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## **Gastroschisis**

### **What is gastroschisis?:**

Gastroschisis is a condition in which the baby's abdominal muscles do not form properly during pregnancy. As a result, there is an opening in the abdomen, usually located on the right side of the umbilical cord. The baby's intestines, and sometimes other organs, protrude through this opening. The unprotected intestines may be damaged by the amniotic fluid surrounding the baby. In some cases the flow of blood to a portion of the intestines may be limited, causing more damage.



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### **What causes gastroschisis?:**

There is no known specific cause for gastroschisis. The condition is seen in approximately 1 in 4,000 to 1 in 10,000 live births. Medical researchers at Monroe Carell Jr. Children's Hospital at Vanderbilt have identified a nearly 300% increase in the number of babies born with gastroschisis in Tennessee in the last ten to fifteen years.

Gastroschisis is *not* usually associated with other birth defects, chromosomal abnormalities or genetic syndromes. Couples who have had one baby with gastroschisis do not have an increased risk for a subsequent baby with a birth defect.

### **How is gastroschisis detected?**

Your doctor may suspect gastroschisis if:

- the mother shows signs of excessive amniotic fluid
- a blood test called "maternal serum alpha-fetoprotein test" shows an elevated result in the second trimester of pregnancy
- Gastroschisis is visible on prenatal ultrasound

Your doctor will take great care to distinguish this particular condition from other abdominal defects during ultrasound. The condition can be diagnosed or confirmed at physical examination once the baby is born.

### **How will gastroschisis affect my baby's health?:**

If gastroschisis is diagnosed before birth, your doctor will carefully observe you and the baby during pregnancy. This also allows you and your doctors time to

discuss a plan for delivery and treatment. Your doctor will schedule a series of ultrasounds to observe the baby's growth and detect any damage to the intestines.

### **How will gastroschisis affect my baby's birth?**

All babies with gastroschisis should be delivered at a "tertiary center." A tertiary center is a hospital that has the staff and equipment ready to support a baby needing surgery or intensive care. Your baby will need the services of the neonatal intensive care unit (NICU) and a pediatric surgeon.

### **What will happen after birth?**

The pediatric surgeon may close the opening in the baby's abdomen shortly after delivery. If there is not enough room in the baby's abdomen for the intestines, this surgery will not be possible. In this case, the doctors will surround the baby's intestines with protective material called a "silo." This silo allows the intestines to slowly return into the baby's abdomen. Once the intestines are completely inside the body, the opening is surgically closed. It is common for the baby to need help breathing during this period of time. In this case, a ventilator is used.

Following surgery, the infant's intestines will need time to recover. These organs may be swollen and inflamed from floating in the amniotic fluid. If so, they may not function well. Babies with this condition may stay in the hospital for a month or more. The length of your baby's hospital stay after birth is determined by two things:

1. the length of time it takes for the gastrointestinal tract to function normally
2. the baby's tolerance for feedings

**Feedings:**

At first, your baby will be fed “intravenously,” or through an “IV” tube. This IV tube may stay in place for weeks, and is called a “PICC” or “Broviac catheter.” Once the baby has a bowel movement, the intestines are considered to be functioning normally. At this point, feedings of breast milk or special formula will be given through a naso-gastric (NG) tube. This tube is placed in the baby's nose and delivers feedings to the stomach. The IV feedings will continue as NG feedings are slowly increased. Oral feedings will eventually be introduced. Your baby will be discharged from the hospital when all feedings are taken by mouth and he or she is gaining weight.

**Expected Progress:**

Fortunately, most children born with gastroschisis recover completely and lead normal lives. Your baby will be scheduled for follow-up visits with a pediatric surgeon and a pediatrician.