

# Gastroschisis

The baby's abdominal wall completely closes by the twelfth week of pregnancy. Gastroschisis is when the abdominal wall does not close properly during development. Babies born with this condition have a hole in the abdominal wall. The baby's intestines are located outside of the abdomen and floating free in the amniotic fluid.

Gastroschisis is the most common abdominal wall defect. The stomach, small bowel, and large intestine come through a small opening to the right of the umbilical cord. See Figure A. Because the bowels have been exposed to the amniotic fluid, the intestines may be swollen and covered with a thick film. Sometimes the ovaries in girls and undescended testicles in boys are found outside the body also.

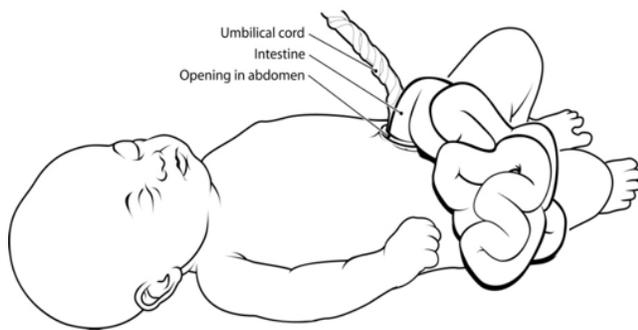


Figure A

## Cause

The exact cause of gastroschisis is not known.

Gastroschisis affects both males and females in equal numbers. Most babies with gastroschisis are born to young mothers in their first pregnancy. It is congenital, meaning it happens before your baby is born. Usually, the condition is not inherited, and future pregnancies are not affected. Usually there is not a family history of gastroschisis.

## How gastrochisis is found

You may have a prenatal ultrasound done while you are pregnant to learn about the health of your baby. Gastrochisis is usually found on prenatal ultrasound after the 12th week of pregnancy. The ultrasound may also show too much amniotic fluid. The survival rate for babies born with gastroschisis is 95 percent.

## Care during your pregnancy

A baby with gastroschisis cannot be treated before birth. Your doctor will have a detailed plan to watch your pregnancy very closely. Ideally you will be able to have a normal vaginal delivery. If a cesarean section (C-section) is needed your doctor will discuss this with you. It is important to call your doctor if you have any questions or concerns during your pregnancy. On average, mothers deliver between 36-37 weeks of pregnancy.

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## Ohio Fetal Medicine Collaborative

If this problem is found while you are pregnant, you will continue to receive care from your doctor and may be referred to the Ohio Fetal Medicine Collaborative (OFMC). Through the OFMC, you will see a doctor who specializes in the care of high-risk patients. You will also meet with a pediatric specialist at Nationwide Children's Hospital to learn more about your baby's care after he or she is born. Nurse coordinators will be available to help answer your questions and concerns; guide you through your pregnancy; and prepare you for what to expect.

You will deliver your baby at a hospital that is prepared to care for high risk babies.

## Care after your baby is born

At the delivery hospital, a neonatologist (a doctor who specializes in treating newborns) will observe your baby.

- Your baby will receive care in the hospital's neonatal intensive care unit (NICU).
- As soon as your baby is born, a sterile plastic bag called a bowel bag will be placed over the bowel to protect it. This bag helps to prevent infection by keeping germs from getting to the intestines. This bag stays on until he or she has surgery.
- A tube will be put into your baby's nose or mouth. This tube goes into your baby's stomach and helps to keep the stomach empty.
- An intravenous line (IV) will be started in your baby's arm, hand, foot or scalp. The IV provides fluids, nutrients, and antibiotics to prevent dehydration and infection.
- Your baby will be taken to Nationwide Children's Hospital, Main Campus, Neonatal Intensive Care Unit for further care.
- The doctor will schedule an ultrasound of your baby's heart, kidneys and head.

