MATERNAL SERUM ALPHA-FETOPROTEIN (MSAFP)

The MSAFP screens for “open neural tube” defects. Open spina bifida (or “open spine”) and anencephaly are examples of open neural tube defects. Neural tube defects are malformations of the central nervous system, the spinal cord and/or the brain. These defects occur in about two out of every 1,000 pregnancies.

This screening test is most commonly performed on women who have already undergone first trimester screening. The MSAFP involves minimal risk to the mother and the unborn baby. Here is how the screening works:

A blood sample is drawn from the vein in your arm. This will be done between 16 - 20 weeks after the start of your last menstrual period. The blood sample will be sent to the lab and analyzed. Higher than normal levels of AFP indicate that unborn baby may have a neural tube defect but there are other causes for having an elevated level. For instance:

1. If you are carrying twins or triplets;
2. If there is a small amount of bleeding from the unborn baby;
3. If your due date is incorrect;
4. If you may be at high risk for complication late in pregnancy such as fetal/perinatal death, oligohydramnios/abruption placentae;
5. If the baby may be affected by some other birth defect.

If the AFP is abnormally high, you may be asked to have a second blood sample drawn. The serum will again be analyzed. A very small percentage of women will have an unexplained elevated level of AFP the second time. These women will be contacted. Please remember that the blood test alone, which is a screening tool, is not used as an indication for any diagnosis or any form of medical treatment. They are used to suggest that additional diagnostic tests may be needed.

In most cases the baby will not be abnormal just because the AFP levels are higher than normal. In only 2 per 1,000 pregnancies will the baby have a neural tube defect. Even when two successive blood samples show elevated levels of AFP, the baby will have a defect only about 1 in 15 times.

Diagnostic testing, which is determined by you and your provider, such as an ultrasound, may be recommended. After this, an even smaller percentage of women may need to have a sample of amniotic fluid drawn from the bag of water around the baby. This procedure is known as amniocentesis.

If diagnostic testing reveals that the fetus does have a neural tube defect, you will be counseled about the finding. All options will be discussed with you at this point and any decision will be yours.

In conclusion, we must stress that only open neural tube defects can be screened with this test. Therefore, a normal result does not guarantee that your baby will be normal. Please feel free to contact your provider if you have any questions or concerns.

_____________________________ I do want to have the AFP test done.
_____________________________ I DO NOT want to have the AFP test done.

Patient signature ___________________________ Date ___________________________

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