Kona Birth & Midwifery Services

Informed Consent

SECOND TRIMESTER MATERNAL SERUM AFP, TRIPLE
and QUAD SCREEN

What is the test

Maternal blood alpha fetoprotein (AFP), Triple or Quad screen is a blood test done in the early part of the second trimester, generally between 15-18 weeks. This test looks for increased risk potential for fetal anomalies including Trisomy 21, Trisomy 18, Anencephaly and Spina Bifada.

The Triple Screen looks at three things:

AFP which is a protein produced by the baby. These proteins are normally found in the blood of all pregnant women.
hCG which a hormone produced by the placenta.
Estriol which is an estrogen produced by both the baby and the placenta.

The triple screening measures the amounts of all of the above substances in a pregnant woman's blood. When the test also includes the hormone inhibin A, then the test is called the quad screen.

This test is a screening, not a diagnosis. This test can only indicate the possible potential for genetic or neural tube anomalies. None of these tests show for certain your baby has a birth anomaly. Should this test come back positive, indicating increased risk, further testing will need to be done to determine a diagnosis.

Things to Consider

What is the cost of of this test?
What is the benefit?
What will I do with this information?
Why would I want this test?
How is the test performed?
Are there other options?
Are the results accurate?
Who should have screening?

What is the cost of of this test?

The Triple Screen, AFP and Quad screen typically costs between $90-$250 depending on where you live and the lab being used. Check with your specific provider for current costs. Most prenatal labs are covered by insurance and 50% self-pay discounts may also apply depending on the lab in your area.

The Clinical Laboratories of Hawaii: $152 with a 50% discount for self-pay clients**.**

What is the benefit?

The benefit of this test is that it allows the parents to prepare for and assess the options they have should an anomaly be discovered. A positive test can help the parents determine whether further testing is necessary. This test also allows the

parents time to research and understand the potential difficulties they will face should their baby be born with a genetic malformation.

What will I do with this information?

What you will do with this information is an important factor in deciding whether or not to choose this test. The test is typically performed in the early second trimester so parents can choose to terminate the pregnancy should a complication be indicated. If termination is not an option for you, then being able to understand and educate yourself on the baby you are giving birth to is also an important aspect of this test.

What are factors that affects the test?

All of the following can be instrumental in producing a positive, or false positive, result:

Weeks of gestation of the pregnancy
Woman's weight
Woman's race
Woman's age
Family history
Twins
Insulin dependent diabetes

How is this test performed?

It is a simple blood draw and generally takes less than 5-10 minutes from start to finish depending on the laboratory practitioner.

The health professional taking a sample of your blood will:

- Wrap an elastic band around your upper arm. This makes the veins below the band larger so it is easier to put a needle into the vein.
- Clean the needle site with alcohol.
- Put the needle into the vein.
- Attach a tube to the needle to fill it with blood.
- Remove the band from your arm when enough blood is collected.
- Put a gauze pad or cotton ball over the needle site as the needle is removed.
- Put pressure on the site and then put on a bandage.

What are open spine, skull and open abdominal defects?

These birth defects occur when the developing baby's spine, skull or abdomen does not close completely. They are the most common types of birth defects occurring in about 1 to 2 out of every 1,000 live born babies. About 95% occur in families with no history of these defects. These babies have mild to severe problems. If the defect occurs in the skull (anecephaly), the baby cannot survive long after birth. If the defect is in the spine (spina bifida), nerve damage occurs and the baby usually has paralysis from the point of the defect and below. Surgery cannot correct many of the associated problems and life span maybe reduced. Open abdomen defects also vary in severity. Surgery after birth is helpful in some, but not all, affected babies.

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What is Trisomy 21, or Down Syndrome

Down Syndrome occurs during cell division. During cell division an error occurs an chromosome 21 and either the egg or sperm fail to separate. This is called non-disjunction and means an embryo then makes three copies instead of two and the mutation continues to replicate throughout development. It is stated that 1 in every 691 babies in the US will be born with Down Syndrome.

What is Trisomy 18 or Edward's Syndrome

It is a chromosomal anomaly which can effect many areas of the developing baby. Most babies with trisomy 18 will be IUGR and a low birth weight. They may also have heart defects and abnormalities of other organs that develop before birth. Small, abnormally shaped head, jaw and mouth, and clenched fists with overlapping fingers are all signs of Edwards Syndrome. Edward's Syndrome is considered a life-threatening medical problem and most babies with Trisomy 18 will pass away in the womb prior to birth. This anomaly occurs approximately 1 in every 5,000 babies born alive and many, if not most, of these babies will not survive extra-uterine life for long.

Are the results accurate?

This test has a high rate of false-positive results, or incorrect results, that indicate a potential genetic problem in a healthy fetus. These results often prompt the woman to submit to additional tests, such as amniocentesis, which carry a risk of miscarriage or harm to the fetus. **It is estimated that in more than 80 percent of abnormal results the baby turns out to be perfectly healthy.**

Are there other options?

Diagnostic ultrasound is a viable option.

Who should have screening?

Screening is offered to all pregnant women.

Risk for genetic anomaly's is stated to increase with parental age. Mother and fathers >35 years of age as well as anyone with a history of genetic anomalies in the maternal or paternal family would be considered at higher risk and recommended for this screening.

PLEASE REMEMBER: The decision to have the screening tests performed, or to decline the test, is your personal decision. If these tests show you have an increased risk, it does not mean a problem has been diagnosed, only that further evaluation of your pregnancy is indicated. The majority of women with an increased risk are found to have healthy babies after further testing.

I read and understand the test, the purpose and the benefit vs. the risk.

Therefore, having been informed of my choices, I **request** ☐ **decline** ☐ the AFP/Triple and/or Quad Screen and all my questions have been answered.

Client Signature / Partner Date

References

www. pubmed.com

www.consciouswoman.org

Essentials of Maternal-Infant Care Prenatal Testing with Gloria Lemay

Parentingweekly.com