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First-Trimester Detection of Down Syndrome Using Fetal Ultrasound Assessment of Nuchal Translucency Combined with Maternal Serum Assessment

EFFECTIVE DATE	11/17/2005	LAST UPDATED	12/02/2008

Description:

One of the most common chromosmal abnormalities found at birth is Down Syndrome. Although the risk of having a baby with Down syndrome increases with maternal age, age cannot be the only screening factor as 70% of Down syndrome babies are born to women under the age of 35.

Historically, prenatal detection of Down syndrome was performed in the second trimester of pregnancy. Second trimester screening allows the patient less time to undergo further confirmatory diagnostic testing and may limit options for termination of pregnancy.

Nuchal Translucency Test:

Nuchal translucency is an ultrasound measurement of an approximately one milimeter fluid-filled space at the base of the fetus neck. During the first trimester, babies with abnormalities tend to accumulate more fluid at the back of the neck causing the translucent space to be larger. Unlike amniocentesis, this test does not give a definitive diagnosis but can be used to determine if further testing would be beneficial.

The first trimester testing is only performed between 11 and 14 weeks of pregnancy. Once the sonographer confirms the baby's gestational age, the nuchal fold area is measured. The nuchal fold measurement, maternal age and baby's gestational age are put into a risk calculation program that uses an algorithm to statistically compute the child's chances of having a chromosomal abnormality.

First Trimester Combined Screening Test:

Nuchal translucency testing combined with blood tests provide a more accurate risk assessment. The blood tests measure two proteins found in the blood, beta human chorionic gonadotropin (b-HCG) and pregnancy-associated plasma protein-A (PAPP-A). Pregnancies with Down Syndrome tend to have lower PAPP-A and higher hCG numbers. Two blood tests are done, one at 11 and one at 14 weeks.

First-trimester combined screening for detection of Down syndrome, which consists of a calculation of risk based on maternal age, human chorionic gonadotropin, pregnancy-associated plasma protein A, and ultrasonic measurement of fetal nuchal translucency, is covered for women who are adequately counseled and desire information on the risk of having a child with Down syndrome.

First-trimester screening for detection of Down syndrome using measurement of nuchal translucency alone is not medically necessary as there is insufficient medical literature to support the efficacy of this screening.

Medical Criteria:

Not applicable.

Policy:

First-trimester combined screening for detection of Down syndrome is **covered** for women who are adequately counseled and desire information on the risk of having a child with Down syndrome. Preauthorization is not required or recommended.

Coverage:

Benefits may vary between groups/contracts. Please refer to the appropriate member certificate/subscriber agreement/RIte Care contract for applicable radiology benefits/coverage.

Coding:

Radiology Codes:
76813
76814

Pathology/Laboratory Codes:
84163
84702
84704

Also Known As:

N/A

Related Topics:

N/A

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References:

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Back to Previous Page