

PATIENT EDUCATION



The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

Special Procedures • EP143

Hysterosalpingography

Hysterosalpingography (HSG) is used to diagnose problems of the **uterus** and **fallopian tubes**. Most often it is used to see if a woman's tubes are partly or fully blocked. It also can show if the inside of the uterus is of a normal size and shape.

This pamphlet explains

- *why HSG is done*
- *what to expect before and after HSG*
- *how HSG is done*
- *risks, complications, and alternatives*

Why HSG Is Done

HSG is an X-ray procedure that is used to view the inside of the uterus and fallopian tubes. It checks for scarring or abnormalities in their size or shape, which can lead to **infertility** and pregnancy problems. HSG also is used a few months after some **sterilization** procedures to make sure that the fallopian tubes have been completely blocked.

What to Expect

HSG is done in a hospital, clinic, or health care professional's office. It is best to have HSG done in the first half (days 1–14) of the menstrual cycle. This timing reduces the chance that you may be pregnant.

HSG is not done if a woman

- is pregnant
- has a pelvic infection
- has heavy uterine bleeding at the time of the procedure

Your health care professional may recommend that you take an over-the-counter pain reliever an hour before the procedure. Discuss this decision with your health care professional. In some cases, he or she also may prescribe an antibiotic for you to take before HSG. Most people can drive themselves home after having HSG. However, you may not feel well after the procedure, so you may want to make arrangements for someone to drive you home.

How HSG Is Done

During HSG, a **contrast agent** is placed in the uterus and fallopian tubes. This is a fluid that contains a dye. The dye shows up in contrast to the body structures on an X-ray screen. The dye outlines their inner size and shape. It also is possible to see how the dye moves through the body structures.

The procedure is performed as follows:

1. You will be asked to lie on your back on an X-ray table. Your feet will be placed as for a pelvic exam. A

device called a speculum is inserted into the vagina. It holds the walls of the vagina open to allow the cervix to be viewed. The cervix is cleaned.

2. The end of the cervix may be injected with **local anesthesia** (pain relief). You may feel a slight pinch or tug as this is done.
3. One of two methods may be used to insert the dye. In one method, an instrument called a cannula is inserted into the cervix. In the other method, a thin plastic tube is passed into the cervical opening. The tube has a small balloon at the end that is inflated. The balloon keeps the tube in place in the uterus.
4. The fluid slowly is placed through the cannula or tube into the uterus and fallopian tubes. The fluid may cause cramping. If the tubes are blocked, the fluid will cause them to stretch.
5. X-ray images are made as the contrast medium fills the uterus and tubes. You may be asked to change position. If there is no blockage, the fluid will spill slowly out the far ends of the tubes. After it spills out, the fluid is absorbed by the body.
6. After the images are made, the cannula or tube is removed.

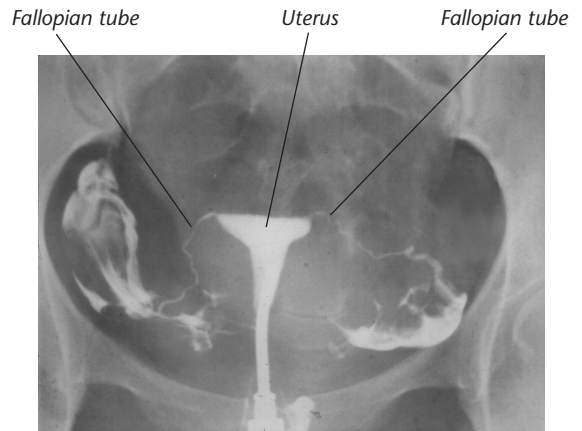
After the Procedure

After HSG, you can expect to have a sticky vaginal discharge as some of the fluid drains out of the uterus. The fluid may be tinged with blood. A pad can be used for the vaginal discharge. Do not use a tampon. You also may have the following symptoms:

- Slight vaginal bleeding
- Cramps
- Feeling dizzy, faint, or sick to your stomach

Risks and Complications

Severe problems after an HSG are rare. They include an allergic reaction to the dye, injury to the uterus, or pelvic infection. Call your health care professional if you have any of these symptoms:



