Non-Stress Testing during Pregnancy

Non-stress testing (NST) is a means of monitoring the fetal heart rate when the fetus moves. This test makes sure the fetus is healthy. It is thought that if the fetal heart rate increases during fetal movement that it is a sign of good fetal health. This is the most widely used test of fetal well being. It is suggestive that the baby is doing well and is healthy.

BERORE THE PROCEDURE:

- **Do not** smoke.
- **Do not** take medications that may increase or decrease the fetal heart rate.

LET YOUR CAREGIVERS KNOW ABOUT THE FOLLOWING:

- Medications taken including herbs, eye drops, over-the-counter medications and creams.
- If you have a fever.
- If you have an infection.

METHOD OF TESTING

The mother lies on her back and an external transducer (*doppler*) is placed on her abdomen and attached to a monitor that will record the baby's heart rate.

During this test, the mother lets the examiner know when the fetus is moving. The fetal heart rate is monitored with a *doppler* (a device that monitors the fetal heart rate by use of sound waves). These sound waves do not hurt the mother or the fetus. These tests are usually carried out for at least 20-40 minutes because the fetus may be sleeping. The baby normally has a slower heart rate during sleep. If the baby is sleeping, a loud sound is produced over the abdomen to awaken the baby. This helps to shorten the time of the test. There are different ways non stress tests are done from one medical center to the next.

Non-stress tests are 50% nonreactive during 24 to 28 weeks of the pregnancy and 15% nonreactive between 28 and 32 weeks of the pregnancy. Therefore other tests may be needed to accurately evaluate the baby during those times if a nonreactive tests is seen. If the NST is reactive, then no other tests are necessary.

RESULTS

The monitor is used to detect an increase of the fetal heart rate during fetal movement. When the fetal heart rate does not increase in the number of heart beats per minute during fetal movement, the fetus may be having some problems, such as decreased brain function or fetal acidosis.

It is recommended that a test is normal (reactive) if the fetus has two or more accelerations of at least 15 beats per minute. The increase in the fetal heart rate should last 15 seconds or more. However, the 15 minute peak of the FHR does not have to last 15 seconds and all occur within 20 minutes of the beginning of the test.

- It is thought that fetal heart rate increase at any time, regardless of movement, is also a sign that the baby is doing well.
- A nonreactive (abnormal) NST is if the fetal heart rate does not reach 15 beats/minute with movement over a 40 minute period. A test that is nonreactive does not always mean that the fetus is in trouble. Your caregiver will talk to you about the test and if any further testing should be done.

RISKS AND COMPLICATIONS

There are no known risks to the mother or baby when doing a NST.

AFTER THE PROCEDURE

You may go home and resume your usual activities.

HOME CARE INSTRUCTIONS

- Follow your caregiver's advice.
- Be aware as to whether or not your baby is not moving as usual or moving more than usual.
- Make and keep your prenatal visits.

SEEK IMMEDIATE MEDICAL CARE IF:

- You do not feel the baby moving.
- You think the baby's movements have slowed down or are too many.
- You develop uterine contractions.
- You develop abdominal pain.
- You develop vaginal bleeding.
- You are leaking or have a gush of fluid from your vagina.

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