- Even men with poor semen analysis whose conditions are not treatable or unexplained, may have the option of using advanced reproductive techniques.
- Men with no sperm in the ejaculate may also be able to procure some living sperm using other methods with advanced reproductive techniques.
- Few men, who produce no sperm at all, can explore other options.

How is male factor treated?

Varicocele:

Either surgery to close off, or use of balloon insertion to block the blood flow.

Intra Cytoplasmic Sperm Injection (ICSI):

This is done in conjunction with In-vitro fertilization (IVF - fertilization done outside the womb). After the eggs are retrieved, a single sperm is injected into each mature egg. Because the sperms do not have to swim towards the egg, this procedure can succeed even with extremely immature sperm.



A fertilization rate of at least 50-60% should be expected with a good clinic. Currently, good clinics have an ongoing pregnancy rate of 35-45%.

What lifestyle changes can help improve the quantity and quality of sperm?

- · Quit smoking
- Stop taking recreational drugs like marijuana (cannabinoid), cocaine, etc.
- Reduce alcohol consumption
- Avoid high temperatures
- Avoid anabolic steroids (male hormones)

Though boys/men use them to build muscle mass and improve athletic performance, they suppress the testes ability to make testosterone, thereby decreasing the testosterone level inside the testes and severely diminished production of sperms or complete absence of sperm. Persistent and irreversible depression of the hypothalamus and pituitary may result even after stopping consumption of these steroids.

- Avoid use of vaginal lubricants as they are toxic to sperm. Couples should avoid their use during the fertile time of a woman's cycle.
- Exercise regularly
- Take vitamins (antioxidants)

Book an Appointment **079-66770000**



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MALE INFERTILITY

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It takes just one sperm to fertilize a woman's egg and achieve fatherhood.

How common is the problem of male factor infertility?

60% of all couples that experience infertility have an infertile male factor (primarily male factor in 40% and both male and female factors in 20% cases). Therefore, when a couple is having trouble conceiving it makes sense to evaluate both the man and the woman.

What causes infertility in men?

Infertility in men is caused by:

- Problems in making sperm producing too few or no sperm.
 - Varicocele
 - > Hormonal abnormalities
 - > Abnormalities in seminal fluid
 - Ductal blockages
 - Difficulties with erection and ejaculation
- Problems with the sperm's ability to reach the egg and fertilize it - abnormal sperm shape or structure prevents it from moving the right way.

Sometimes a man is born with problems that affect his sperm. Other times problems start later in life due to illness or injury. For example, male infertility may be caused due to cystic fibrosis.

What risk factors increase a man's risk of infertility?

The quality and quantity of a man's sperm can be affected by his overall health and lifestyle.

Some risk factors that contribute to decreased sperm number and/or quality are:

Alcohol

- Drugs
- Environmental toxins, including pesticides and lead
- Cigarettes
- Health problems
- Certain medicines
- Radiation treatment and chemotherapy for cancer
- Age

How do you test for male infertility?

- Physical evaluation
- Problem identification
- Investigation
- Diagnosis

The general purpose of a man's evaluation (semen analysis and/or consultation) is to identify any problems and address them in order to maximize the quality of the man's sperm. This also reduces the need for more complicated interventions for female partner and rules out significant medical problems that may contribute to poor semen analysis.

What is semen analysis and does it confirm infertility?

Semen is the fluid that man ejaculates. The sperms within the semen are the cells that actually fertilize the egg and it is important to assess them. However, as sperms account for only 1-2% of the semen volume, problems with the fluid may interfere with the movement and function of the sperm. Semen analysis is, therefore, the most significant first step in any man's evaluation.

What tests are included in a basic semen analysis?

• Concentration (also referred to as "count")

This is a measurement of how many million sperms are produced in each millilitre of fluid. Counts of less than 20 million per millilitre (<20 million/cc) are considered sub-fertile.

Motility (also referred to as "mobility")

This describes the percentage of sperm which are moving. Half or more than half of the sperms should be moving.

Morphology

This describes the shape of the sperm as examined under microscope. It must meet specific sets of criteria of various sperm characteristics in order to be considered normal. Most commercial laboratories work according to WHO criterion which states that at least 30% of the sperm should be normal.

- Volume
- Total Motile Count

This is the number of moving sperm in the entire ejaculate

• Standard Semen Fluid Tests

Colour, viscosity (thickness of semen) and the time until the specimen liquefies should be measured.

What are the treatment options when the semen analysis turns out to be poor?

- Male factor infertility is treatable in 50% men.
 The underlying cause may be treated, either
 through medication (hormones, antibiotics) or
 surgery (varicocelectomy, vasal reconstruction,
 repair of a blocked ejaculatory duct) leading to
 significant improvement in semen quality.
- In idiopathic or unexplained infertility cases, lifestyle changes may result in an improvement in semen quality.