Preterm Labor -

Predictions & Treatment

Being pregnant with multiples places even the healthiest woman into the "high risk" category. This is due in part to the fact that being pregnant with multiples is a set-up for more pregnancy complications for both mom and babies. This makes it very important to see an obstetrician who has experience in dealing with high risk pregnancies.

Early diagnosis of multiples, additional ultrasounds, bedrest, working outside the home, exercise, stress levels, and the use of tocolytic drugs (drugs to stop preterm labor contractions) should ideally be discussed with your obstetrician on your initial visit or interview. Good communication and clear explanations should be given to all your questions. It is also important that you feel comfortable with the office staff, whom you may call with questions throughout your pregnancy. All of these items will help optimize your chances of getting term, healthy babies.

Your best chances at preventing preterm labor contractions involve eating the right foods, getting plenty of hydration, frequent rest periods during the day, and feeling for uterine contractions. However, even with the best prenatal care and optimal nutrition, preterm labor is not always preventable (see Prematurity - Is It Preventable).

In recent years, medical research has found that psychological factors could play a significant role in the onset of preterm labor. A 1992 study conducted in Belgium hypothesized that the failure to build a positive emotional relationship with your unborn babies could predispose you to develop preterm labor. Difficulties with the motherhood process could influence the outcome of pregnancy and ultimately the bonding process.[1] This is very interesting research, and could be applicable to women pregnant with multiples, who already have heightened emotions such as anxiety, stress, fear, and excitement all at the same time.

There have been several recent medical advances directed toward identifying those women that are predisposed to develop preterm labor. The first is a test called Fetal Fibronectin. Fetal Fibronectin is a large protein found in amniotic fluid and in fetal membranes. This protein functions as an adhesive substance in pregnancy to help attach the fertilized egg(s) to the implantation site in the uterus. However, after 22 weeks gestation, Fetal Fibronectin is not normally present until the pregnancy reaches term. Women who are candidates for this test are those who are between 24 and 34 weeks gestation, have amniotic membranes intact (which is the sac of water surrounding each baby), and have cervical dilatation less than 3 centimeters, but are having symptoms of preterm labor. Some of the symptoms of preterm labor are, lower back pain, pelvic pressure, menstrual-like cramping with or without diarrhea, change in the amount of vaginal discharge, or your just not feeling quite right. If protein is found in the cervical-vaginal fluid there is an elevated risk of imminent delivery within 14 days after sample collection.[2] This test is only one criteria for determining the risk of delivery, and should be used in conjunction with other tests and patient symptoms. It is a relatively new test and should be discussed with your doctor.

Mammary Stimulation Tests (MST) also have some predictive value in determining the risk for preterm delivery. The MST is performed between 24 and 32 weeks of gestation in women who are at high risk for preterm delivery. This test utilizes nipple stimulation to bring on the possibility of uterine contractions. The patient is placed in a sitting position with an electronic fetal monitor placed on her abdomen to measure uterine contractions and the babies heartbeat. The woman is then asked to stimulate one breast (nipple) through her clothing for 2 minutes followed by a short rest period. The test is considered positive when nipple stimulation brings about uterine contractions lasting for 40 seconds or longer (within 8 minutes from the onset of stimulation). The test is negative when there is absence of uterine contractions lasting for more than 40 seconds after nipple stimulation within the same time frame. In a recent study, a positive MST identified 84% of the patients who delivered prematurely. Of the patients who delivered at term, 94% had a negative MST.[3]

The Mammary Stimulation Test seems to be a promising test for the prediction of preterm labor and delivery as it is cost effective, readily available to your physician, and takes about 20 minutes to perform.Do not perform this test at home or without your doctors consent.

Although there is no fool proof method for determining who will deliver prematurely, Fetal Fibronectin, and Mammary Stimulation Tests are needed screening tools in helping prevent premature births.

There are a number of tocolytic drugs used by your physician if you do experience preterm labor contractions. Terbutaline is the most commonly prescribed drug used for that purpose because it can be administered in a variety of different ways, and is inexpensive. The most common side effect is that of feeling shaky as your heartbeat will rise anywhere from 10-30 beats/min above your normal heart rate, or having a headache for the first few days. This drug should not be used if you are diabetic. The side effects to your babies are minimal. Terbutaline is almost aways given after the 20th week of pregnancy when the development of the babies is not likely to be affected. Occasionally, there is a slight increase in your babies heartbeat or blood sugar values, but these effects are short lasting in most cases. If you have been treated within 24 hours of delivery, your pedicatrician will most likely check your babies blood sugar level.

The use of Indocin, a medication that inhibits prostaglandins, a substance which can cause uterine contractions has shown to be effective in some people, but is only used on a short term basis and not past 32 weeks gestation. Common side effects are headache and nausea. Procardia, also used as a heart medication is used to relax the uterine muscle, thus stopping uterine contractions. Side effects may include dizziness, nausea, headache, or a severe lowering of the blood pressure. Lastly, Magnesium Sulfate is a drug that is given intravenously and only in a hospital setting. It is a central nervous system depressant so you feel very warm and flushed, may have nausea initially, and a flu like fatigue. The side effects to the babies are minimal. Your babies may have decreased muscle tone if born soon (within 24 hours) after magnesium sulfate has been discontinued but this is easily corrected and studies show no long term effects. In some people, the above medications may have many more side effects, some of them being quite serious. Never take yourself off a medication without first talking with your doctor. It is best, of course, to do everything you can to prevent preterm labor, but if these medications help to prolong your pregnancy, they will be well worth enduring the side effects. Remember, it is still very important to eat well while on these medications, so if you are having nausea or vomiting to the point that you are not eating, discuss this with your doctor, there may be another alternative.

Having a healthy pregnancy with multiples is indeed a team effort. You, your spouse or significant other, your physician, area twins or more clubs and multiple birth education classes all play a significant role toward your good health and the health of your babies. Having a strong emotional bond with your babies can affect your attitude about your pregnancy and may even make a difference in the outcome. Good Luck!