Hysterosalpingogram (HSG)  
General Information, EDI

**Definition:**
The Hysterosalpingogram (HSG) is an X-ray study of the uterine cavity and the fallopian tubes.

**Scheduling:**
If you have regular cycles, please try to schedule the procedure the month before. If you have irregular cycles, you may call the office on the first business day within the first couple of days of menstruation to schedule your HSG procedure. The first full day of menstrual bleeding is considered day number 1 of your cycle. The HSG is generally performed between days 6-10 of your menstrual cycle, although this may be extended if you generally ovulate beyond day 14 of your cycle. By performing the procedure following menses and before ovulation, we will minimize the amount of menstrual blood that may flow back into the peritoneal cavity during the procedure, as well as decrease the possibility of exposing an early pregnancy to the low dose of X-rays used during the test.

**Location:**
The procedure is often performed at Radiology Regional Center located about one mile from our office at 6140 Winkler Road, Suite A. If your insurance requires that the procedure be performed at a different location, the arrangements will be made accordingly.

**Reasons for Testing:**
- Infertility
- Abnormal uterine bleeding
- Recurrent miscarriages
- Suspected or known malformation of the uterus
- History of premature labor
- Risk factors for uterine or tubal scarring

**The Test May Improve Chances for Pregnancy:**
Numerous studies have shown that pregnancy rates may improve following the HSG procedure. Your physician and the Radiologists feel the water-soluble contrast is best able to outline the uterine and tubal anatomy. Using oil-based media, however, has been shown to improve pregnancy rates when compared to water-soluble contrast. The potential risks for the instillation of oil-based contrast, while exceedingly rare, are slightly greater. These risks include mild pelvic inflammation to lethal pulmonary problems (exceedingly rare). In reality, there is very little evidence that consistent problems are seen with oil-based media in humans. Your physician feels the oil-based contrast is quite safe in the vast majority of patients. Unless you indicate differently, your physician may try to use both types of contrast to maximize the information obtained, while giving you the best chance of conception following the HSG procedure.

**What The Test Can and Can Not Diagnose:**
The test is able to diagnose such abnormalities of the uterus as uterine polyps, fibroids, intra-uterine adhesions (scarring) and general malformations of shape and size. The study can also diagnose blocked or dilated fallopian tubes and may suggest the presence of pelvic and tubal adhesions. The test is unable to diagnose such problems as endometriosis, hormone abnormalities and some forms of pelvic scarring. If a uterine abnormality is found, an additional study called a diagnostic hysteroscopy or transvaginal sonography with the infusion of saline into the uterine cavity may be needed at a later date.

**What to Expect:**
Your clinician (physician or the Nurse Practitioner) or the radiologist will perform the procedure. They will take great care in performing this procedure. Please do not listen to well-meaning individuals who may frighten you with their tales of the procedure. HSG instruments that were used many years ago made the procedure far more uncomfortable than those used today. Keep in mind that if the procedure is unusually uncomfortable, upon your request, it will be quickly discontinued.

**General Instructions:**
While not essential, we prefer that you come with your partner or with someone to drive you home. If you are having pelvic pain on the day of the procedure or bleeding heavily, please contact the office because the procedure may need to be rescheduled. Please bring a menstrual pad with you to the procedure. We also suggest that you take about 800 mg. of Ibuprofen or similar medication about one hour prior to the procedure.

**The procedure will be as follows:**
1. You will be asked to change into a hospital gown and will be walked into the X-ray room.
2. If needed, the clinician may perform a pelvic exam prior to the procedure. If you are unusually tender, this could represent an infection of your reproductive organs necessitating that the procedure be rescheduled.
3. A speculum will then be placed and the cervix swabbed with a cleansing solution.
4. A thin catheter will be threaded through the cervix and inflated. The cervix may also need to be slightly dilated or grasped in order to perform the procedure. At times, different instrumentation may be utilized to better evaluate the uterine cavity.
5. As the uterus and tubes fill with dye, you may be asked to lay flat, tip your hips slightly and completely roll to your side in a fetal position so that the uterus and tubes are completely viewed. A fluoroscope is used during the procedure so the unit will be just a few inches above your pelvis. You will be able to view the study as it takes place on the TV screen.
6. If a cavity-distorting structure is found, it will be best that you not conceive until the final results are discussed with you at a later follow-up visit at our office.

7. You will be allowed to rest as long as desired following the procedure.

**Complications:**
Menstrual-like cramps are common along with slight vaginal bleeding. Severe complications are infrequent. Most patients rate the level of discomfort of the procedure at 2 out of 10 with 10 being significant discomfort.

Uterine perforation (puncture) is possible although a very infrequent complication of the procedure. We here have never seen this complication occur during an HSG. The uterus is a rather hearty organ and has holes placed into it frequently without difficulty (i.e., amniocentesis).

Every attempt is made to minimize the 1% infection rate associated with the procedure. Antibiotics may be given prior to and following the HSG as directed by your physician. If an infection does occur, oral or IV antibiotics and hospitalization will be needed. Rarely, as with any pelvic infection, surgery to drain or remove infected organs leading to sterility may be necessary. It should be understood that individuals who become infected were most likely previously infected and almost always have underlying severe tubal disease. The procedure does not seem to initiate a new infection, but rather, reactivates an underlying infection.

Individuals rarely have an allergic reaction to the "dye" because it is not actually injected into the blood stream. If you have an allergic reaction to iodine or x-ray fluids, please instruct your physician before the procedure begins.

You may feel slightly dizzy for a brief period following the procedure.

**Interpretation:**
Keep in mind that the staff here at EDI has tremendous experience in interpreting HSG’s. Your Reproductive Endocrinologist has the advantage of taking many patients to surgery following an HSG diagnosis and are thus able to pick out the subtle findings often missed by other well-trained Radiologists. If your personal physician will review the X-ray films prior to your next visit.

Since time and space are limited and managed care organizations do not allow for procedures to be combined with discussions on the same day, a detailed follow-up directly following the procedure may not be possible. You will usually be asked to schedule a more detailed conversation for a later date. If the procedure is an uncovered service, you will be billed for the time involved in discussing the findings directly after the procedure.

**Fees:**
Please contact our office if you have any questions concerning the fees or insurance coverage for the study. The prices quoted are for a routine HSG. If you cancel the procedure, please notify the office as quickly as possible so another individual will be able to take your place.

If the procedure is canceled at the radiology office after prepayment has occurred; a limited office visit will be charged to the patient to cover the clinician’s time away from the office, with the remaining balance refunded to the patient.
**Treatment:**
The particular treatment plan will depend on the abnormality found. Surgical treatment as an outpatient procedure is commonly performed to correct abnormalities of the uterus. Tubal disease may be treated through the laparoscope or through an in-patient laparotomy procedure. Many options are now available and will be discussed in detail with you in follow-up.

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