How Doctors Evaluate Infertility in Women

If you've been trying to get pregnant and haven't been successful, when should you think about seeing your doctor to find out if you have a problem with fertility? Most women wait a year before going to see the doctor. But if you are older than 35, have irregular periods, or have any medical problems that could make it difficult for you to get pregnant, you should go sooner.

Your doctor will perform several tests to help figure out the problem. Your partner also should have tests because he could have a fertility problem.

**Diagnosis: What is the basic problem?**
First, your doctor will ask you about your medical history and may give you a physical exam. Then, your doctor may perform one or more of the following tests to see if you are producing an egg and if that egg can travel to your womb:

**Ovulation testing**
Ovulation occurs when your ovary releases an egg (oocyte) from a follicle (fluid filled cyst) in the ovary. After that, the egg will be picked up by the fimbria (fingers of the fallopian tubes), then travel through the tube to your uterus (womb). When you ovulate, your body goes through changes. These changes include:

- Your body temperature rises after ovulation. A special thermometer can be used to take your temperature, then daily measurements can be recorded on a basal body temperature chart.
- Your body makes more of an important hormone called progesterone after you ovulate. An over the counter urine test kit or a blood test can measure LH (luteinizing hormone) levels, which is the trigger for ovulation and the cause of the subsequent rise in progesterone.
- Your follicles increase in size prior to ovulation. This change in follicle growth can be measured by an ultrasound and help predict the time of ovulation.
- How frequently you get your period and how long it lasts (recorded on a menstrual calendar) will also help identify when ovulation occurs.

**Fallopian tube testing**
After you ovulate, an egg travels from the ovary to the uterus through one of your fallopian tubes. For the egg to make the trip, the tubes need to be clear of any blockages. To make sure that one or both tubes are not blocked, your doctor can perform one of two different procedures:

- **Hysterosalpingogram (HSG).** During this x-ray procedure, a speculum is used to open the vagina then a catheter or device is used to place (inject) liquid into your cervix (opening into the uterus) so that it flows into the uterus. If the liquid comes out the ends of one or both of your tubes, then you can determine if one or both of the tubes are open. If the liquid does not enter or does not flow completely through one or both of your tubes, then the affected tube or tubes should be considered blocked. A blockage may or may not be corrected by surgery.

- **Laparoscopy.** In this minimally invasive procedure, a surgical instrument called a laparoscope is inserted through a very small incision below your belly button. The surgeon can look through the laparoscope to see if one or both of your tubes are open. The laparoscope can also be used to look for other problems that may affect fertility, such as adhesions (scar tissue) or endometriosis (tissue from the lining of the uterus that grows in the wrong place and can cause irritation or scarring).

**Uterine testing**
Your doctor may perform other procedures to look for other problems, such as:
- Fibroids (noncancerous growths in the uterus)
- Polyps (noncancerous growths in the uterine lining)
- Scarring
- An abnormally shaped uterus

Several procedures may be used:
- HSG (described above)
- Hysteroscopy is a surgical procedure in which a telescope-like instrument is placed through the cervix and to look at the inside of your uterus.
- Sonohysterogram is an office procedure using ultrasound where a thin catheter is inserted through the opening of the cervix into the uterus, then sterile liquid is injected into the uterus. While the fluid is in the uterus, a vaginal ultrasound is used to obtain a good view of the uterine cavity. This procedure also provides important information about the muscle wall of the uterus (myometrium).

**Hormone testing**
Too much or not enough of important chemicals called hormones can cause ovulation problems. Blood tests reveal the hormone levels in your body. Your doctor may check some of these hormones, as they can affect your fertility. Testing may include checking for thyroid function or for a hormone (prolactin) that increases milk production in the breasts.

**Ovarian reserve tests**
These blood tests measure hormone levels and give us an estimate of how many eggs you have in your body and how good they are. The tests are performed during the first days of your menstrual cycle and sometimes before and after you take a fertility drug. Your doctor may perform these tests if:

- You are more than 35 years old
- You have one ovary
- You have had ovarian surgery
- You have had a poor response to fertility treatments
- You have irregular menstrual cycles

**Other tests**
Your doctor may also recommend pre-pregnancy tests for:
- Infections (chicken pox, rubella, HIV, hepatitis, syphilis or other sexually transmitted infections)
- Genetic testing (cystic fibrosis, sickle cell, Tay-Sachs or other genetic disorders)

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