



The use of ICSI for the Treatment of Blastocysts, Pregnancy

Dr. Archana Singh¹, Dr. Varsha Ojha's*

I. Dr Archana Singh, IVF specialist, Obstetrician and Gynecologist, IndraIVF, Jodhpur, India.

***Correspondence to:** Dr .Varsha Ojha, Specialist Obstetrician and Gynecologist, Prime Hospital, Dubai, UAE.

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Introduction

ICSI has given lot of hope to male infertility patients, this revolutionary technique gave smiles to millions of childless couples.

ICSI: Intracytoplasmic Sperm Injection (ICSI) is performed as an additional part of an IVF treatment cycle where a single sperm is injected into each egg to assist fertilization using very fine micro-manipulation equipment. In most cases, ICSI can be used to overcome severe male infertility.

ICSI for low sperm count : ICSI involves collecting a sperm sample and cleansing it to isolate the strongest, healthiest sperm. Then a single sperm is collected and injected directly into the egg for fertilization. IVF with ICSI is often the best treatment option for men with low sperm count.

ICSI for OLIGOASTHENOTERATO: Oligoasthenoteratozoospermia (OAT) is a condition that includes oligozoospermia (low number of sperm), asthenozoospermia (poor sperm movement), and teratozoospermia (abnormal sperm shape). OAT is the most common cause of male subfertility.

ICSI for AZOOSPERMIA: Azoospermia is the medical term used when there are no sperm in the ejaculate. It can be “obstructive,” where there is a blockage preventing sperm from entering the ejaculate, or it can be “nonobstructive” when it is due to decreased sperm production by the testis.

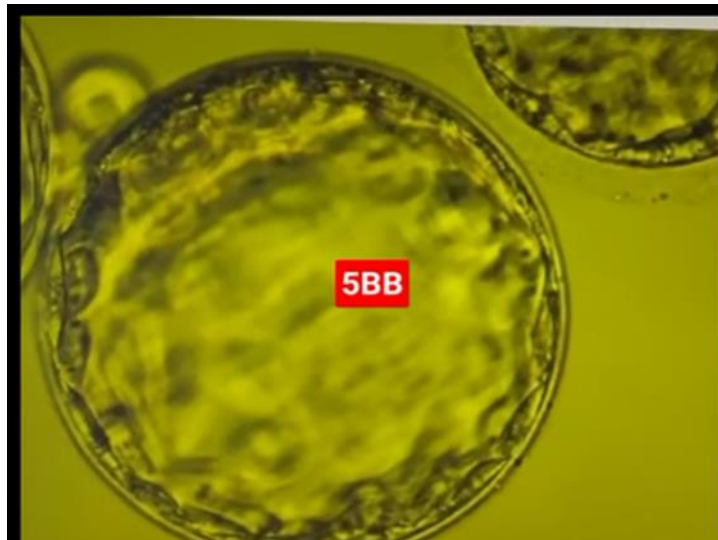
ICSI for Unexplained infertility: Intra-Cytoplasmic Sperm Injection (ICSI) has been suggested for couples whose infertility is unexplained, as its use may bypass potential fertilization barriers causing the couples' infertility [8]. ICSI was introduced in 1992 to treat couples with male factor infertility

ICSI for TESA TESE PESA: PESA involves passing a fine needle through the skin into the epididymis to obtain sperm. TESA involves passing a fine needle through the skin directly into the testes and retrieving a small number of the seminiferous tubules themselves.

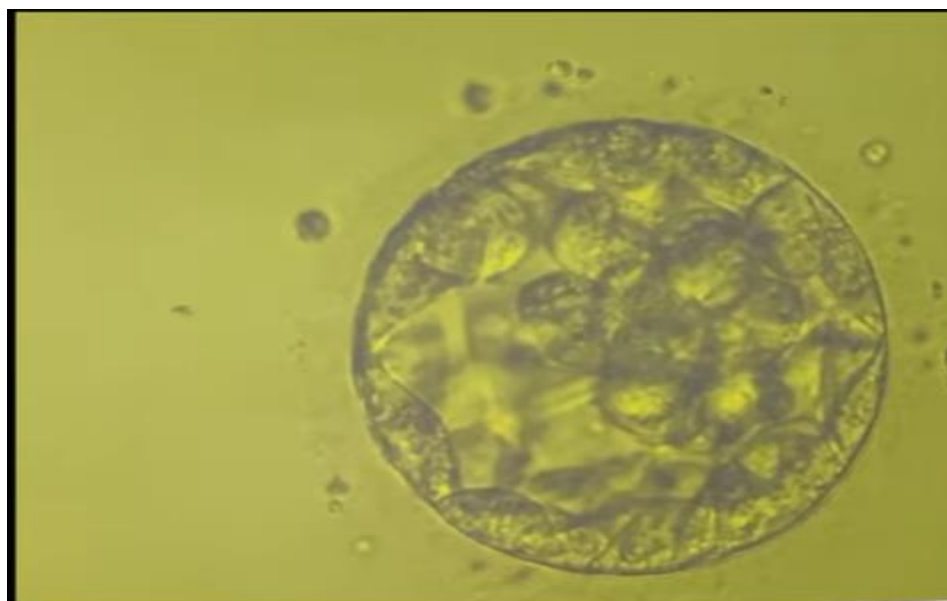
TESA or testicular sperm aspiration is performed by inserting a needle in the testis and aspirating fluid and tissue with negative pressure. The aspirated tissue is then processed in the embryology laboratory and the sperm cells extracted are used for ICSI.

ICSI for Cryptozoospermia: Intracytoplasmic sperm injection (ICSI) is well established and provides patients with severely impaired sperm quality with an opportunity to father a child. However, previous studies do not clearly indicate whether male with cryptozoospermia should use testicular sperm or ejaculated sperm for ICSI

ICSI for Obstructive & Non-obstructive cases: ICSI using spermatozoa from patients with acquired obstructive azoospermia resulted in significantly higher fertilization and pregnancy rates as compared to CAVD and non-obstructive cases.







Conclusion

The progression to blastocyst and the likelihood of conceiving a viable pregnancy were unaltered by ICSI. Thus, it seems appropriate for programs to offer BT to patients undergoing ICSI using the same inclusion criteria applied to the patients.

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