

## **HYSTEOSALPINGOGRAM (HSG)**

A hysterosalpingogram is a diagnostic x-ray that allows a study of your uterus and fallopian tubes.

### **Why is a HSG necessary?**

It is done primarily to confirm that your fallopian tubes are open. However it also gives us information about the uterine cavity. It may for instance identify the presence of polyps or fibroids protruding in to the uterine cavity. These may potentially interfere with fertility.

### **Where is the HSG done – and by whom?**

It is performed in an X-ray department (usually within a hospital or clinic) by a radiologist and an gynecologist like Dr. Kyle.

### **When is the procedure done?**

The timing of this test is very important. It needs to be performed early on in the menstrual cycle before the lining of the uterus becomes too thick and also before ovulation- to make sure that this test is not done at a time that you may conceivably be pregnant.

Therefore, the best time to do the HSG is before day 12 of your menstrual cycle. The HSG cannot be done during your period. So there is only a small window of time every month that it can be done (i.e. after your period is complete- but before day 12 of your cycle).

### **How is the HSG booked?**

If you have been asked to have an HSG done, you should call Dr. Kyle's office on the first day of your period. You should advise when you expect your period to stop (how long your flow usually lasts), and we will be able to arrange for the HSG to be done in that important window between the end of your flow and before Day 12 of your cycle.

### **Is an HSG painful?**

The procedure itself may be uncomfortable. For this reason, you may want to take someone with you to the hospital. We would also suggest that you take two Advil or Tylenol approximately one hour before the procedure. You should be reassured that most patients have only minor cramping.

### **What are the risks of the procedure?**

There is a small risk of infection following a HSG if your tubes are abnormal. Because of this risk, you would be given a 5 day course of doxycycline at the time of HSG by Dr Kyle, only if your tubes are identified as abnormal on the HSG. You will be told the results of your test as soon as it is done and if you need antibiotics. This is a commonly prescribed antibiotic, and side effects are uncommon. However, some side effects that may occur include diarrhoea, nausea, and a skin rash if you go out in the sun (photosensitivity). Another fairly common side effect is heartburn or pain in your stomach. If this does happen you should discontinue the antibiotic and let us know. It is preferable that you continue the antibiotics for the full 5 days.

Apart from a small risk of infection there is also a small risk of a reaction to the dye. It is important that you tell Dr. Kyle if you have any specific allergies. Allergies that would be important to mention include a previous reaction to intravenous radiological contrast. This will be discussed further below.

**There is a drug commonly used in infertility called Metformin. It is very important that if you are on Metformin, you stop taking it the day before the procedure, and, only restart it 5 days later. (you should NOT take Metformin for the few days following an HSG- this may be potentially dangerous)**

### **Allergic reactions to contrast media used in medical imaging**

Allergic reactions to radiographic contrast media (such as may be used for CT scans, IVP's- and to a lesser extent with Hysterosalpingogram may occur. With Hysterosalpingogram the contrast is not being injected intravenously so the risk is lower.

The 2 common type adverse reactions include an allergic reaction or a contrast induced nephropathy. (kidney reaction)

Iodine allergy is not a risk factor for an allergy to contrast used for radiographic procedures. Risk factors for an allergy include previous adverse reaction, asthma, dehydration, heart disease, existing renal disease, anemia, young and older age, and the regular use of nonsteroidal anti-inflammatory drugs like ibuprofen. Allergy or sensitivity to sea food is not associated with an increase risk.

If you do have a history of a previous allergic-type reaction to contrast media, premedication with steroids or antihistamines may be a good idea.

It is important to note that an allergic-type reaction may be immediate or delayed. Immediate reactions take place within minutes and can be mild such as nausea and hives; moderate with vomiting, shortness of breath; or severe with fluid in the lung, (pulmonary edema) cardiac arrhythmias or collapse.

Delayed reactions may occur weeks after the injections and are usually mild-including a rash, and some swelling with or without fever.

### **What is the process?**

The Hysterosalpingogram itself is done by injecting dye through your cervix, into your uterus, and out through your fallopian tubes. During the procedure, Dr Kyle will insert a small speculum into your

vagina, a bit like having a pap smear. A little clip is then attached to your cervix and a very small catheter will then be passed through your cervix and the dye injected. X-rays will then be taken. The uterus being a muscle does not like being manipulated and it is during the injection itself that you will feel cramping.

### **Are there other benefits to an HSG?**

As mentioned above, this study is designed to tell us about the inside of your uterus and also to confirm whether your fallopian tubes are patent (open) and normal. However, although it is essentially a diagnostic test, there is also a beneficial effect. The contrast dye that is used has some detergent-like actions and helps flush out debris and bacteria from inside the fallopian tubes, **and does indeed result in an improved fertility rate for the first few months afterwards.**

### **What do I do after the test?**

If you're feeling well you can resume normal activities after the procedure. In other words you can go back to work. After the test, if you experience any pain, malodorous discharge, or fever, you should call Dr. Kyle's office right away. Please do not forget to complete the course of antibiotics if they have been prescribed.

You should schedule an appointment to come in to Dr. Kyle's office to discuss this and other test results with us once your blood work (and semen analysis if we are waiting for it) have been done.

It is not uncommon to have some light bleeding for a few days after the procedure. You may also have some cramping. The important thing to remember is that as the days go by you should feel better. If you're not feeling better you should contact us immediately.

### **Can I try and conceive with this cycle?**

Yes you can. It is fine to continue to try and conceive while you are finishing your course of antibiotics.

### **What does it mean if one or both tubes are obstructed?**

The result will be discussed with you. It is important to remember that the uterus is a muscle, and will cramp when dye is injected. This cramping may "pinch" off the entrance to the fallopian tube- and make it appear that one or both tubes are obstructed. This would be a false positive result. If the tubes appear to be blocked close to the uterus, we would need to do a Laparoscopy to look at the tubes in more detail. This is a procedure done under general anaesthetic, so is not generally the "first line" investigation. If the tubes are swollen and obstructed (hydrosalpinges)- It would indicate that the tubes have been previously damaged (usually by infection). The management would depend on a variety of other factors, which would be discussed with you at Dr. Kyle's Office.