disease of the kidney, diabetes, nerve disorders, cancer
- Medications for conditions such as heart disease or high blood pressure, as well as tobacco, alcohol and other recreational drugs
- Chemotherapy or radiation
- Genetic abnormalities, cystic fibrosis and hormone imbalances
- Regular use of hot tubs
- Exposure to environmental toxins

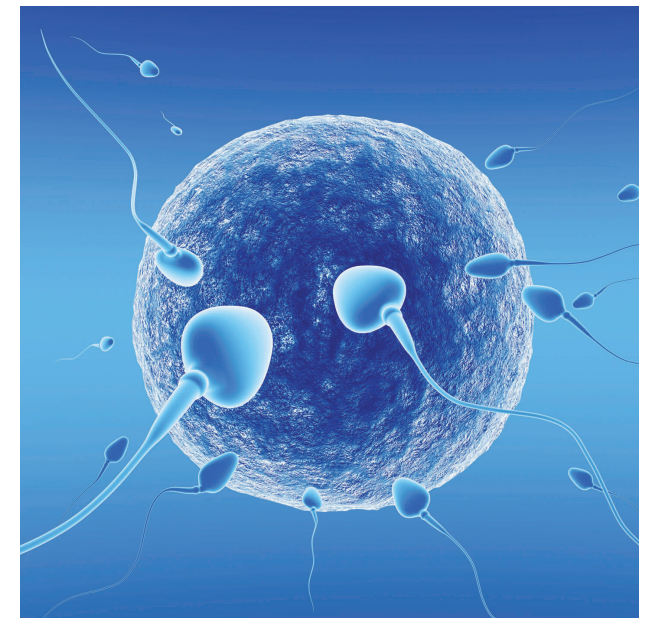
Physical Examination

A thorough, simple and painless physical examination includes overall assessment of general appearance and male sexual characteristics including:

- General examination
- Complete genital exam including evaluation of the penis for a normal urine opening and signs of curvature or scarring; the testes for size, shape and consistency and the epididymis and vas deferens for signs of obstruction or inflammation
- Examination in the standing position for varicocele (enlarged veins around the testes)

Semen Analysis

The semen analysis is the most important test for the evaluation of the male. One or more semen specimens should be obtained after three to five days of abstinence from ejaculation and examined within hours of collection by a laboratory technician with extensive experience in semen analysis.



Semen is evaluated for volume, sperm concentration, total number of sperm, sperm movement (percentage of moving and forward progression), and sperm morphology (shape).

The average sperm count is 20 million/cc, though pregnancy can occur with lower sperm counts. If the semen appears to fall into the average range, more sophisticated testing may be necessary to better evaluate sperm function.