

## *Your Pregnancy Guide*



*CONGRATULATIONS, you just got pregnant following your recent tubal reversal!*

*Finding out that you are pregnant can be a bit of an emotional roller coaster. You may be feeling excited, anxious, happy, and overwhelmed all at the same time. Many women wonder how they will cope with pregnancy never mind caring for a newborn. Don't worry it is normal to have these feelings. The purpose of this guide is to let you know what to expect and how to handle some of the issues that might arise.*

What happens now?

Every patient always wants to know, “How soon can I have a scan to see the baby?” Your first scan is usually scheduled about 2-3 weeks after your pregnancy test. Remember, by convention you are already about 4 weeks pregnant at the time of your positive pregnancy test (at the time of your missed menses). Therefore, you will have your first obstetrical ultrasound when you are 6-7 weeks pregnant. This will be a transvaginal ultrasound.

During your first scan, at around 6 weeks gestation, your doctor will most likely be able to see a gestational sac, which looks like a dark round area within the uterine cavity. Oftentimes one will also see a ring-like structure within the sac, called the yolk sac. Next to the yolk sac, a careful evaluation often reveals a tiny structure, which is the fetal “pole”; this is the fetus! Sometimes, a tiny flicker can be seen within the fetal pole, which is the fetal heartbeat.

Which hormones play a role in my pregnancy and why is it important to monitor them?

Human Chorionic Gonadotropin (HCG) - HCG is the hormone of pregnancy. When you become pregnant, your pregnancy starts producing its own HCG. We expect your first HCG level to be 30 mIU/mL or greater at the time of a positive pregnancy test (at the time of your missed menses). Occasionally, we will see a level lower than 30 mIU/mL that can still result in a viable pregnancy.

Two days after your initial HCG blood test is done, you will need to have your HCG level checked again. Ideally, this second test will show that the level of HCG has increased by at least 66-100 percent (approximately double from the 1<sup>st</sup> test), indicating normal development at this point. Even though it is difficult to suppress your excitement, it may be wise to refrain from sharing your pregnancy news until after your first ultrasound scan (about two-three weeks after your initial pregnancy test), when a heartbeat can typically be observed.

Your HCG levels will continue to rise for quite a while into your pregnancy before leveling off. Unfortunately, HCG levels monitored this early in the pregnancy cannot tell us if the baby is normal, if it is a boy or a girl, or if the pregnancy will continue without complications.

Monitoring HCG levels right from the start, with a positive pregnancy test, is extremely important since it can oftentimes reveal if the pregnancy is doing ok, or if the pregnancy is prone to an early miscarriage (called a biochemical pregnancy) or an ectopic pregnancy (a pregnancy located outside of the uterus; most commonly a tubal pregnancy). The tubal reversal you had done does not increase the risk of miscarriage; however, the risk of an ectopic pregnancy is increased. An abnormal rise in HCG levels is the earliest indication of an ectopic pregnancy, and therefore must be monitored carefully.

Progesterone - Progesterone is the “pro-gestational” hormone. It is a critical hormone which allows an embryo to implant in the uterus and then nourishes the developing

embryo. In a natural cycle, progesterone is produced when ovulation occurs and changes the endometrial lining to make it more receptive to the arriving embryo.

Along with HCG, at the time of your positive pregnancy test, your doctor should also check your progesterone level. The level of progesterone can help indicate whether the early pregnancy is developing well within the uterus, or whether the pregnancy is an ectopic pregnancy or is likely to miscarry.

What can I expect early blood tests and ultrasounds to tell me about my pregnancy?

During the first few weeks of pregnancy, about 80% of normal pregnancies will show doubling of the HCG levels each 48 hours. Progesterone levels tend to be high (>25 ng/mL) in most intrauterine pregnancies (pregnancies located inside the uterus). If your HCG numbers do not increase normally, or your progesterone level is low, there are 3 possibilities: you could have a normal pregnancy that is in the “slowest” 20%; the pregnancy could be abnormal and in the uterus (which may lead to a miscarriage); the pregnancy could be outside of the uterus (ectopic; most commonly a tubal pregnancy located in the fallopian tube).

