AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE
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PATIENT'S FACT SHEET
Unexplained Infertility

DEFINITION AND DIAGNOSIS

Unexplained infertility is a diagnosis of exclusion, when the standard investigation of both the female and male partner has ruled out other infertility diagnoses. It doesn't mean that there is no reason for the infertility, but that the reason is unable to be identified at that time. Approximately 10 to 15 percent of couples will receive the diagnosis of unexplained infertility. The conventional infertility evaluation in the female may include: medical history, physical examination, tests of blood hormone levels, ovulatory function, and hysterosalpingogram (HSG) (an x-ray of uterus and fallopian tubes). Laparoscopy, which involves the insertion of a thin, lighted telescope-like instrument into the abdomen to look at the uterus, ovaries, and fallopian tubes, may be necessary to exclude factors such as endometriosis and adhesions (scar tissue) which may not be apparent by HSG. The conventional infertility evaluation in the male may include: medical history, physical examination, semen analysis, and hormonal testing. Tests to determine the fertilization ability of the husband's sperm, strict morphology or hamster-egg penetration test, may be performed but are not completely reliable. This problem, however, may be discovered at the time of in vitro fertilization (IVF). IVF is a method of assisted reproduction that involves combining an egg with sperm in a laboratory dish. If the egg fertilizes and begins cell division, the resulting embryo is then transferred into the woman's uterus.

OTHER FACTORS

Critical factors to be considered in evaluating and managing unexplained infertility are the duration of infertility and age of the female partner. Younger fertile couples have approximately a 20 percent chance of spontaneous conception per month. In contrast, couples with unexplained infertility, who are infertile for more than three years, have spontaneous conception rates of 1 to 2 percent per month. It is clear that the aging process is associated with a reduction in reproductive capacity and increased miscarriage, particularly after age 35 in the female. Tests of reproductive capacity (ovarian reserve), which may include cycle day 3 levels of follicle stimulating hormone (FSH) and estradiol and/or the clomiphene citrate challenge test, may be helpful in evaluating ovarian function. Infertile couples in which the female is greater than age 35 should be encouraged to actively pursue treatment after six months of trying to conceive, or if a known infertility related problem (e.g., endometriosis, history of irregular periods) is present.

THERAPY

There is no consensus as to the optimal therapy for the treatment of unexplained infertility, since many couples with one to three years of unexplained infertility will conceive spontaneously. In the female, empiric treatment (infertility treatments when no known cause of infertility has been diagnosed) with ovulation induction drugs for three to six cycles combined with intrauterine insemination (IUI) (inserting prepared semen directly into the uterus), followed by IVF or gamete intrafallopian fertilization (GIFT), is an approach frequently used. GIFT is an assisted reproductive technique that involves injecting a mixture of eggs and sperm directly into the fallopian tube. Recent research indicates that pregnancy rates with these therapies are equal to or higher than pregnancy rates of couples with other infertility diagnoses. In the future, increased understanding of human reproductive physiology will allow more effective therapies for patients with unexplained infertility.

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