

Guidelines on the number of embryos transferred

The Practice Committee of the Society for Assisted Reproductive Technology and the American Society for Reproductive Medicine

Society for Assisted Reproductive Technology, Birmingham, Alabama

Based on data from the most current published CDC/ASRM/SART yearly report, guidelines for the number of embryos to be transferred in IVF cycles have been further refined. (Fertil Steril® 2004;82(Suppl 1):1–2. ©2004 by American Society for Reproductive Medicine.)

GUIDELINES ON NUMBER OF EMBRYOS TRANSFERRED COMMITTEE REPORT MAY 2004

Multiple gestation (particularly triplet and higher order multiple pregnancy) is an undesirable consequence of the assisted reproductive technologies (ART) (1). Multiple gestation leads to an increased risk of complications in both the fetuses and the mother (2).

Although multifetal pregnancy reduction can be performed to reduce fetal number, the procedure does not completely eliminate the risks associated with multiple pregnancy. Fetal reduction may result in the loss of all fetuses and even successful reductions may have adverse psychological consequences (3). Moreover, multifetal pregnancy reduction is not an acceptable option for many women.

These guidelines are intended to assist ART programs and patients in determining the appropriate number of cleavage stage (usually day 2 or 3) embryos to transfer. Strict limitations on the number of embryos transferred, as required by law in some countries, do not allow treatment plans to be individualized after careful consideration of each patient's own unique circumstances. Accordingly, these guidelines may be modified, according to individual clinical conditions, including patient age, embryo quality, and the opportunity for cryopreservation, and as clinical experience with newer techniques accumulates. These guidelines should be modified to replace fewer embryos when transferring embryos at a more advanced stage of development (i.e., blastocyst).

- I. Individual programs are encouraged to generate and use their own data regarding patient characteristics and the number of embryos to be transferred.
- II. The number of embryos transferred should be agreed upon by the physician and the treated patient(s), informed consent documents completed, and the information recorded in the clinical record. In the absence of data generated by the individual program, and based on data generated by all clinics providing ART services, the following guidelines are recommended:
 - A. In patients under the age of 35, no more than 2 embryos should be transferred in the absence of extraordinary circumstances. For patients with the most favorable prognosis, consideration should be given to transferring only a single embryo. Patients having the most favorable prognosis include those who are undergoing their first cycle of IVF, have good quality embryos as judged by morphologic criteria, and have excess of embryos of sufficient quality to warrant cryopreservation. Patients who have had previous success with IVF should also be considered in the most favorable prognostic category.
 - B. For patients between 35 and 37 years of age having a more favorable prognosis, no more than 2 embryos should be transferred. All others in this age group should have no more than 3 embryos transferred.
 - C. For patients between 38 and 40 years of age, no more than 4 embryos should be

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transferred. For patients in this age group having a more favorable prognosis, consideration should be given to transfer of no more than 3 embryos.

- D. For most patients greater than 40 years of age, no more than 5 embryos should be transferred.
- E. For patients with two or more previous failed IVF cycles and those having a less favorable prognosis, additional embryos may be transferred according to individual circumstances after appropriate consultation.
- F. In donor egg cycles, the age of the donor should be used to determine the appropriate number of embryos to transfer.

III. Since all oocytes may not fertilize when GIFT is performed, one more oocyte than embryo may be transferred for each prognostic category (4).

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and the Practice Committee of the American Society for Reproductive Medicine as a service to their members and other practicing clinicians. While this document reflects appropriate management of a problem encountered in the practice of reproductive medicine, it is not intended to be the only approved standard of practice or to dictate an exclusive course of treatment. Other plans of management may be appropriate, taking into account the needs of the individual patient, available resources, and institutional or clinical practice limitations. This report was approved by the Executive Council of the Society for Assisted Reproductive Technology in May 2004, and by the Board of Directors of the American Society for Reproductive Medicine in May 2004.

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