
Determining the patency of the fallopian tubes

Medisch Centrum Kinderwens

Goal

The goal of this information brochure is to inform you of the various examination techniques we offer for determining the patency of the fallopian tubes, and help you and your treating nurse or physician choose which one you'd prefer.

Introduction

Examining the patency of the fallopian tubes can be a part of the initial fertility screening, or it might be found necessary before or during another fertility treatment. The odds of the fallopian tubes being blocked – preventing the passage of sperm cells, oocytes and/or embryos – are higher after suffering an infection of the fallopian tubes (caused by, for example, chlamydia); another nearby infection such as appendicitis; abdominal/pelvic surgery; or issues like endometrioses. Your treating nurse or physician will talk you through your risk of having a fallopian tube patency issue, and whether examining the patency is necessary or not. Based on your situation, your treating nurse or physician might advise one of the examinations outlined below. They will explain their reasons for favoring that specific type of examination.

In addition to medical reasons for performing an examination of the fallopian tubes, there are financial considerations. Donor sperm is expensive and not covered by insurance, although the treatment itself is. So even if there are no medical grounds for examining the patency of the fallopian tubes, the financial repercussions of discovering a blockage at a later stage might be a factor in your decision on whether to examine the patency or not.

Options for examining the patency of the fallopian tubes

1. Foam ultrasound
2. Hysteroscopy and tubal testing (HIP)
3. Hysterosalpingograph (HSG/uterine photograph)
4. Laparoscopy and tubal testing

*Your treating nurse or physician will indicate which examination could work best for you, but you decide **together** which one will ultimately be performed.*

1. Foam ultrasound

A foam ultrasound is a fast way of determining the patency of the fallopian tubes, without needing to use x-ray imaging.

It's a vaginal ultrasound examination, in which the uterus and fallopian tubes are brought into view using foam. The foam is inserted in the uterus and fallopian tubes, making them easily visible on the ultrasound since the foam shows up on the image as white and the abdominal cavity shows up as dark. Therefore, we can see how the foam spreads, allowing us to determine the patency of the fallopian tubes. It's possible the

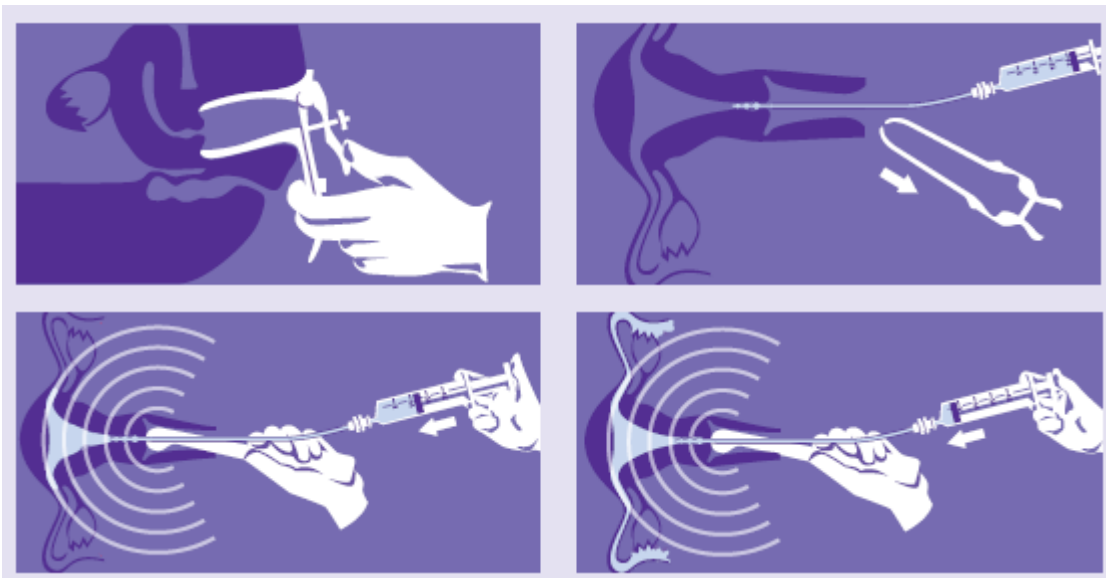
ultrasound is unclear, or a temporary spasm of the fallopian tube obstructs the way of the contrasting fluid. If this is the case, further examination may be necessary to verify the results.

