

## Infertility

Infertility is defined as no conception after one year of unprotected sex. In contrast, sterility is the inability to conceive. Interventions for infertility include artificial insemination, in vitro fertilization (IVF), and drug therapy. Types of IVF include in vitro fertilization-embryo transfer, gamete intrafallopian transfer, and zygote intrafallopian transfer. Drug therapy includes clomiphene citrate (Clomid), menotropins, and gonadotropin-releasing hormone (GnRH) agonists. Surgery may be indicated to treat underlying disorders caused by structural defects of the reproductive organs. Emotional support is critical since the patient is at risk for distress, anger, and grief. Interventions implemented to address infertility may result in multiple gestations.



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### No Conception After 1 Year

#### No Conception After 1 calendar Year

Infertility is defined as no conception after 1 year of unprotected sexual intercourse. Since female fertility naturally decreases due to ovulatory dysfunction and accumulated damage from various diseases, the prevalence of infertility increases with maternal age. Females over 40 years old are particularly affected. Factors contributing to female infertility include hormonal and ovulatory factors, tubal inflammation, thyroid dysfunction, or endometriosis. Male infertility may be associated with structural or hormonal diseases, sexually transmitted diseases, substance abuse, or exposure to toxic substances.

### Interventions

#### Artificial Insemination

##### Artificial In-semen-nator

Artificial insemination is the injection of semen into the vagina or uterus other than by sexual intercourse. This procedure may be indicated if the male partner has a very low sperm count, the female partner has antisperm antibodies, or if the couple has a genetic defect. The donor sperm undergoes laboratory testing to decrease the risk of life-threatening illnesses for the recipient and fetus. Extensive counseling is critical in addressing the inability to produce a biological child, and the long-term issues related to parenting a child conceived through artificial insemination.

#### In Vitro Fertilization (IVF)

##### In V-tube Fertilized-plant

In vitro fertilization is a form of assisted reproductive technology (ART) in which an egg and sperm are combined together in a laboratory dish, and the embryo is transferred to the uterus to help facilitate conception. Various types of in vitro fertilization include in vitro fertilization-embryo transfer (IVT-ET), gamete intrafallopian transfer (GIFT), and zygote intrafallopian transfer (ZIFT).

### Drug Therapy

#### Clomiphene Citrate (Clomid)

##### Clown-muffin

Clomiphene citrate (Clomid) is indicated to treat infertility related to hormonal abnormalities by enhancing ovulation by increasing gonadotropin release.

## Menotropins

### Man-toppings

Menotropins or human menopausal gonadotropin (hMG) stimulate ovaries to produce eggs in order to stimulate ovulation for conception.

## GnRH Agonists

### Gonad-gopher Dragonist

Gonadotropin-releasing hormones (GnRH) stimulate ovulation to help increase the likelihood of conception.

## Considerations

### Treat Underlying Disorders

#### Treating the Underlying Disorders

Treatment of underlying structural disorders may help overcome infertility. Surgical interventions in females include ovarian tumor removal, adhesion removal, and hysterosalpingography to identify and treat tubal ligation. Surgical repair in males with varicocele, or enlarged veins in the scrotum, may help increase sperm count.

### Emotional Support

#### Emoticon Support

Individuals experiencing infertility benefit from emotional support. Their inability to conceive increases their risk for distress, anxiety, grief, anger, and low self-esteem. Infertility may lead to feelings of isolation and marital dysfunction in couples desiring children. Individuals undergoing donor insemination may grieve the loss of a biologic child.

### Multiple Gestations

#### Multiple Children

Individuals undergoing fertility treatment may experience multiple gestations if pregnancy is viable. However, multiple gestations lead to increased risks for both mother and fetuses. To minimize the risk of a multiple gestation pregnancy, recommendations include transferring only two embryos into women less than 37 years old.