Screening Tests in Pregnancy

There are several routine tests done during pregnancy to evaluate the health status of the mother. Screening tests may also check for abnormal cell growth, infection, or certain types of diseases. Routine screening at your first OB visit will include the following tests:

- **Complete Blood Count (CBC) -** *Blood test to evaluate the components of the blood system, including red and white blood cells and platelets.*
- **HIV** - *Blood test to detect the presence of human immunodeficiency virus*
- **Hepatitis B Surface Antigen** - *Blood test to screen for hepatitis B*
- **RPR** -*Blood test that screens for syphilis*
- **Rubella Titer** - *Blood test to check for immunity to rubella*
- **Blood Type and Rh Factor** - *Blood test to determine maternal blood type and the presence or absence of the Rh factor in the mother's blood cells*
- **Antibody Screen** - *Blood test to check for certain blood antibodies which may affect the pregnancy.*
- **Pap Smear** - *Sample of cells taken from the cervix to screen for abnormal cell growth*
- **Gonorrhea & Chlamydia** - *Swab culture obtained from the cervix to screen for gonorrhea and Chlamydia infection*

Glucola

Around 28 weeks you will be screened for Gestational diabetes. During this visit you will be given a sweet drink called a "glucola." You will need to drink the entire 6 ounces of fluid over a 5 minute period. One hour after completing the drink, we will draw your blood to check your blood sugar. If you have a normal result then you do not have gestational diabetes at that time. If your result is abnormal you will be sent for additional testing to confirm gestational diabetes.

Group Beta Strep (GBS)

A Group Beta Strep (GBS) culture is obtained around 36 weeks of pregnancy. A cotton swab will be used to swab from the vagina and the anal area. GBS is a common type of bacteria that many people have in the genital area. Though rare, complications can result if a mother carries GBS and it is transmitted to the baby during labor. If you test positive for GBS, as many patients do, we will treat you with antibiotics during labor to prevent any potential problems.

Screening Tests in Pregnancy (Cont'd)

Other Screening Tests

There are several tests available that screen for fetal abnormalities. These tests are optional and women who are considering them need to realize that they are offered only as methods of screening for possible abnormalities. No screening test by itself can diagnose a birth defect nor does a normal result guarantee a normal baby. Further testing such as ultrasound and/or amniocentesis may be necessary to confirm any problems. You should also check with your insurance to determine the coverage of the tests you wish to have performed.

Maternal Serum Alpha-Fetoprotein (MSAFP) & Triple Analysis

The MSAFP and Triple Analysis or Triple Screen are simple blood tests offered between 16 and 18 weeks of pregnancy that may help to identify a small number of women whose unborn babies may have certain defects.

The *MSAFP* test measures the amount of substance, AFP, that is present in a pregnant woman's blood. AFP is produced by the baby and is normally passed into the mother's blood in small quantities. Some causes of abnormally high or low levels of AFP may be twins, incorrect gestational age, neural tube defect, or Down Syndrome.

The *Triple Analysis* tests three substances in a pregnant woman's blood- alpha-fetoprotein (AFP), unconjugated estriol (UE3), and human chorionic gonadotropin (HCG). These substances are made by your baby during pregnancy and normal limits have been established based on the stages of pregnancy. Triple screen testing detects about 85% of open neural tube defects and about 67% of Down Syndrome in women of all ages.

Abnormal results can mean several different things. An elevated result often means that the pregnancy is further along than first thought or that a woman is carrying twins. In some cases, elevated values may be associated with a neural tube defect. A neural tube defect occurs when the skin over the developing brain and spinal cord fails to close completely. A low result usually indicates that the pregnancy is not as far along as originally thought. However, low values may also indicate the possibility of Down Syndrome. Down Syndrome, also known as Trisomy 21, is a birth defect associated with mental retardation and possible defects of the heart and other organs. Down Syndrome affects about one in every 800 live births and is the most common major chromosomal abnormality. In the United States, there are about 5000 babies born each year with Down Syndrome. The risk for having a baby with Down Syndrome increases with maternal age.

Screening Tests in Pregnancy (Cont'd)

Other Screening Tests (Cont'd)

Pregnancy-Associated Plasma Protein-A (PAPP-A) & Nuchal Translucency (NT)

A new combination of two blood tests and ultrasound is available during the first trimester to screen for genetic defects. Optimal timing for these tests is between 11 and 13 weeks of pregnancy. First-trimester screening offers several potential advantages over second-trimester screening. Anxiety about some birth defects may be lower if test results are negative. If screening results are positive, it allows women to take advantage of earlier testing to confirm a diagnosis of genetic defects such as Down Syndrome. Detecting problems earlier in pregnancy may also allow women to prepare for a child that may have health problems.

This first-trimester screening method includes testing of the mother's blood for two substance synthesized by the placenta known as *pregnancy-associated plasma protein-A (PAPP-A)* and *free beta subunit of human chorionic gonadotropin (B-hCG)*. An ultrasound is also done to evaluate *nuchal translucency (NT)*, the thickness of an area at the back of the fetal neck. Women who screen positive on these tests may be at an increased risk for having a child with Down Syndrome. Again, it is important to remember that this method is only for screening purposes and additional testing such as chorionic villus sampling (CVS) or amniocentesis are required to diagnose and confirm any abnormality. PAPP-A and NT testing detects about 87% of Down Syndrome babies.