

Reproductive Technology (Evaluation & Treatment of Infertility) Guidelines for Catholic Couples⁽¹⁾

Technologies Compatible with Catholic Teachings:

1. Observation of the naturally occurring sign(s) of fertility (Natural Family Planning). Time intercourse on the days of presumed (potential) fertility for at least six months before proceeding to medical interventions.⁽²⁾
2. General medical evaluation of both spouses for infertility.
3. Post-coital test to assess sperm number and viability in "fertile type" mucus. These tests are undertaken after normal intercourse.
4. Appropriate evaluation and treatment of male factor deficiency. Seminal fluid samples can be obtained from a non-lubricated, perforated condom after normal intercourse.
5. Assessment of uterine and tubal structural competence by imaging techniques (e.g., ultrasound, hysterosalpingogram, etc.).
6. Appropriate medical treatment of ovulatory dysfunction.
7. Appropriate (usually surgical) correction of mechanical blocks to tubal patency (the state of being open).

Reproductive Technologies under Discussion (neither "approved" nor "disapproved"):

1. Gamete intra-fallopian transfer (GIFT).
(The Sacred Congregation for the Doctrine of the Faith has not yet pronounced on the subject.)
2. Intrauterine insemination (IUI) of "licitly obtained" (normal intercourse) but technologically prepared semen sample (washed, etc.).

Reproductive Technologies in Disagreement with Catholic Teachings:

1. Obtaining a sample of seminal fluid by masturbation.
2. Artificial insemination by a non-spouse (AID), or even by the husband (AIH) if the sample is obtained and handled by non-licit means (masturbated specimen).
3. In vitro fertilization (IVF), zygote intra-fallopian transfer (ZIFT), and intracytoplasmic sperm injection (ICSI), ovum donation, "surrogate" uterus.

"How do I know when a reproductive technology is morally right?"

The rule of thumb is:

Any procedure which assists marital intercourse in reaching its procreative potential is moral

Procedures which add a "third party" into the act of conception, or which substitute a laboratory procedure for intercourse, are not acceptable.

1. The guidelines are drawn from the document *Donum vitae* (1987). See also *Dignitas personae* (2008).
 2. Some women may have to wait longer for their fertility signs to appear due to the effects of recent use of chemical contraceptives (e.g., the pill, depo-provera, norplant, etc.).
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Definitions

IVF (In Vitro Fertilization):

Conception occurs outside the body--"in a glass."

Ordinarily, the woman is treated with hormones to stop her natural cycle and stimulated to ripen a number of ova. The ova are harvested from the follicle with a needle under ultrasonic guidance. The needle is inserted either through the vagina or abdomen. Ova are incubated in the laboratory with a carefully washed and adjusted specimen of semen to allow fertilization. Prior to implantation in the woman's uterus, embryos are examined in order to select the "best." Sometimes, one cell is removed for genetic testing. To date, visual inspection of the embryos has been totally unrelated to their subsequent course--health or otherwise. Usually at least two embryos are implanted; in some centers, as many as four are implanted with the hope of getting at least one live baby. At times, three or four embryos thrive. Some clinics then offer the mother "embryo reduction" (selective abortion) to allow only one or two fetuses to develop further.

Because the endometrium is considerably changed by the stimulation of ovaries to produce eggs, it is the practice in some centers to freeze the embryos and to implant them in a subsequent natural cycle. Success rates vary considerably due to the age of the woman, the health of the uterus, the quality of semen, etc. The disposition of frozen embryos varies with the wishes of the parents. "Spare embryos" may either be preserved, donated to other women or to researchers, or destroyed.

GIFT (Gamete Intra-Fallopian Transfer):

Nearly ripe ova are obtained from the woman's follicles by ultrasonically guided aspiration techniques as for IVF. But one ovum, separated with an air bubble from a prepared seminal fluid sample, is immediately reinserted with a plastic tubing into the woman's fallopian tube so that

conception will occur within the body. Pregnancy rates are similar to IVF.

ZIFT (Zygote Intra-Fallopian Transfer):

Ova and sperm are obtained analogously to IVF, but the zygote, that is the newly fertilized embryo, is immediately transferred into the woman's tube with a catheter threaded through the uterus. This does not allow examination of the embryos as it would for IVF. The live birth rate is similar to IVF.

ICSI (Intra-Cytoplasmic Sperm Injection):

When men have low sperm counts or other problems, such as blocked ducts, spermatozoa can be obtained either by masturbation or, in the absence of a normal ductal system, by needle aspiration from the epididymis or even from the testis itself. A single sperm is then injected through the membrane of the ovum and the embryo cultured in the laboratory until it reaches the 8-16 cell stage, when it is inserted into the uterine cavity.

Because the "natural selection" which occurs when sperm enter through the cervical mucus is excluded by this procedure, a number of birth defects have been recorded when conception was effected by ICSI.

AIH (Artificial insemination with husband's sperm):

Sperm can be placed into a cup which is placed over the cervix. This technique is also used in AID - artificial insemination by donor.

IUI (intrauterine insemination) of "licitly obtained" (normal intercourse) but technologically prepared semen sample.

The sperm are collected from a perforated condom after normal intercourse, washed, and then injected into the uterine cavity, bypassing the cervix to avoid "hostile" mucus. Cervical mucus hostility is an immunological reaction brought about by several known, and some unknown factors. A postcoital test would find no living sperm in mucus during the fertile phase. Other treatments for cervical mucus hostility include abstinence for two years to allow the antibodies to diminish or disappear, or the use of condoms (not acceptable for Catholics). Various treatments with steroids have been tried without much success.

This text was written by Hanna Klaus, MD

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