

The Ethics of Reproductive Technologies

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Reproduction is not this simple!



Why Help with Reproduction?

- Drive to procreate is very strong
- Christian families place high value on children
- Psalm 127:3-5:

Behold, children are a gift of the LORD,

The fruit of the womb is a reward.

Like arrows in the hand of a warrior,

So are the children of one's youth.

How blessed is the man whose quiver is full of them . . .

The Problem of Infertility

- Medical aspects:
 - Failure to become pregnant after one year of trying
 - Affects 10 to 15 percent of all couples
- Causes:
 - Male factors account for 40%
 - Female factors:
 - Failure of ovulation
 - Diseases of the uterus (e.g., STDs or pelvic inflammation)
 - Unknown (10-20%)

Methods for Assisted Procreation

- Artificial Insemination
 - Timed for ovulation
 - Sperm from husband or donor placed directly into vagina, cervix, or in uterus
 - Sperm concentration techniques may be used
- Intracytoplasmic Sperm Injection (ICSI)
 - Sperm aspirated from epididymus or testes
 - Oocyte retrieval by harvesting methods
 - After egg retrieval, one sperm injected into each oocyte

Other Methods

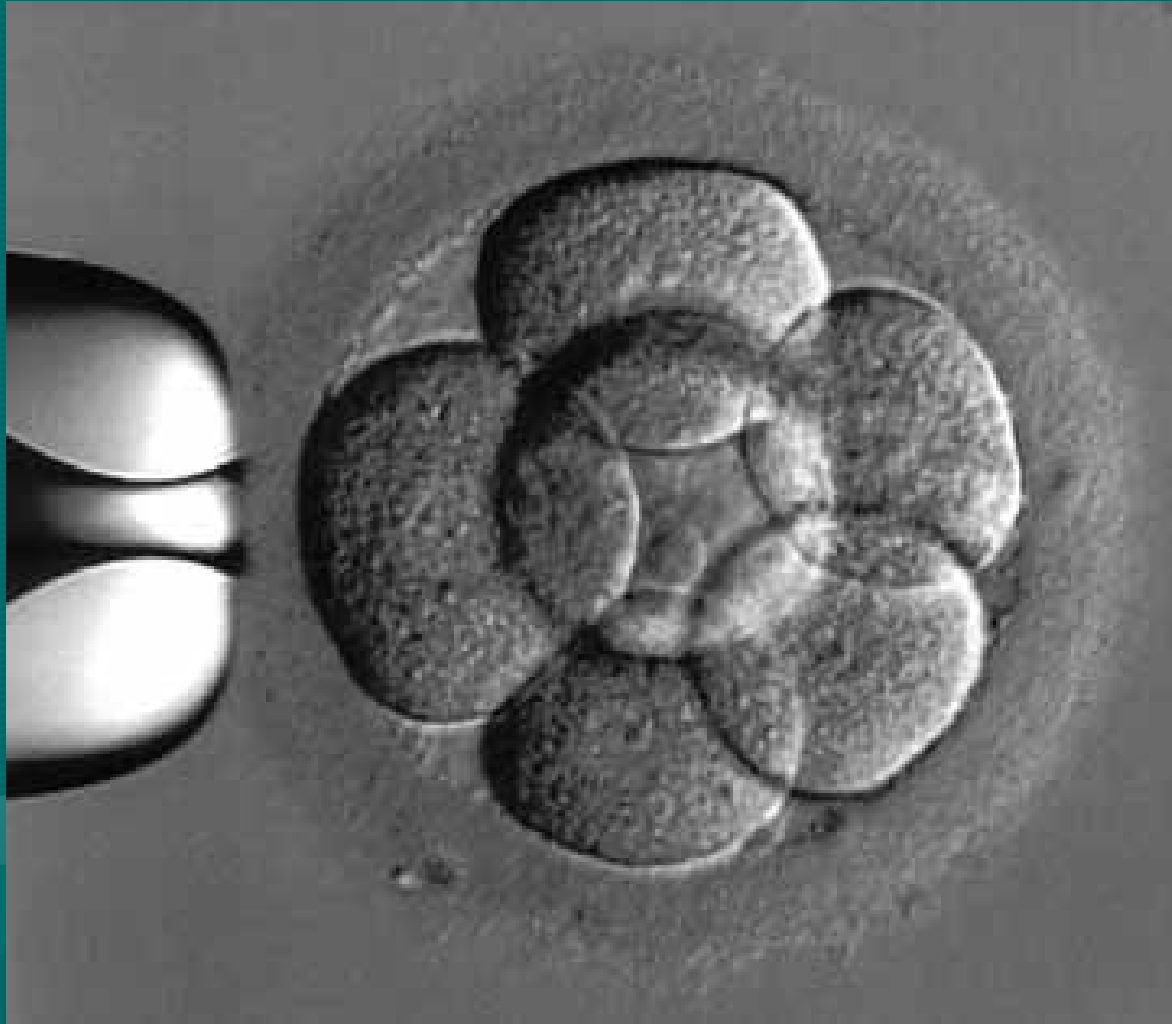
- Gamete Intrafallopian Transfer (GIFT)
 - Eggs of a donor + sperm (wife infertile)
 - Both placed into Fallopian tube of wife
- Zygote Intrafallopian Transfer (ZIFT)
 - Zygotes formed in test tube
 - Transferred within 24 hours to Fallopian tubes

Technique of IVF

- in vitro fertilization = “in glass”
 - (in vivo = in a living thing)
 - Also called blastocyst transfer (BT)
 - hyperstimulation of ovaries
 - follow progress with U/S
 - harvest eggs, then fertilize some or all
 - 3 to 5 day development of embryos
 - implantation of embryos
 - (often) freezing of remaining embryos







Costs:

- about \$10,000 for initial cycle
- about \$2000 to implant previously-frozen embryos

Success Rate:

- Initially 3 or 4 embryos
- usually 1 or 2 will develop into a full fetus
- overall success rate – about 40%
- if frozen embryos used, about 25%

Improving the Success Rate

- Implantation of 6 or 7, followed by selective reduction
- Selecting out the more “vigorous” embryos, disposing of others

Ethical Issues:

- IVF itself – morally neutral (?)
- Extra-uterine conception
- Freezing embryos
- Discarding embryos
- Selective reduction
- Third-party gametes (sperm or egg donors)
- High fees
- Human embryonic stem cell question

IVF for the Christian

- An “Ethical Consult” for Christian couples:
 - IVF only as last resource
 - No gametes outside of marriage bond
 - Only fertilize embryos that will be implanted
 - Only fertilize 3-4 embryos
 - Embryo loss may parallel natural order
 - No freezing of embryos
- After above, leave the rest to the Lord

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