Since a tubal reversal increases your risk of an ectopic pregnancy, in cases where your initial early hormone levels are inadequate, it is imperative to continue following your hormone levels (mainly HCG) quite closely, and to have an early pelvic ultrasound (using a vaginal probe), before the 6 week mark, until it can be determined if the pregnancy is inside the uterus or outside (ectopic). In the case of an ectopic pregnancy, an early pelvic ultrasound may reveal the presence of the pregnancy sac and/or fluid outside the uterus. Early and prompt diagnosis of an ectopic pregnancy is paramount because if an ectopic pregnancy goes unrecognized, as the pregnancy grows in the tube it can eventually lead to rupture of the tube which can lead to life-threatening internal bleeding and the need for emergency surgery. If an ectopic pregnancy is found early-on in the first trimester, the pregnancy can oftentimes be treated with an injection, called Methotrexate, which may terminate the pregnancy without the need for surgical intervention. If initially unrecognized, or diagnosed late in the first trimester, surgical intervention may be necessary (sometimes on an emergency basis) to remove an ectopic gestation, and sometimes the entire fallopian tube.

Miscarriages and ectopic pregnancies can be devastating to experience, especially after going to great lengths to achieve a pregnancy through a tubal reversal procedure. Patient support counseling and other resources are available through our office to help couples deal with such a sudden and unexpected loss.

What do I do if I see bleeding?

First of all, do not panic. About 25-30% of women will experience an episode of bleeding or spotting during the first trimester. As the embryo's blood supply is being established, it is not uncommon to see some bleeding or staining due to the growth of the placenta into the uterine tissue. If you notice bleeding, please notify us. Depending on how advanced the pregnancy is, you will probably be instructed to go into your doctor's office to have blood work and a pelvic ultrasound. Once it is verified that

the pregnancy is okay, you may be placed on bed rest or restricted activity until the bleeding stops. It is important to remember that in the vast majority of cases, first-trimester bleeding does not lead to, or suggest, a miscarriage, even in cases where a blood clot (hematoma) is seen on ultrasound.

If bleeding is accompanied with significant pelvic pain, it is important that you have an immediate evaluation by your doctor or in the emergency room, as this can signify an ectopic pregnancy. Although other conditions can lead to bleeding and pelvic pain during pregnancy, an ectopic pregnancy is high on the list of conditions which must be diagnosed and treated early.

What should I eat or not eat?

You should eat a well-balanced diet supplemented with daily prenatal vitamins. The FDA recommends that a healthy diet consists of 2-3 servings of dairy and meat products, 3-5 servings of vegetables, 2-4 servings of fruit, and 6-11 servings of grains, daily. The FDA also recommends that fats, sweets and oils be used sparingly. Avoid beverages containing caffeine or alcohol, as well as herbal remedies and/or supplements, except those approved by your physician. You should also avoid foods made with unpasteurized dairy products or raw shellfish and raw meats. Because of the risk of mercury contamination, which can affect the developing fetal nervous system, the FDA suggests that pregnant women avoid swordfish, tilefish, shark, and mackerel. You should also limit your consumption of other fish, including tuna and salmon, to less than 12 oz per week. Because of the risk of hepatitis and/or parasitic infection, any uncooked seafood should be avoided including oysters, clams and raw sushi or sashimi. Although not considered harmful in pregnancy, spicy and oily foods may lead to annoying heartburn, which you are already more likely to experience due to your pregnancy; and it is therefore advisable to cut back on such foods.

What can I do about nausea?

If you are experiencing nausea and vomiting commonly associated with pregnancy, remember to eat small frequent meals and to stay hydrated. Nausea tends to be worst when you are quite hungry or full and you will need to experiment to see which foods are better tolerated. Small, frequent meals and snacks are therefore preferred to infrequent large meals. For many women, bland starchy foods such as crackers, noodles, soup, etc are well tolerated. It may also be helpful to try an acupressure band – these are commonly sold in drug stores for treatment of seasickness. Some women find ginger to be helpful. Vitamin B6 (Pyridoxine), at doses of up to 75 g per day, may help some women.

Lack of weight gain is not uncommon in the first trimester. However, persistent vomiting leading to weight loss should be treated aggressively, and may require hospitalization. Today, multiple safe, effective, and well-tolerated medications are available to treat nausea and vomiting, which can be administered to make your first trimester of pregnancy a more pleasant experience.

Can I have sex?

The answer is, "Yes! You CAN have sex during pregnancy!" Intercourse is both normal and healthy for a pregnant couple. The only exception is when a pregnant woman is bleeding or cramping. Also, if concerns exist about going into premature labor, your doctor may advise against intercourse. But in a normally developing pregnancy, sex is fine.

Can I exercise?

