

Evaluating Infertility

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What is an infertility evaluation?

During an infertility evaluation, exams and tests are done to try to find the cause of infertility. If a cause is found, treatment may be possible. Infertility often can be successfully treated even if no cause is found.

When should I consider having an infertility evaluation?

You should consider having an infertility evaluation if any of the following apply to you:

- You have not become pregnant after 1 year of having regular **sexual intercourse** without the use of birth control.
- You are older than 35 years and have not become pregnant after 6 months of having regular sexual intercourse without the use of birth control.
- · Your menstrual cycle is not regular.
- You or your partner have a known fertility problem.

What causes infertility?

Infertility can be caused by a number of factors. Both male and female factors can contribute to infertility. Female factors may involve problems with *ovulation*, the reproductive organs, or *hormones*. Male factors often involve problems with the amount or health of sperm.

Does age affect fertility?

Yes. A woman begins life with a fixed number of eggs. This number decreases as she grows older. For healthy, young couples, the chance that a woman will become pregnant is about 20% in any single menstrual cycle. This percentage starts to decline in a woman's early 30s. It declines more rapidly after age 37 years. A man's fertility also declines with age, but not as predictably.

Can lifestyle affect fertility?

Lifestyle factors can play a role in infertility. For women, being underweight, being overweight, or excessive exercise may be associated with infertility. Drinking alcohol at moderate or heavy levels and smoking may make it difficult for a woman to get pregnant. For men, smoking, heavy drinking, marijuana use, and anabolic steroid use can reduce sperm count and movement. Smoking also can lead to *erectile dysfunction*.

How long does an infertility evaluation take?

The infertility evaluation can be finished within a few menstrual cycles in most cases.

What should I expect during my first visit for infertility?

The first visit usually involves a detailed medical history and a physical exam. During the medical history, you will be asked questions about your menstrual period, abnormal vaginal bleeding or discharge, pelvic pain, and disorders that can affect reproduction, such as thyroid disease. If you have a male partner, both of you will be asked about the following health issues:

- Medications (both prescription and over-the-counter) and herbal remedies
- Illnesses, including sexually transmitted diseases, and past surgery
- Birth defects in your family
- · Past pregnancies and their outcomes
- · Use of tobacco, alcohol, and illegal drugs
- Occupation

You and your partner also will be asked questions about your sexual history:

- Methods of birth control
- How long you have been trying to become pregnant
- How often you have sex and whether or not you have difficulties
- If you use lubricants during sex
- Prior sexual relationships

What tests are done for infertility?

Tests for infertility include laboratory tests, imaging tests, and certain procedures.

What does the basic testing for a woman consist of?

Laboratory tests include tracking **basal body temperature**, a urine test, a **progesterone** test, thyroid function tests, prolactin level test, and tests of ovarian reserve. Imaging tests and procedures include an **ultrasound** exam, **hysterosalpingography**, **sonohysterography**, **hysteroscopy**, and **laparoscopy**. You may not have all of these tests and procedures. Some are done based on results of previous tests and procedures.

What is the purpose of tracking basal body temperature?

Tracking basal body temperature is a way to tell whether ovulation has occurred. After a woman ovulates, her body temperature increases slightly.

How do I track my basal body temperature?

To perform this test, you will need to take your temperature by mouth every morning before you get out of bed. You record it on a chart for two or three menstrual cycles.

What do results from a urine test determine?

Urine test results determine when and if you ovulate. The test detects *luteinizing hormone (LH)* in the urine. LH triggers the release of an egg.

How is a progesterone test done?

A sample of blood is taken on a given day in the menstrual cycle. The level of the hormone progesterone is measured. An increased level shows that you have ovulated.

When would a thyroid function test be done?

Thyroid function problems can affect fertility. If a problem is suspected with your thyroid gland, levels of hormones that control the thyroid gland are measured to see if it is working normally.

What is a prolactin level test?

This blood test measures the level of the hormone prolactin. High prolactin levels can disrupt ovulation.

What are tests of ovarian reserve?

These tests measure the levels of certain hormones in the blood that are involved in ovulation. They may be recommended if you are older than 35 years or if you have known fertility problems. Results of these tests can give an idea of the number of eggs the ovaries have and whether they are still healthy.

Why are imaging tests and procedures done?

Different imaging tests and procedures are used to look at your reproductive organs. They check whether your *fallopian tubes* are healthy and whether there are problems in your *uterus*. The procedures used depend on your symptoms as well as the results of other tests and procedures.

What does the basic testing for a man consist of?

The testing for a man often involves a **semen** analysis (sperm count). If the result of the semen analysis is abnormal or areas of concern are found in the man's history, other tests may be considered. For example, an ultrasound exam may be done to find problems in the ducts and tubes that the semen moves through. Ultrasound also may be used to find problems in the **scrotum** that may be causing infertility.

Glossary

Basal Body Temperature: The temperature of the body at rest.

Erectile Dysfunction: The inability in a man to achieve an erection or to sustain it until ejaculation or until intercourse takes place.

Fallopian Tubes: Tubes through which an egg travels from the ovary to the uterus.

Hormones: Substances produced by the body to control the functions of various organs.

Hysterosalpingography: A special X-ray procedure in which a small amount of fluid is placed into the uterus and fallopian tubes to detect abnormal changes in their size and shape or to determine whether the tubes are blocked.

Hysteroscopy: A procedure in which a slender device, the hysteroscope, is inserted into the uterus through the cervix to view the inside of the uterus or perform surgery.

Laparoscopy: A surgical procedure in which an instrument called a laparoscope is inserted into the pelvic cavity through a small incision. The laparoscope is used to view the pelvic organs. Other instruments can be used with it to perform surgery.

Luteinizing Hormone (LH): A hormone produced by the pituitary gland that helps an egg to mature and be released.

Ovulation: The release of an egg from one of the ovaries.

Progesterone: A female hormone that is produced in the ovaries and that prepares the lining of the uterus for pregnancy.

Scrotum: The external genital sac in the male that contains the testes.

Semen: The fluid made by male sex glands that contains sperm.

Sexual Intercourse: The act of the penis of the male entering the vagina of the female (also called "having sex" or "making love").

Sexually Transmitted Diseases: Diseases that are spread by sexual contact, including chlamydia, gonorrhea, genital warts, herpes, syphilis, and infection with human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

Sonohysterography: A procedure in which sterile fluid is injected into the uterus through the cervix while ultrasound images are taken of the inside of the uterus.

Ultrasound: A test in which sound waves are used to examine internal structures. During pregnancy, it can be used to examine the fetus.

Uterus: A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.

If you have further questions, contact your obstetrician-gynecologist.

FAQ136: Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

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