

Repeated Implantation Failures Following Embryo Transfer

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Abstract

In spite of the great deal of research in assisted reproductive techniques, more than 80% of transferred embryos by IVF/ICSI methods fail to be implanted. The causes for repeated implantation failures (RIF) may be reduced endometrial receptivity or other various uterine pathologies, such as thin endometrium, altered expression of adhesive molecules or immunological factors; whereas genetic abnormalities of male or female individuals, sperm defects, embryonic aneuploidy or zona hardening are other etiologies for implantation failures. Clinically, endometriosis, polycystic ovaries and hydrosalpinx may decrease implantation following embryo transfer due to dual disorders in the quality of embryos or endometrium. In this study, probable causes and methods of evaluation for RIF patients have been reviewed and the suggested methods for their treatment, including myomectomy, endometrial stimulation, immunotherapy, hysteroscopy, preimplantation genetic screening (PGS), assisted hatching, zygote intra-fallopian transfer (ZIFT), co-culture, blastocyst transfer, cytoplasmic transfer, tailoring stimulation protocols, intracytoplasmic sperm injection (ICSI) and salpingectomy for hydrosalpinges have been discussed.

Key Words: Repeated Implantation Failure, Embryo transfer, IVF/ICSI, Hydrosalpinx.

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