

RANDY S. MORRIS M.D.
BOARD CERTIFIED REPRODUCTIVE ENDOCRINOLOGY
AND INFERTILITY

Medications Consent -- Frozen Embryo Transfer or Recipient of Donor Oocytes or Embryos

GONADOTROPIN RELEASING HORMONE AGONIST - GnRH_a (Lupron, Synarel, Zoladex)

GnRH agonists are synthetic protein derivatives of the human hypothalamic hormone GnRH. They are administered by injection (Lupron) or inhalation (Synarel). When given continuously at therapeutic doses, GnRH agonists first stimulate then inhibit the release of the pituitary hormones which normally stimulate the ovaries. Without pituitary stimulation, the ovaries stop development of follicles and levels of ovarian hormones such as estrogen drop to low levels. These medications are commonly used to reduce the likelihood of premature ovulation in ART cycles. They are also used to treat endometriosis, fibroids, and pelvic pain.

GONADOTROPIN RELEASING HORMONE ANTAGONIST - GRHant (Ganirelix, Cetrotide)

GnRH antagonists are synthetic protein derivatives of the human hypothalamic hormone GnRH. They function by blocking the effect of naturally produced GnRH. The result is a rapid decrease in the pituitary hormones, which continues for as long as the medication is administered.

Side effects

Since the production of estrogens from the ovaries is reduced to post-menopausal levels, any post-menopausal symptoms may occur. This commonly includes hot flashes (55%) but may also include headache (7%), vaginal dryness and irritation, decreased libido, and lethargy. Injections can cause pain, swelling, itching, or irritation at the injection sites. Inhaled medications can cause nasal irritation.

During the initial stimulation phase of GnRH agonist use, ovarian cyst formation may occur. Also, exacerbation of estrogen related medical problems such as endometriosis or fibroids might occur. These problems may require extension of the length of time for medication use or necessitate surgical treatment.

Numerous other side effects have been reported with low frequencies and include but are not limited to:

Abdominal or pelvic pain, cramps	Nausea and vomiting	Abnormal uterine bleeding
Allergic reaction	Bloating, weight gain, fluid retention.*	

*Conditions which might be influenced by this (epilepsy, migraines, asthma, cardiac or renal dysfunction) require careful observation

Use during pregnancy

Both GnRH agonists and antagonists are rated pregnancy Category "X" Its use is contraindicated in women who are already pregnant. There are reports in the scientific literature of women who inadvertently took GnRH agonists during pregnancy. There is a suggestion that this may increase the risk of miscarriage. There is no suggestion from the medical literature that agonist or antagonist use increases the risk of fetal malformations.

ESTROGEN Oral tablets (Estrace, Femtrace, Gynodiol) Estradiol Vaginal tablets (Vagifem)

Estradiol mimics the effects of estrogen normally produced by the ovaries. Estradiol is given to stimulate the lining of the uterus to develop in frozen embryo transfer (FET) cycles and recipients of donor oocytes, and occasionally in other treatment cycles.

Cautions

Use Estradiol with caution if you have a history of stroke or **blood clot**, circulation problems, high blood pressure, heart disease, asthma, a hormone-related cancer such as breast or uterine cancer. Estrace is a FDA pregnancy category X. There is no FDA indication for Estrace use in pregnancy. There appears to be little or no increased risk of birth defects in children born to women who have used estrogens and progestins from oral contraceptives inadvertently during early pregnancy.

Side effects

Common side effects may include dizziness, lightheadedness, headache, nausea, weight changes, acne, skin color changes, altered libido, breast tenderness. Serious side effects are unlikely and include: allergic reactions, severe depression, memory loss, swelling of hands/feet, yellowing eyes/skin, stomach/abdominal/pelvic pain, persistent nausea/vomiting, dark urine, increased in risk for heart attacks, stroke, and blood clots, pulmonary embolism similar to risk of oral contraceptive pills.

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PROGESTERONE (Crinone, Progesterone-in-oil, Endometrin, Progesterone Suppositories)

Progesterone is a steroid hormone normally produced by the ovary after ovulation and by the placenta during pregnancy. It is used primarily to induce the menses in anovulatory women and to help support the early pregnancy. Crinone contains micronized progesterone in an oil and water emulsion called polycarbophil. Progesterone injections contain an oil base (either sesame or peanut oil).

Side effects

Possible symptoms include:

- Abdominal or pelvic pain, cramps
- Breast discomfort
- Nausea and vomiting
- Abnormal uterine bleeding
- Fatigue, drowsiness, depression
- Muscle or joint ache
- Bloating, weight gain, fluid retention

Conditions which might be influenced by this (epilepsy, migraines, asthma, cardiac or renal dysfunction) require careful observation.

Injectable progesterone can cause pain, rash or swelling at the injection site.

Other side effects, such as allergic reactions, have been reported, but may be related to the vehicle (for example, peanut oil) and occur with an incidence of less than 5%.

Progesterone should not be used in patients with liver problems, undiagnosed vaginal bleeding, or with a history of clotting disorders.

Multiple pregnancy

Studies using fertility medications for in-vitro fertilization procedures (ART) have demonstrated multiple pregnancy rates of over 30%. The actual risk, however, may be more strongly related to the number of eggs or embryos transferred to the uterus rather than direct effects of the medicine per say. The risk of complications of pregnancy or adverse outcomes is higher with multiple pregnancies than with singleton pregnancies. These include, but are not limited to, preterm delivery, gestational diabetes, hypertensive disorders, and fetal or neonatal death. Despite monitoring with blood tests or ultrasounds, it is not possible in most cases, to determine who will have a multiple pregnancy.

I understand that use of these medications may not be successful in producing a pregnancy. A pregnancy that does occur may not result in the birth of a live born infant.

I acknowledge that I have read the above consent in its entirety and have had any questions answered completely and to my satisfaction.

I also understand the risks, consequences, and potential benefits of these medications.

My signature below indicates my consent to the use of the medications and procedures and that I am exercising independent judgment as to the use of such fertility enhancing medications.

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