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# Diagnostic Testing for Male Factor Infertility

When you are unable to conceive, there is an equal chance that your male partner is suffering from male factor infertility. Male factor infertility may be caused by:

- Production of low number of sperm required to fertilize an egg
- Abnormally shaped sperm that do not move normally
- Block in the male reproductive tract that is blocking the path of the sperm

A thorough history and physical examination, and a battery of tests are usually ordered to find the exact cause for male factor infertility. Some of these tests are described below.

**Semen analysis:** A semen sample is collected through masturbation. Semen is the ejaculate that contains sperm. This sample is tested within an hour of collection to measure the volume of semen, total number of sperm in the semen (total count), number of sperm in a milliliter of semen (concentration), percentage of moving sperm (motility), sperm of normal shape (morphology) and presence of infection in the reproductive system.

You may be asked to provide another sample after two weeks to confirm on the diagnosis. Both times, you are advised not to ejaculate 2 to 5 days before you provide the sample.

**Hormone levels and reproduction:** The levels of hormones may also be tested through blood work. Many hormones control sperm production, your interest in sex and ability to have intercourse.

**Other tests:** If your semen analysis results are not normal, other tests may be carried out:

- Vital staining test: Test if there are sufficient viable (live) sperm in the sample
- Antisperm antibodies test: Test for antibodies attached to sperm, preventing them from moving normally
- Peroxidase staining and semen culture: Test for infection or inflammation that could be affecting your semen

- Hypo-osmotic swelling test: Determine if the outer layer of sperm is intact or broken
- Computer-assisted semen analysis: Check for sperm motility
- Biopsy of testicles if no sperm are found
- Test sperm tubes to determine if they are intact when no sperm are found

**Genetic tests:** Certain genetic tests may be carried out as well.

- Sperm DNA testing: Detect fragile or broken DNA
- Sperm aneuploidy testing: Ascertain the correct number of chromosomes in sperm
- Chromosome analysis and/or Y-chromosome deletion testing: Determine any chromosomal defects

No single test can determine the cause of infertility. Your doctor will determine the tests that are required depending on your individual case.