

# Gastroschisis

BIRTH DEFECT RESEARCH FOR CHILDREN



## What is Gastroschisis?

Gastroschisis is an abdominal wall defect where all or parts of the small intestine and other internal organs are on the outside of the abdomen. The umbilical cord is usually attached to the abdominal wall to the left of the defect. Other problems include a small abdominal cavity and the absence of a protective sac covering the exposed organs.



# Gastroschisis



## How many children are born with Gastroschisis?

One out of every 6,000 children is born with Gastroschisis. The chances of being born with Gastroschisis are equal for boys and girls. Young mothers are 4 times more likely than women in their late 20s to have babies with Gastroschisis.

## What causes Gastroschisis?

The defect occurs 5-8 weeks after conception, most likely due to a disruption in the blood flow to the developing abdominal wall. While no exact cause is known, some studies have found that certain medications and solvents can increase the risk of having a child with Gastroschisis. For instance, vasoconstrictors are substances that reduce blood flow and have been suspected as possible causes. Aspirin, ibuprofen, and decongestants all are known to alter blood circulation. Since taking any medications involves risk, always consult your doctor before using any medications – even over the counter medicines.

Solvents are found in a number of products, including gasoline, motor oil, paint thinner, spray paint, aerosol sprays, nail polish remover, and many cleaning products. Coloring agents, such as wall or furniture paints, fabric dyes, permanent hair dye, nail polish, and painted metal that has corroded have also been associated with increased risks of having a child with Gastroschisis.

## Can Gastroschisis be prevented?

Since environmental exposures to certain drugs and chemicals are suspected of having an adverse effect on the developing fetus, it is important to avoid as many of these exposures as possible before and during pregnancy.

## How is Gastroschisis diagnosed?

Gastroschisis is frequently diagnosed by ultrasound examinations before birth. It is a life threatening event that requires immediate intervention. Newborns with Gastroschisis must have immediate corrective surgery and intensive hospital care.

## Treating a child with Gastroschisis

**Surgery:** Gastroschisis repair or closure involves replacing the abdominal organs back into the abdomen through the abdominal wall defect; repairing the defect if possible or creating a sterile pouch to protect the intestines while they are gradually pushed back into the abdomen.

Immediately following delivery, the exposed organs are covered with warm, moist, sterile dressings. A tube is inserted into the stomach to keep the stomach empty, which will prevent choking on or breathing in stomach contents into the lungs. The surgery is done as soon as the infant is stable.

While the baby is under general anesthesia, the surgery is completed. If the abdominal cavity is too small or the organs too swollen to allow the skin to be closed, a temporary pouch will be made to protect the organs. Complete closure may be done over a few weeks.

After surgery, the infant should be placed in a neonatal intensive care unit. An incubator will keep the baby warm and prevent infection. While in the incubator, the infant will be given intravenous fluids, antibiotics, pain medications, and oxygen if needed.

**Risks:** Breathing difficulties may occur as a result of increased pressure in the abdomen when it is closed. In some cases a mechanical ventilator may be necessary. Other risks include temporary paralysis of the small bowel and peritonitis, an inflammation of the membrane lining the abdominal wall. Short bowel syndrome is another complication that results

# Gastroschisis



from the partial removal of organs causing interference with the intestinal absorption of nutrients.

**Feeding:** Feedings are started by a nasogastric tube as soon as bowel function resumes. They are started slowly since infants are often reluctant to feed. Some may need feeding therapy.

**Cost:** The costs of any surgery vary significantly between surgeons, medical facilities, and regions of the country. Patients who are younger, sicker, or need more extensive surgery will require more intensive and expensive treatment. Insurance coverage for surgery expenses depends on many factors and should be explored for each individual instance. Since the surgery is life saving, it should be covered by most policies. Charges can usually be broken down into the following categories:

- 1) Surgeon's fee
- 2) Anesthesiologist's fee
- 3) Hospital charges
- 4) Medication charges
- 5) Additional charges (assistant surgeon, diagnostic procedures, and complications)
- 6) Follow-up care

**Prognosis:** Over 90% of infants with Gastroschisis can be expected to survive due to improved surgical techniques and postoperative care.

Fact Sheet by:

Birth Defect Research Children,  
Inc.  
[www.birthdefects.org](http://www.birthdefects.org)