Moderate and safe exercise during pregnancy can help you feel good, tone your muscles and increase endurance. The BEST exercises for pregnant women are swimming, biking, and walking. Aerobic exercise typically is fine as long as it is low impact and a routine you have been doing for a while. The following guidelines for exercise in pregnancy are provided by the American College of Obstetricians and Gynecologists (ACOG):

- Regular exercise (at least 3 times per week) is preferable to sporadic activity.
- Vigorous exercise should not be performed in hot, humid weather or during illness.
- Strenuous exercise should not exceed 15 minutes. Additionally, exercise should be preceded by a 5 minute muscle warm-up and followed with a cool down period.
- Activities that require jumping or rapid changes in direction should be avoided because of joint instability.
- A pregnant woman's heart rate should not exceed 120 beats per minute.
- Women should drink fluids before, during and after exercise to prevent dehydration.

Women with a history of miscarriage, premature labor, multiple pregnancies, vaginal bleeding or heart disease should consult with their physician about exercise during pregnancy.

How about Jacuzzis/Saunas/Hot tubs?

You should avoid very long, hot baths or Jacuzzis as there is a theoretical risk of slightly increasing the chance of neural tube defects with prolonged elevations of the core body temperature.

What medications can I take?

As a general rule, never take any medication during pregnancy without first consulting your physician. This includes "over the counter" medications that you can get at any store without a prescription. However, there are some medications that are safe to take during pregnancy. Unfortunately, that list is too long to mention. The following is a partial list of the prescription and over the counter drugs about which we are most commonly asked and which *are safe* for use in pregnancy:

- Pain - Tylenol, Tylenol #3, Percocet. Do not take Motrin, Advil or Nuprin
- Coughs, cold, flu - Sudafed, Robitussin (not Robitussin DM)
- Allergies - Benadryl, Zyrtec

- Constipation - Colace, Metamucil, Fibercon, Miralax, Senokot
- Heartburn - Tums
- Asthma - Inhalers are safe for an asthmatic attack (including inhaled steroids)
- Yeast infection - over the counter preparations (Monistat, Mycelex)
- Upper respiratory tract/urinary tract infection - Penicillin, Amoxicillin, Erythromycin, Nitrofurantoin

What are the health risks of smoking and drinking alcoholic drinks?

Smoking and being around smokers both are very dangerous for a pregnancy. In addition to the well-known risks to your health, smoking increases your risk of miscarriage, stillbirth and low newborn birth weights. Babies of mothers who smoke also are more likely to die from SIDS (sudden infant death syndrome or “crib death”) and will be more likely to suffer from asthma and respiratory infections. Get serious about quitting if you smoke. Your baby’s future depends on it.

Avoid drinking alcoholic beverages during pregnancy. Consumption of alcohol may cause low birth weight, birth defects and mental retardation (fetal alcohol syndrome) in the fetus. No one has ever determined a “safe” amount of alcohol that can be ingested during pregnancy, so we recommend that you eliminate alcohol altogether.

What about microwaves and other types of radiation exposures?

Whether or not exposure to microwaves is harmful is still controversial. It is believed that two types of human tissue, the developing fetus and the eye, are particularly vulnerable to the effects of microwaves because they have a poor capacity to dissipate the heat the waves generate. The following precautions should take place:

1. Be sure your oven does not leak.
2. Do not stand in front of the oven when it is in operation.
3. Follow the manufacturer’s directions to the letter.

It is clear that diagnostic x-rays rarely pose a threat to the embryo or fetus, however, it is usually recommended that elective x-rays be postponed until after delivery. Radiological tests involving computerized tomography (CT scans), or those utilizing injected or ingested radio-contrast material, should be avoided during pregnancy. Magnetic resonance imaging (MRI) is considered safe.

How about household cleaners/chemicals/etc.?

Household Cleaning Products - no correlation has ever been noted that using household cleaning products causes birth defects. The following are guidelines in screening out potentially hazardous chemicals:

- If the product emits a strong odor or fumes, don’t breathe it in directly
- Use pump sprays instead of aerosols
- Never mix ammonia with chlorine-based products
- Try to avoid using products such as oven cleaners and dry-cleaning fluids
- Wear rubber gloves and mask when you’re cleaning

Insecticides - Some chemical insecticides have been linked to birth defects. Whenever possible, take the natural approach to pest control. The chemicals are only dangerous when the fumes linger.

