

Reproductive Facts

Patient fact sheet developed by the
American Society for Reproductive Medicine



Progesterone Supplementation During In Vitro Fertilization (IVF) Cycles

What is progesterone?

Progesterone is a hormone produced by the ovary during the menstrual cycle and during pregnancy. It is first detected in the middle of the menstrual cycle when an egg is released from ovary (ovulation).

Progesterone prepares the lining of the uterus (endometrium) for a fertilized egg (embryo) to stick or implant. If an embryo implants into the lining of the uterus, the ovary continues to produce progesterone for eight to ten weeks. After that time, the placenta produces progesterone to support the developing pregnancy. If a pregnancy does not take place, progesterone levels drop and a woman has her period.

Why do doctors prescribe progesterone during fertility treatments?

During an in vitro fertilization (IVF) cycle, medications are used to prevent the early release of an egg from the ovary (premature ovulation) and fluid from the follicles is removed. These medicines and procedures may affect your ovary's ability to make progesterone. Your doctor may prescribe a progesterone supplement to make up for this decrease in your progesterone levels. Progesterone supports the growth of the uterine lining so that an embryo can implant and grow inside. Many scientific studies have looked at pregnancy rates in IVF cycles that used progesterone. These studies have shown that pregnancy rates are much higher in cycles with progesterone supplementation compared to those without.

When and how should I take progesterone?

Progesterone supplementation is usually started on the day of or the day after egg retrieval. If a pregnancy takes place, supplementation may continue throughout the first trimester. Progesterone may be taken as an intramuscular injection or given through the vagina as a suppository, gel, or tablet.

It is important to follow instructions and talk with your doctor about the form of progesterone that best fits your needs. Taking progesterone as a pill does not work well to support the pregnancy because it is not absorbed by the stomach enough to help the pregnancy.

What are the types of progesterone available?

There are two basic types of progesterone. One is a synthetic type called medroxy-progesterone acetate or Provera. The other type more closely resembles the natural progesterone produced by the ovaries. The natural form is the one recommended for use in pregnancy.

Revised 2023