This ultrasound will generally take place during the first half of your menstrual cycle. Since it is unclear whether the endometrium is effected at all by the foam, it is discouraged to inseminate during the same cycle as a foam ultrasound.

The examination

The foam ultrasound will be easiest if your bladder is about half full. During the examination, you'll be laying down in a gynecological chair. The nurse or physician performing the examination will insert a speculum and a thin catheter will be inserted into the cervix. The speculum may then be removed, and a vaginal ultrasound will be inserted. The foam will slowly be squirted into the uterus, while we follow it using the ultrasound. This may cause cramps reminiscent of menstruation, so you could take 1000mg of paracetamol 1 hours prior to the treatment if desired.

Afterwards, you may experience slight blood loss and/or discharge of the foam that was inserted during the examination.



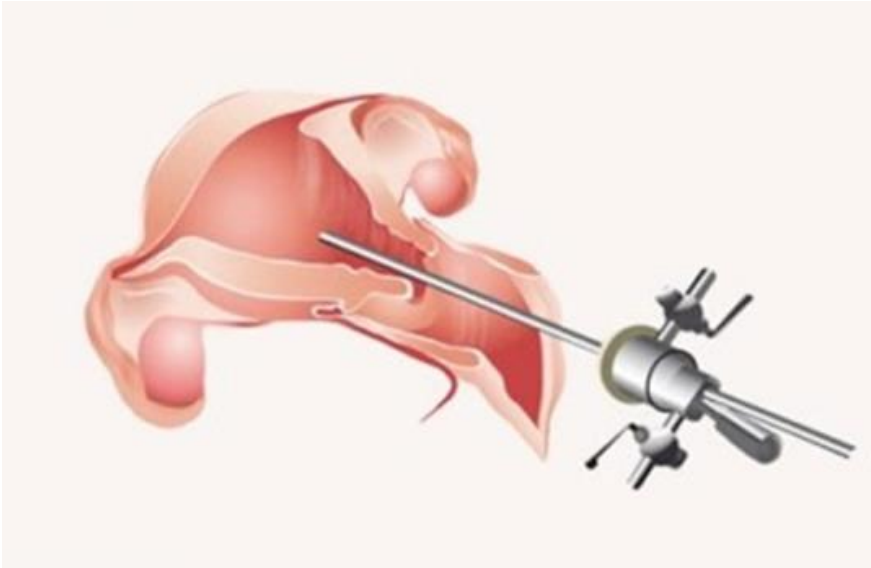
2. Hysteroscopy and tubal testing

During a diagnostic hysteroscopy, the gynecologist uses a hysteroscope to examine the interior of the uterus.

During a hysteroscopy, the physician will view the inside of the uterus through a hysteroscope, which is inserted via the vagina. A hysteroscope is a thin, hollow, lighted tube. In order to bring the inside of the uterus into view clearly, the gynecologist will insert fluids during the hysteroscopy, which assist in keeping the view clear. The hysteroscope will be connected to a camera transmitting the footage to a viewing screen. If you want to, this allows you to view what is happening.

This is an outpatient examination and it will be conducted without any kind of sedation, if your cervix allows for it. If there are any special circumstances, you and the gynecologist may choose to change that (for example by going through the examination lightly sedated, using an epidural, or fully sedated – either under narcosis or an epidural, which is NOT possible in the MCK Fertility Center).

Image 1: the examination



In addition to determining the patency of the fallopian tubes, there are many other reasons to do a hysteroscopy:

- Abnormal findings after an ultrasound or other kind of examination of the uterus;
- Abnormal blood loss;
- Failure to conceive;
- Endometrial scratching (intentionally scratching the surface of the endometrium);
- Reduced fertility and repeated miscarriages or premature births.

For further information on these reasons, please refer to our information brochure 'diagnostic hysteroscopy'.

A hysteroscopy will take place when you're not menstruating, preferably during the first half of your menstrual cycle (before ovulation). This is especially important if you have a chance of conceiving naturally, since before ovulation there is no fertilized oocyte which might lodge in the uterus.

The examination

You do not need to fast before this examination. During the examination, most people experience menstruation-like pain. To reduce this, you could take a strong painkiller (like 100mg diclofenac) two to three hours prior to the examination.

