



INTRAUTERINE GROWTH RETARDATION

Intrauterine growth retardation is the second leading cause of fetal death. It is thought that death is increased by 6 to 10 times in an infant with intrauterine growth retardation as compared with a normally grown infant. Your physician will go to great efforts to identify growth restriction in your baby. If growth restriction exists, your physician will take special measures to decrease problems with your delivery.

Q. WHAT IS INTRAUTERINE GROWTH RETARDATION?

A. Intrauterine growth retardation is used to describe an infant whose weight is significantly less than expected for its gestational age. Standard tables show what the average fetus weighs at each gestational week. If your infant falls more than 10% below the weight on these tables, he or she will be classified as having intrauterine growth retardation.

Q. WHAT ARE THE RISKS ASSOCIATED WITH INTRAUTERINE GROWTH RETARDATION?

A. Fetuses with intrauterine growth retardation often are unable to tolerate stress during pregnancy or during delivery. Because of this lack of reserve, these fetuses/infants are at risk of intrauterine death, death after delivery, significant fetal distress with only mild lack of oxygenation, and many other problems.

Q. WHO IS AT RISK OF HAVING INTRAUTERINE GROWTH RETARDATION?

A. Several known factors are related to intrauterine growth retardation. These include maternal, fetal, and placental factors. Maternal factors related to growth retardation include smoking, drug use, and alcohol use by the mother. Certain nutritional deficiencies can cause growth restriction. It is recommended that the average woman gain approximately 25 to 35 pounds during pregnancy. Finally, healthy problems of the mother such as hypertension or heart disease have been associated with intrauterine growth retardation.

Fetal infections obtained during pregnancy, i.e., toxoplasmosis, rubella, CMV, as well as genetic disorders, may be associated with intrauterine growth retardation.

Placental factors associated with intrauterine growth retardation include placenta previa (the placenta is implanted over the cervix), placental abruption (the placenta slightly separates from the lining of the uterus), and placental infarctions (where a portion of the placenta dies due to inadequate blood supply).

In over 50% of cases of intrauterine growth retardation, no cause for the growth restriction can be determined.

If your physician feels that you are at risk of intrauterine growth retardation he or she may order an ultrasound evaluation or serial ultrasound evaluations to measure the growth of your fetus.

Q. HOW IS INTRAUTERINE GROWTH RETARDATION DIAGNOSED?

A. Initial diagnosis of intrauterine growth retardation is made by clinical history. If you have had a prior infant with intrauterine growth retardation or have any of the risk factors mentioned above, you will be at increased risk of having growth restriction with this pregnancy and may be followed more closely by your physician. Your physician will also monitor your weight gain and the size of your uterus (fundal height) at each prenatal visit looking for signs of growth restriction. Your fundal height in centimeters should be within 3 centimeters of your gestational age. For example, a 30-week pregnancy should have a fundal height between 27 and 33 centimeters. If growth is less than expected, your physician may order an ultrasound evaluation. Ultrasound is the most effective test for diagnosing intrauterine growth retardation. Certain measurements allow your physician to estimate your infant's weight and subsequently diagnose intrauterine growth retardation.

Q. HOW IS INTRAUTERINE GROWTH RETARDATION TREATED?

A. Once your infant has been diagnosed with intrauterine growth retardation, your physician will try to determine the cause. If the cause is reversible, then he or she will attempt to correct the cause. The goal is to time the delivery of your infant in a way that will be most beneficial to your baby. This involves weighing the risk of early delivery against the risk of your infant remaining in the environment that is leading to intrauterine growth retardation. Your physician will weigh all of the risks and benefits, and will determine the best timing of delivery.

Your physician may use many measures during your pregnancy to repeatedly assure that your baby is fairing well despite the growth restriction. These include having you measure fetal activity on a daily basis by reporting the number of kicks felt. Additionally, he or she may regularly monitor your baby electronically. One test the physician may use is known as an NST (nonstress test). This test measures the fetal heart rate over a 30-minute time frame and has a certain elevation in heart rate that must be seen periodically for the test to be passed. Additionally, he or she may perform a CST (contraction stress test) where you are stimulated to have mild contractions and your baby's heart rate is monitored. If your baby has repetitive decreases in heart rate with the contractions, there may be concern over your baby's well being. Additionally, your physician may obtain ultrasound studies of your baby. These may include a BPP (biophysical profile) where several ultrasound criteria must be passed. Another ultrasound study is called a Doppler study. In this study, the actual blood flow to your baby can be measured through some of the arteries. Implications of Doppler studies for fetal well being are still being debated.

INDU S. ANAND, MD

Dr. Anand is a former Assistant Professor in the Department of Obstetrics and Gynecology at the University of Tennessee Health Science Center, in Memphis, Tennessee. She now is in private practice in Atlanta, GA.

Date Published: 2000-09-21

Health Information Provided by Women's Health Specialists

7800 Wolf Trail Cove, Germantown, TN 38138, (901) 682-9222, www.whsobgyn.com

This information is for educational purposes only. It does not represent comprehensive coverage of the topics addressed and is not a substitute for direct consultation with your health care provider. Always consult a health care provider regarding your specific condition. Trademarks referred to are the property of their respective owners.