

The Male Factor Infertility: Causes, Diagnosis, and Treatment Overview

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DESCRIPTION

Infertility is often perceived as primarily a female issue, but male factor infertility plays a significant role in approximately 40% of cases where couples struggle to conceive. Male factor infertility refers to any condition in a man that interferes with the normal process of conception through sexual intercourse. Understanding its causes, the diagnostic process, and available treatments is crucial for couples navigating fertility challenges.

Causes of male factor infertility

Male infertility can stem from various factors, including

Sperm disorders: Conditions affecting sperm production (such as genetic abnormalities, hormonal imbalances, or testicular trauma) can lead to low sperm count (oligospermia) or complete absence of sperm (azoospermia).

Sperm motility issues: Even if sperm count is normal, poor sperm motility (asthenospermia) can impair their ability to reach and fertilize an egg.

Sperm morphology abnormalities: Abnormalities in sperm shape and structure (teratospermia) can hinder fertilization.

Obstruction: Blockages in the reproductive tract, such as from previous infections, surgery, or congenital conditions, can prevent sperm from being ejaculated normally.

Ejaculatory disorders: Problems with ejaculation, such as retrograde ejaculation (where semen enters the bladder instead of exiting the penis), can also cause infertility.

Diagnosis of male factor infertility

Diagnosing male infertility typically involves a comprehensive evaluation that includes:

Semen analysis: A key diagnostic tool to assess sperm count, motility, morphology, and other parameters.

Hormonal testing: Blood tests to evaluate hormone levels, which can identify issues such as testosterone deficiency or other hormonal imbalances affecting fertility.

Genetic testing: Particularly useful in cases of severe male infertility or when there is a family history of genetic disorders.

Imaging studies: Ultrasound or other imaging techniques to examine the reproductive organs for structural abnormalities or blockages.

Specialized tests: Additional tests, such as sperm function tests or tests for antisperm antibodies, may be conducted based on initial findings.

Treatment options for male factor infertility

Treatment options for male infertility depend on the specific diagnosis but may include

Lifestyle changes: Improving overall health through diet, exercise, and minimizing exposure to toxins can positively impact sperm production and quality.

Medications: Hormonal treatments or medications to address specific issues like infections or erectile dysfunction.

Surgical interventions: Surgical procedures to correct anatomical abnormalities, repair blockages, or retrieve sperm directly from the testicles (testicular sperm extraction, or TESE).

Assisted reproductive techniques (ART): ART procedures such as Intrauterine Insemination (IUI) or *In Vitro* Fertilization (IVF) with Intracytoplasmic Sperm Injection (ICSI) can overcome many types of male infertility by directly injecting sperm into an egg.

Donor sperm: In cases where male infertility is severe and other treatments are not viable, the use of donor sperm may be considered.

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Psychological impact

Facing male factor infertility can be warm challenging for couples, affecting self-esteem, relationships, and overall wellbeing. Open communication, support from healthcare professionals, and access to counseling or support groups can help couples navigate these challenges effectively.

CONCLUSION

Male factor infertility is a complex issue with a range of potential causes and treatment options. Advances in medical

technology and understanding continue to offer hope to couples facing these challenges. By understanding the causes, undergoing thorough diagnosis, and exploring appropriate treatment options, many couples can achieve their dream of parenthood despite male infertility factors. Seeking guidance from fertility specialists and maintaining a positive outlook are crucial steps in this journey towards conception and family building.