Paint Fumes - it has been reported that latex paints contain unsafe amounts of mercury. Federal regulations now require that paints be reformulated so they don't contain mercury. But because you don't know what hazard may turn up in paint next, painting should be avoided during pregnancy. While painting is being done, try to arrange to be out of the house. Make sure there is adequate ventilation. Avoid exposure to paint removers.

Should I be concerned about handling my pets?

No, in general you should not be concerned about having pet(s) while pregnant. However, various precautions should be routinely used when handling some pets to ensure that your pregnancy is not harmed.

Dogs - be sure that your dog doesn't jump on your belly while you're sitting or lying down. If your dog is heavy and in the habit of jumping on you, it would be prudent to train your dog not to do so. In addition, wash your hands thoroughly after handling your dog or the dog litter to avoid parasitic infections. Furthermore, make sure your dog is treated with parasitic infection prevention measures.

Cats - be careful of toxoplasmosis when handling your cat. Toxoplasmosis is an infection caused by a parasite that can be carried by cats. You can get toxoplasmosis by cleaning kitty litter or touching dirt where cats might have been, including garden soil. Many people who get toxoplasmosis never have any symptoms. However, this illness can cause serious complications in pregnancy, such as birth defects or even loss of the pregnancy. If a pregnant mom becomes infected with toxoplasmosis for the first time just before or during pregnancy, she has a 1 in 2 chance of passing the illness to her baby. Pregnant women can lower their chance of getting toxoplasmosis by avoiding cleaning out the litter box every day or better yet letting others clean the box, wearing gloves while handling cat litter, keeping cats indoors, staying away from stray cats, and washing hands thoroughly with running water and soap after coming in contact with the cat's stool or after gardening.

Rodents - these animals may carry a virus called lymphocytic choriomeningitis (LCMV). Pregnant moms can lower their chance of getting LCMV by keeping pet rodents in a separate part of the home, asking another family member to care for the pet and to clean its cage, washing hands with soap and water after handling pet rodents, keeping rodent cages clean and free of soiled bedding, and cleaning the cage in a well-ventilated area or outside.

Reptiles and amphibians - be especially careful of salmonella which is linked to reptiles and amphibians (lizards, iguanas, turtles, frogs, snakes). Exposure to the feces of some reptiles can lead to a salmonella infection. A family expecting a child should remove any pet reptile from the home before the infant arrives. If removal of the reptile is not possible, it is important to wash your hands thoroughly before and after handling of

reptiles or their cages, and to refrain from letting reptiles/amphibians near the kitchen or while preparing food.

Is it safe for me to fly?

Rest assured that flying while you are pregnant is almost always completely safe, so in most cases there is no need to change your travel plans. Commercial airlines and many noncommercial planes are required to maintain a cabin pressure equivalent to 5,000 to 8,000 feet by the Federal Aviation Administration (FAA). Therefore, healthy pregnant women with no major medical or obstetrical problems pose no danger to themselves or their babies by flying in a pressurized cabin. Flying in small noncommercial planes with unpressurized cabins is not advisable.

A common concern for many pregnant women is whether or not it is safe to walk through the airport metal detectors. The answer is yes, metal detectors are safe! These machines are not x-ray machines and will not cause harm to you or your baby.

There are some restrictions as to just who should and should not travel the skies when they are pregnant. Generally, women who are having a healthy, normal pregnancy are free to come and go as they please, including in the early parts of the first trimester. Many women report that their second trimester is when they feel the most comfortable and choose to take to the skies. The American College of Obstetricians and Gynecologists (ACOG) recommends women do not fly after their 36th week of pregnancy. Airlines have their own flight restrictions for pregnant women, which can vary from one airline to another, and according to whether you are flying domestically or internationally. For example, some airlines will not allow you to travel for 30 days before your due date, while others will not permit you on board if your due date is less than seven days away. Whether you are in your first trimester or third trimester, it is always a good idea to discuss your travel plans with your health care provider before you leave. It may also be a good idea to obtain a doctor's note saying that it is okay for you to travel, especially if you are in your third trimester.

The following precautions should be taken by pregnant women who fly:

- Avoid travel in planes with unpressurized cabins
- Avoid travel close to your due date
- Women who are having any sort of complications associated with their pregnancy or who are considered to be 'high risk' should not travel
- In order to improve blood circulation during flights lasting over 2 hours, it is important that pregnant women move about the cabin every several hours
- ACOG recommends that pregnant women keep their seatbelt on while seated during the flight since you never know when turbulence will strike, and there is a risk of trauma when it does happen

Is it safe to get a manicure and pedicure while I'm pregnant?

