



Evaluating Infertility

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What is an infertility evaluation?

An **infertility** evaluation includes exams and tests to try to find the reason why you and your partner have not become pregnant. If a cause is found, treatment may be possible. In many cases, infertility 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 age 35 years and have not become pregnant after trying for 6 months without using birth control.
- You are older than age 40 years and have not become pregnant within 6 months of trying without using birth control.
- Your menstrual cycle is not regular.
- You or your partner have a known fertility problem.

What type of doctor does an infertility evaluation?

Your **obstetrician–gynecologist (ob-gyn)** usually will do the first assessment. You also may choose to see a specialist. Infertility specialists are ob-gyns with special training in evaluating and treating infertility in women and men. These specialists are called reproductive endocrinologists. Men also may be evaluated and treated by a **urologist**. Some urologists have special training in male infertility.

What causes infertility?

The most common cause of female infertility is lack of or irregular **ovulation**. The most common causes of male infertility are problems in the **testes** that affect how **sperm** are made or how they function.

Other factors in women include problems with the reproductive organs or **hormones**. Scarring or blockages of the **fallopian tubes** may contribute to infertility. This may be the result of past **sexually transmitted infections (STIs)** or **endometriosis**. Problems with the **thyroid gland** or **pituitary gland** also may contribute to infertility. In men, blockage of the tubes that carry sperm from the testes may be a cause of infertility.

How does age affect fertility?

For healthy couples in their 20s or early 30s, the chance that a woman will become pregnant is about 25–30% in any single menstrual cycle. This percentage decreases rapidly after age 37 years. By age 40 years, a woman's chance of getting pregnant drops to less than 10% per menstrual cycle. A man's fertility also declines with age, but not as predictably.

Can lifestyle affect fertility?

In women, being underweight, being overweight, or exercising too much may be associated with infertility. In both men and women, drinking alcohol at moderate or heavy levels may be a factor in infertility. In men, smoking cigarettes and marijuana can reduce sperm count and movement.

What should I expect during my first visit for infertility?

The first visit with a fertility specialist usually involves a detailed medical history and a physical exam. You will be asked questions about your menstrual period, abnormal bleeding or discharge from the **vagina**, pelvic pain, and disorders that can affect reproduction such as thyroid disease. You and your partner will be asked about the following health issues:

- Medications (both prescription and over-the-counter) and herbal remedies
- Illnesses, including STIs 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 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. Imaging tests and procedures look at the reproductive organs and how they work. Laboratory tests often involve testing samples of blood or **semen**.

What does the basic testing for a woman include?

Laboratory tests may include a urine test, a **progesterone** test, thyroid function tests, a prolactin level test, and tests of ovarian reserve. Imaging tests and procedures may 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. You also may track your **basal body temperature (BBT)** at home.

What is the purpose of tracking basal body temperature?

A woman's temperature increases around the time of ovulation and stays elevated for the rest of her menstrual cycle. To track ovulation, you will need to take your temperature by mouth every morning before you get out of bed. You record your temperature on a chart for two or three menstrual cycles.

Charting monthly temperature changes can confirm ovulation but it cannot predict it. Some women also monitor their cervical mucus while charting BBT. Just before ovulation, a woman's cervical mucus becomes thin, slippery, and stretchy. Cervical mucus monitoring is a natural way to help a woman identify her most fertile days.

What do results from a urine test determine?

A urine test determines when and if you ovulate by detecting an increase in the levels of **luteinizing hormone (LH)** in the urine. A surge in the level of LH triggers the release of an egg. If the test result is positive, it suggests that ovulation will occur in the next 24–48 hours. This gives you an idea of the best time to have sex to try to get pregnant.

How is a progesterone test done?

For a progesterone test, a sample of blood is taken about 1 week before you expect your menstrual period. The level of progesterone is measured. An increased level shows that you have ovulated.

Why would a thyroid function test be done?

Problems with the thyroid gland may cause infertility problems. If a thyroid problem is suspected, levels of hormones that control the thyroid gland are measured to see if it is working normally.

What is a prolactin level test?

This test measures the level of the hormone prolactin. A high prolactin level can disrupt ovulation.

What are tests of ovarian reserve?

The term ovarian reserve refers to a woman's supply of eggs. Blood tests are used to check the remaining number of eggs.

Why are imaging tests and procedures done?

Different imaging tests and procedures are used to look at the **uterus, ovaries**, and fallopian tubes to find problems. Some procedures also are used to treat certain problems if they are found. The procedures that you may have depend on your symptoms as well as the results of other tests. Common imaging tests for female infertility include the following:

- Ultrasound exam—This test can predict when ovulation will occur by viewing changes in the **follicles**.
- Sonohysterography—This special ultrasound exam looks for scarring or other problems inside the uterus.
- Hysterosalpingography—This X-ray procedure shows the inside of the uterus and whether the fallopian tubes are blocked.
- Hysteroscopy—The procedure uses a camera with a thin light source that is inserted through the **cervix** and into the uterus. This can show problems inside the uterus and help guide minor surgery.
- Laparoscopy—This procedure uses a camera with a thin light source that is inserted through the abdomen. This can show the fallopian tubes, ovaries, and the outside of the uterus.

What does the basic testing for a man include?

Testing for a man often involves a semen analysis. This analysis is done to assess the amount of sperm, the shape of the sperm, and the way that the sperm move. Blood tests for men measure levels of male reproductive hormones. Too much or too little of these hormones can cause problems with making sperm or with having sex. In some cases, an ultrasound exam of the **scrotum** may be done to look for problems in the testes.

How long does it take to complete an infertility evaluation?

An infertility evaluation can be finished within a few menstrual cycles in most cases. Some insurance companies may cover the cost of an infertility evaluation. It is a good idea to call your insurance company to find out before you start your evaluation.

Glossary

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

Endometriosis: A condition in which tissue similar to that normally lining the uterus is found outside of the uterus, usually on the ovaries, fallopian tubes, and other pelvic structures.

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

Follicles: The sac-like structures that form inside an ovary when an egg is produced.

Hormones: Substances made in the body by cells or organs that control the function of cells or 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 called a hysteroscope is inserted into the uterus through the cervix to view the inside of the uterus or perform surgery.

Infertility: A condition in which a couple has been unable to get pregnant after 12 months without the use of any form of birth control.

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.

Obstetrician–Gynecologist (Ob-Gyn): A physician with special skills, training, and education in women's health.

Ovaries: The paired organs in the female reproductive system that contain the eggs released at ovulation and produce hormones.

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

Pituitary Gland: A gland located near the brain that controls growth and other changes in the body.

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 Infections (STIs): Infections that are spread by sexual contact, including chlamydia, gonorrhea, human papillomavirus (HPV), herpes, syphilis, and 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.

Sperm: A cell produced in the male testes that can fertilize a female egg.

Testes: Paired male organs that produce sperm and the male sex hormone testosterone.

Thyroid Gland: A butterfly-shaped gland located at the base of the neck in front of the trachea (or windpipe). It makes, stores, and releases thyroid hormone and thyroid-releasing hormone that control the rate at which every part of the body works.

Ultrasound Exam: A test in which sound waves are used to examine internal structures.

Urologist: A physician who specializes in treating problems of the kidneys, bladder, and male reproductive system.

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

Vagina: A tube-like structure surrounded by muscles leading from the uterus to the outside of the body.

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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