## Surgery

Your baby will go to surgery a few hours after delivery. Once your baby goes to the Operating Room, the surgeon will carefully inspect the intestines. The surgeon may need to stretch the hole in the abdomen so the intestines can be put back into the abdomen. See Figure B



Figure B

## Primary Repair

About half the time, the surgeon is able to place all the intestines back into the abdomen and the opening is closed.

## Staged Repair

A staged procedure is done when the bowel is swollen and inflamed. Placing the swollen intestines into the abdomen puts too much pressure on the lungs, making it hard for your baby to breathe. So the procedure is done in steps or stages. In the first stage, the surgeon is able to place some of the intestine into the abdomen, but must leave a part of it out because of swelling.

A surgical pouch called a silo is placed around the intestines. See Figure C. Your baby will be placed in an Isolette® so the silo can be suspended, and your baby's

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surroundings kept as clean as possible. Completely sterile (germ-free) linen will be used. Anyone who touches or handles your baby must wear sterile gloves to help prevent infection. Your baby will remain on antibiotics until the silo is removed.

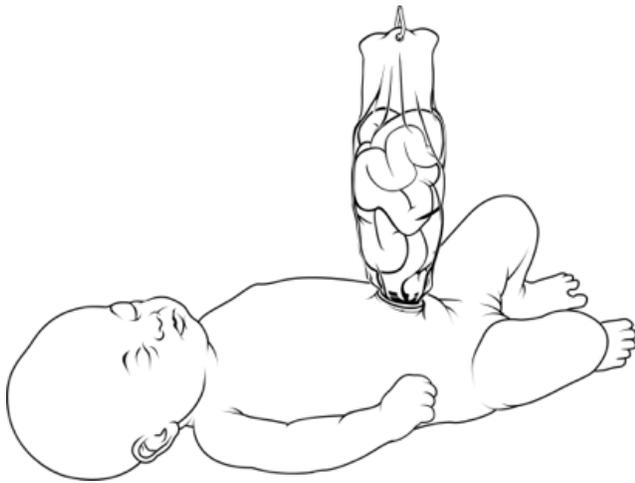


Figure C

Every day the surgeon will gently push part of the intestine into the abdomen until it is inside. This takes about a week. Then your baby will go back to surgery to close the hole in the abdomen. Your baby will have a belly button but it will be slightly to the left.

### Care after surgery

After surgery, your baby will receive care in the hospital's neonatal intensive care unit. Your baby will need to be on a breathing machine.

Other treatments your baby will probably need after surgery are:

- Antibiotics to prevent infection
- Fluids and nutrients given through an IV
- Oxygen
- Pain medicines as needed. Your baby's stomach will be tender and sore to touch.
- A tube placed through the nose into the stomach to drain the stomach to keep it empty (nasogastric or NG tube).

Feedings are started once the intestines are fully healed after surgery. Feedings of breast milk or formula are started very slowly with either the bottle, nasogastric tube (NG) or a gastrostomy tube. The tube is removed when your baby's intestine works properly.

The total length of time your baby will stay in the hospital will vary. It will depend on whether your baby is born with other health issues or if there are complications after surgery. The usual length of stay in the hospital is about 6 to 8 weeks after surgery. If there are complications the expected hospital stay may be longer.

### Complications

- Twisting of the bowel causing bowel atresia (absence of a portion of the intestine) occurs 10 percent of the time.
- The bowel may perforate (rupture) 5 percent of the time.
- Sometimes babies need a blood transfusion. The surgeons will not give blood unless it is medically needed.
- In general, most babies recover well after the surgery. You may be able to take your baby home once he or she is feeding well and gaining weight.

### Follow Up

Your baby will need regular follow-up appointments to measure growth, development and nutrition. You will want to find a local pediatrician to take care of the routine checkups, immunizations, and doctor's visits. The program coordinator can help if needed. The pediatric surgeon will follow up with your baby's surgical needs.

### Reference

American Pediatric Surgical Association  
[www.eapsa.org/parents/resources](http://www.eapsa.org/parents/resources)

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