There's little or no evidence that a pregnant woman's exposure to the chemicals used in a manicure or pedicure is harmful to the fetus. A pedicure in particular can be a wonderful thing in late pregnancy when you're having trouble reaching your toes even to

clip your nails. Given the heightened sensitivity to smell in pregnancy, the fumes may make some women nauseated, so a well-ventilated location would be helpful.

Can I color my hair?

While all the available research suggests that coloring your hair during pregnancy is safe (there's no data suggesting that it increases the risk of birth defects or miscarriage), it's a good idea to schedule appointments after your first trimester just to be on the extra-safe side. By then, most major fetal organ development is complete. It's important for women to feel good about themselves during pregnancy. If you choose to color your own hair, wear gloves and work in a well-ventilated space to minimize your exposure to the chemicals used in the coloring process. Don't leave the dye on any longer than necessary, and thoroughly rinse your scalp at the end of the process.

Can I get dental care?

Preventive dental cleanings and annual exams during pregnancy are not only safe, but are recommended. The rise in hormone levels during pregnancy causes the gums to swell, bleed, and trap food causing increased irritation to your gums. Preventive dental work is essential to avoid oral infections such as gum disease, which has been linked to preterm birth.

When it comes to regular dental work such as a cavity filling, root canal or tooth extraction, it's recommended to treat emergency cases after the first trimester and postpone all unnecessary dental work or elective treatments such as teeth whitening and other cosmetic procedures, until after the birth. It is best to avoid exposing the developing baby to any unnecessary risks, even if they are minimal.

Should I get the flu shot?

Yes. Not only is it safe, but it is also important. The Centers for Disease Control and Prevention (CDC), the American College of Obstetricians and Gynecologists (ACOG), the American College of Nurse-Midwives, the American Academy of Pediatrics, and many other organizations all strongly recommend the flu shot for pregnant women - typically November through January or even later; unless you've had a severe reaction to a previous flu vaccination.

Pregnancy puts extra stress on your heart and lungs and can also affect your immune system. These factors increase the risk not only of getting the flu but of developing serious complications of the flu, such as pneumonia and respiratory distress. In turn, flu complications increase the risk of premature labor, preterm birth and other pregnancy complications. A flu shot can help prevent these potential problems.

Having a flu shot during pregnancy can also help protect your baby after birth. Infants are at high risk of complications from the flu, but childhood flu vaccines are not administered before age 6 months. If you have a flu shot during pregnancy, however, the antibodies you develop will pass through the placenta. In turn, these antibodies help protect your baby from the flu.

When you get your flu shot, be sure to request the flu shot and not the nasal spray vaccine. The flu shot is made from an inactivated virus, so it's safe for both mother and baby during any stage of pregnancy. The nasal spray vaccine is made from a live virus, which makes it less appropriate during pregnancy.

When should I get prenatal testing done to rule-out Down's syndrome and other fetal problems?

Prenatal tests are designed to screen/test against fetal chromosomal problems (Down's syndrome, Trisomy 18...) and congenital defects (cardiac defects, neural tube defects...). Prenatal testing typically does not begin prior to the 10<sup>th</sup> week of gestation. Most pregnant women are candidates for having a first-trimester non-invasive test called nuchal translucency (NT) screening, performed between 10-13 weeks gestation. This test involves a careful fetal ultrasound and a blood test, and does not pose any risk to the pregnancy. In some instances, an invasive test called chorionic villus sampling (CVS) will be recommended. This test involves sampling the fetal placenta (using an ultrasound-guided needle which is passed through the cervix or the abdomen) and removal of cells for the purpose of chromosomal testing. Because of the invasive nature of the test, there is a small risk of miscarriage (typically less than 1%) following this test. The test is done between 10-13 weeks of gestation, under certain clinical conditions.

Since your pregnancy will be monitored in the first trimester by your obstetrician/gynecologist, you should have a comprehensive discussion with him/her about the risks and benefits of each first trimester prenatal test, and obtain a referral for the appropriate test.

Remember, additional non-invasive prenatal tests (quadruple marker screening blood test and level 2 ultrasound evaluation), as well as invasive prenatal tests (amniocentesis) are available in the 2<sup>nd</sup> trimester (and 3<sup>rd</sup> trimester) of pregnancy, as well. The choices regarding 2<sup>nd</sup> trimester prenatal tests will be discussed with you at length with your obstetrician/gynecologist.

*Good luck!*

