



11459 Johns Creek Pkwy. Suite 170
Johns Creek, GA 30096
Phone: (678) 417-0400
Fax: (678) 417-0483
www.gaurology.com

Male Infertility Introduction

Infertility is a common problem and may affect up to 15% of all couples; it is also on the increase since more people are delaying in starting their families. Infertility had been traditionally thought of as primarily a female problem; we now realize that male infertility may also be involved in half of all infertility cases.

History, physical exams and semen analysis are the initial steps in the evaluation for possible male infertility. Complete semen analysis includes semen volume, sperm count, motility, morphology and other assessments. There are other tests such as special sperm functional assays, blood tests for male reproductive hormones and genetic male infertility, and ultrasound or x-rays which may be performed on a as needed basis. The causes for male infertility are numerous, some are simple and easily corrected whereas others are complex and genetic in etiology. Overall, these causes can be divided into two groups: production problems or obstruction.

1. *Production problems*: varicose veins of the testicle, or varicocele, is the most common problem, it may lead to reduced sperm count and/or motility. Other causes include medication or drug use, alcohol, smoking, hormonal imbalance, coexisting medical illness and genetic conditions.
2. *Obstruction*: normal sperm production takes three months, the final two and a half weeks of which are spent traveling from the testicle to the outside. The distance over which sperm must travel is 15 to 20 feet, mainly through tiny, microscopic tubules.

These tubules may be blocked congenitally or by inflammation or scarring; however, the most common cause for obstruction is previous vasectomy. Obstruction can be corrected with microscopic reconstructive surgery or sperm may be directly retrieved for in vitro fertilization (IVF), or test tube baby.

The evaluation for male infertility is fairly straight forward in most men; it starts with a detailed history and physical exam, we prefer the wife to be present in order to provide additional information since she mostly likely is being seen by a gynecologist as well. We will then proceed with two or three semen analyses and blood test for male reproductive hormones; additional tests or procedures such as ultrasounds and testis biopsy may be needed pending the initial evaluation.

We have gained a large amount of insight into male infertility; however, there are a number of men, especially those with severe production problems, for whom we have no effective treatment. In these men, unless the sperm production is completely absent, we can directly extract sperm from the testes and use them for IVF/ICSI.

When a couple is having fertility concerns, both husband and wife should be evaluated. It is not uncommon for both to have some minor abnormalities, natural conception, which is our ultimate goal, may then be possible, if either or both partners can be treated.

I hope you enjoy our web site and find the information useful; furthermore, I also recommend you visit Cornell University's excellent male infertility web site at www.maleinfertility.org for additional information.

Please do not hesitate to contact me if I can be of any further assistance to you.

Jerry Yuan, M.D.