

INFERTILITY WORK-UP:

The following tests are often considered in the evaluation of infertility. Not all of these tests are done on all couples.

LAB WORK

1. TSH – evaluates your thyroid, abnormalities in the level of your thyroid hormone can affect ovulation.
2. Prolactin – is a hormone that increases when you produce milk while nursing. Elevations of this hormone may affect ovulation even if the levels are not high enough to cause milk production.
3. Day 21 progesterone – a progesterone level is drawn around day 21 of your cycle to evaluate the presence or absence of ovulation. (Day 1 of your cycle=first day of your period.)
4. Polycystic ovarian syndrome (PCOS) – PCOS is a combination of irregular periods and too much testosterone such as facial hair or acne (or elevated on a blood test) and can be related to diabetes or pre-diabetes. Lab work may include: labs for diabetes/pre-diabetes (fasting blood sugar or Hgb A1C or 2 hour diabetes screen) and testosterone.
5. Day 3 FSH (may add an estradiol) – FSH is drawn on day 3 of your cycle, if this level is > 10 and estradiol <50 then your ovarian reserve is low, means that medications to increase your chance of pregnancy have a lower chance of being successful. BUT this does not mean you cannot get pregnant. This is usually drawn on women >35 or women who are younger and aren't pregnant after 2 years of trying, smokers >30?, previous ovarian surgery or family history of early menopause. Another test for ovarian reserve is AMH (antimullerian hormone) –can be drawn anytime during your cycle.
6. Clomid Challenge Test (CCT) – CCT can also be used to evaluate ovarian reserve. FSH is drawn on day 3, clomid 100mg is given from day 5-9 and FSH is drawn on day 10.

EVALUATION TUBES AND CAVITY OF THE UTERUS:

There are several ways to test to see if the cavity of the uterus is normal and Fallopian tubes are open. There are 2 tests, the FEMVUE, performed in the office with ultrasound and HSG, performed in the radiology department. These can also be evaluated during surgery. There are advantages and disadvantages to each option therefore the preferred test depends on the individual.

The FEMVUE and HSG tests are performed on cycle days 7-11 in a 28 day cycle. The testing is done after you stop bleeding from your period and before you ovulate. In order to schedule your test at the correct time, call us at the beginning of your period.

You may eat a regular diet before your test. Mild to moderate cramping may occur with either test, so I recommend 600 mg of ibuprofen 30 minutes before the procedure. You may resume normal activities after these tests.

FEMVUE: The test is performed with ultrasound. A thin tube is passed into the cervix, saline is gently pushed into the uterus. The ultrasound is used to look at the cavity of the uterus and bubbles in the saline are seen going out through the tubes if the tubes are open. This test takes about 10 minutes.

Since this test is performed in the office by your doctor, you will get the results immediately and a plan will be made at that visit.

HYSTEROSALPINGOGRAM (HSG) The procedure is performed by passing a thin tube into the cervix and then injecting dye into the uterus. You will lie on an exam table with a speculum in place. As the dye enters the uterus and fallopian tubes, x-rays of your pelvis will be taken by the radiologist. The test usually takes about 20 minutes. This test uses iodine dye so you cannot have this test if you are allergic to iodine or shellfish.

Depending on your health history, we may recommend that you take an antibiotic starting the day of the procedure because of the small risk of infection. If antibiotics are recommended for you, we will give you a prescription for doxycycline 100 mg 2x/day for 3 days, take first dose before the procedure.

It takes 2-3 days to get the results of the HSG, if you do not hear from us within 2-3 days after having the test performed, please call our office so we can get the results as soon as possible.

PELVIC ULTRASOUND:

An ultrasound is often ordered to evaluate for possible ovarian cysts, fibroids, polyps... anything in the uterus or ovaries that may decrease a woman's chance to get pregnant.

SEMEN ANALYSIS (SA):

When a couple is unable to conceive, approximately 45% of the time the cause is due to a male factor. Some labs are not trained to look at the SA for infertility so we will give you instructions for a specific lab. You should not have intercourse for 2-4 days. Collection of semen needs to occur by masturbation and not involve intercourse.

After all the tests that were ordered have been completed, I would like to meet with you and decide on a plan of management.

What can you do to improve your infertility? Often a couple's general health and lifestyle can contribute to infertility. Recommendations include moderate exercise and a healthy well balanced diet.

Being overweight or obese significantly contributes to infertility **and** to miscarriage. Unfortunately, most women don't know the definitions of being overweight or obese. To calculate BMI (body mass index) go to <http://www.nhlbisupport.com/bmi/>

BMI Categories:

- Underweight = <18.5
- Normal weight = 18.5-24.9
- Overweight = 25-29.9
- Obesity = BMI of 30 or greater

If you are overweight, the best thing you can do to improve your fertility is lose weight. Even medications that help women ovulate may not work in someone who is obese until they lose weight, even a 10% weight loss may help (example, 10% weight loss for someone who weighs 230 pounds is 23 pounds). Remember, getting pregnant is a start, avoiding miscarriage and staying pregnant is just as important. Being underweight can decrease fertility as well.

Specific diet changes include: avoid trans fats (look on food labels), eat vegetable protein instead of animal protein, low glycemic carbohydrates (<http://www.glycemicindex.com/>), increase low fat dairy products, Multivitamin with folic acid, increase DHA or omega 3 fatty acids, increase iron from plants and supplements. If you lose weight with these changes, this may improve ovulation.

Women who engage in vigorous exercise for 30 minutes each day had a lower risk of problems with ovulation. If you exercise to exhaustion for > 5 hours/week, you may actually reduce your fertility by suppressing ovulation.

Other recommendations include quit cigarette smoking, street drugs and alcohol, limit medications if possible (there are many medications that you should not stop without discussing with your physician). Avoid anti-inflammatories such as ibuprofen during ovulation. Avoid vaginal lubricants. Reduce caffeine intake to <250mg/day.

Infertility is not caused by stress however stress can affect hormone production. Going through infertility is often very difficult for couples; often they will experience anger, depression, jealousy and strain on their relationship. Fortunately, doctors are more in tune with these stressors and are helping couples deal with them more effectively.

It is very encouraging that healthy habits improve the chance of getting pregnant.

WEBSITES:

www.resolve.org,

www.asrm.org,

www.fertilitylifelines.com/fertilityhealth/biology/female.jsp

www.fertilityplus.org