You'll take place on the gynecological chair. The gynecologist may first do an internal ultrasound. Then, the hysteroscope will be inserted through the cervix into the uterus. If your uterus is not shaped in a way that makes this possible, a speculum will be inserted first to spread the cervix so the hysteroscope can be inserted. In order to bring the front and back walls of the uterus, which usually are close together, into view, the physician performing the examination will insert fluids into the uterus through the hysteroscope. This causes the uterine cavity to expand, which is the reason for the menstruation-like pain. Sometimes, inserting the hysteroscope into the uterus may cause a sudden drop in heart rate. This may make you feel as if you're fainting, but it will pass quickly.

First, the physician will examine the size and shape of the uterus, as well as detect the presence of any polyps, myomas and congenital variations in shape. Then, a fluid with small bubbles of air is inserted into

the uterus, which should move into the abdominal cavity through the fallopian tubes. We will occasionally perform an ultrasound to confirm the presence of fluids in the abdominal cavity.

The entire examination will take between three and ten minutes. We may keep you slightly longer than that for observational purposes and to recover from the examination. You may experience some spotting (slight vaginal blood loss) following this examination.

3. Hysterosalpingograph (HSG)

A hysterosalpingograph (usually referred to as an HSG) is an examination which provides information about the shape of the uterus and the patency of the fallopian tubes using contrasting fluid and x-rays. It is an outpatient examination which usually takes place at a hospital's radiology department.

Precautions

This examination should be performed *before* ovulation, and the possibility of a new pregnancy should be fully eliminated prior to undergoing the examination using a pregnancy test.

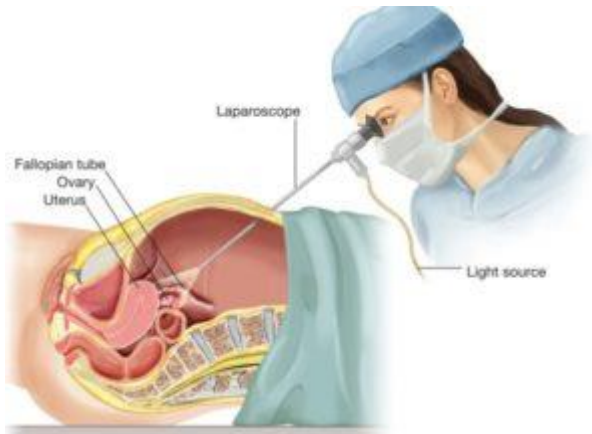
The contrasting fluid will often contain iodine, so you need to be certain you aren't hypersensitive to iodine.

In rare cases, this examination may cause an infection of the fallopian tubes. The odds of this happening are usually lower than 1%, but may be higher due to abnormalities (closed-off fallopian tubes, adhesions etcetera). The results regarding fallopian tube patency yielded by this examination are usually reliable. However, spasming of the fallopian tube may cause it to appear blocked without being so. If a negative HSG result may therefore warrant further examination such as a hysteroscopy. If abnormalities are expected (based on an ultrasound of medical history), an HSG may not be the right choice for you. Also, a HSG may reveal abnormalities to the uterus, such as congenital defects, myomas, polyps et cetera.



The MCK Fertility Center does not have radiology technology available, so we will not perform this examination on-site. If we refer you to another gynecologist in a hospital to get an HSG examination, the hospital in question will provide you with further information regarding the examination, which will then take place at a later date.

4. Laparoscopy and tubal testing



For this examination, please refer to the NVOG information brochure available at http://www.nvog.nl/Sites/Files/0000000100_diagnostische_laparoscopie.pdf

How to contact us

Telephonically, Mondays to Fridays:

We can be contacted telephonically between 9am and 4.30pm.

General questions : 071-5812300

Medical questions : 071-5812300 – the administrative office will schedule a same-day call-back consult with a nurse.

Email

We can be contacted by email. We'll generally answer within 48 hours. If your email needs to be answered posthaste, please mention this in the email subject. Email address: info@mckinderwens.nl

Address

We're located at Simon Smitweg 16 2353 GA Leiderdorp

This information is meant to inform you regarding the different ways of examining fallopian tube patency. This information, together with any other information provided to you by a physician or nurse, is meant to help you make an educated choice on which examination you'd prefer. This information is subject to change.

For any feedback regarding this information brochure, please let us know at info@mckinderwens.nl.