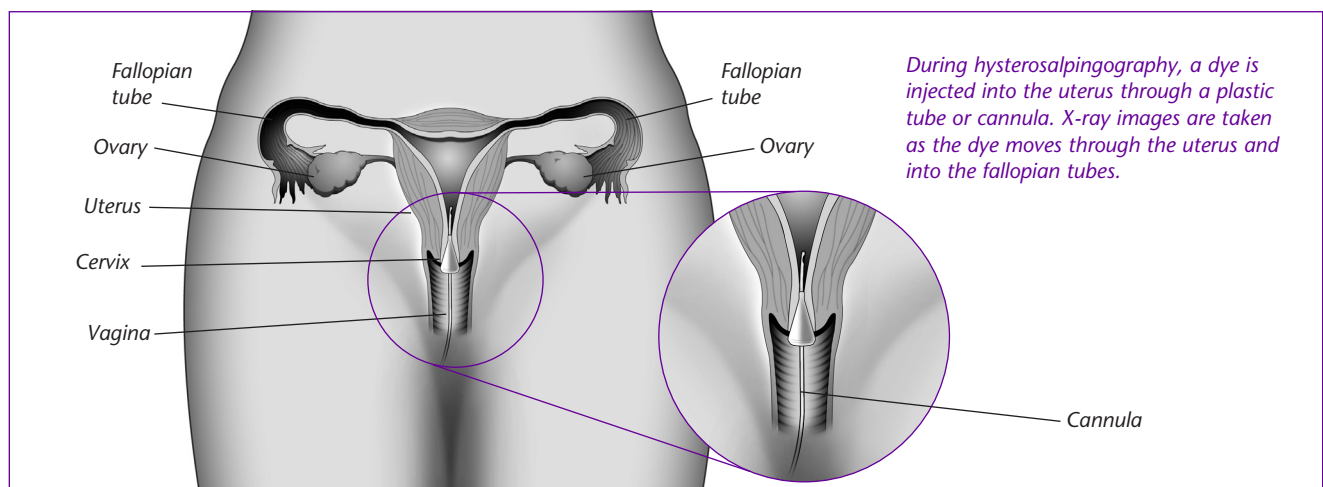
Hysterosalpingography is an X-ray procedure that can show blockage or growths inside the uterus and fallopian tubes. This X-ray shows a normal uterus and fallopian tubes. (Photo courtesy of Ricardo Azziz, MD)

- Foul-smelling vaginal discharge
- Vomiting
- Fainting
- Severe abdominal pain or cramping
- Heavy vaginal bleeding
- Fever or chills

Alternatives

There are other procedures that can give your health care professional some of the same information as HSG:

- **Laparoscopy**—This surgical procedure requires **general anesthesia**.
- **Hysteroscopy**—This procedure can give a detailed view of the inside of the uterus. However, it cannot show whether the fallopian tubes are blocked.
- **Sonohysterography**—This procedure uses **ultrasound** to show the inside of the uterus. Like hysteroscopy, it does not give information about the fallopian tubes.



- **Sonohysterosalpingography**—This procedure uses a saline solution and ultrasound. The saline passes through the cervix and into the uterus. Ultrasound then is used to view the uterine lining and track how the saline flows into the fallopian tubes.

Finally...

HSG is a way to diagnose problems of the uterus and fallopian tubes. The risks of HSG are low, but you should know the warning signs of problems. Talk with your health care professional if you have questions about this procedure.

Glossary

Contrast Agent: A substance that is injected into the body during certain X-ray procedures that allows specific structures or tissues to be seen.

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

General Anesthesia: The use of drugs that produce a sleep-like state to prevent pain during surgery.

Hysteroscopy: A procedure in which a 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 a device 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 to perform surgery.

Local Anesthesia: The use of drugs that prevent pain in a part of the body.

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.

Sterilization: A permanent method of birth control.

Ultrasound: Sound waves that can be 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.

This Patient Education Pamphlet was developed by the American College of Obstetricians and Gynecologists. Designed as an aid to patients, it sets forth current information and opinions on subjects related to women's health. The average readability level of the series, based on the Fry formula, is grade 6–8. The Suitability Assessment of Materials (SAM) instrument rates the pamphlets as "superior." To ensure the information is current and accurate, the pamphlets are reviewed every 18 months. The information in this pamphlet 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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ISSN 1074-8601

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