

Gastroschisis

What is Gastroschisis?

In babies with gastroschisis the abdomen does not form completely. There is a small hole, usually to the right of the umbilical cord that allows the intestines, also called bowel, to float outside the belly and into the amniotic fluid (fluid that normally surrounds the baby). The amount of bowel outside of the body is variable. Some babies will have only a small amount of bowel outside of the body other babies will have most of the bowel out along with the stomach.

Gastroschisis occurs in about 1 in every 5000 births. Gastroschisis occurs by 13 weeks of pregnancy and may be seen on routine pregnancy ultrasound after this time.

What causes Gastroschisis?

It is seen more commonly in younger women but doctors do not yet fully understand the causes of gastroschisis. It is not usually seen as part of a chromosome or genetic problem. Gastroschisis appears to be a random event that can happen to anyone.

What does this mean?

With the intestines or bowels outside of the body, it means the bowel is exposed to the amniotic fluid that may irritate it causing the bowel to swell and thicken. This can increase the chance of the bowel becoming damaged or blocked. Sometimes there is an intestinal atresia (bowel atresia) meaning that a portion of the bowel did not develop properly and is causing a blockage.

As the baby grows, the small opening in the belly may decrease the blood supply to the bowel. The bowel may also twist around itself. Both of these problems can damage to the bowel and cause it to not work properly after birth.

What other tests should we consider?

Regular ultrasounds are needed to monitor the baby. The baby's growth will be measured and the bowel will be monitored for increased size or thickening. The amount of amniotic fluid around the baby will be measured.

The baby's well being is sometimes monitored by an ultrasound called a biophysical profile (BPP). The baby is observed for movement, tone, practice breathing movements (movement of the breathing muscles) and the amount of amniotic fluid around the baby is measured. These may be scheduled once or twice

a week starting at approximately 30-34 weeks and continued until delivery.

What will happen around the time of the baby's birth?

Evidence tells us that babies with gastroschisis do not need to be delivered by a booked cesarean section. It has not been shown to help the baby. An induction of labour may occur at 37 wks gestation.

Babies with gastroschisis need to be born in a hospital with a neonatologist (specialist in newborn babies) and a paediatric surgeon (specialist in surgery for children). All babies with gastroschisis will need surgery relatively soon after delivery. During your pregnancy you will likely meet both the neonatologist and the paediatric surgeon and a tour of the neonatal unit where the baby will be cared for can be arranged. Babies with gastroschisis will need to stay in the hospital for at least several weeks after birth.

When your baby is born, the bowel will be wrapped in clean gauze for protection. Plastic wrap is used around the abdomen after the gauze is applied. This is to keep the area clean and prevent moisture loss from the baby.

The paediatric surgeon will determine how soon after birth the baby will have the operation to close the abdomen. This may occur in one surgery or the gastroschisis may need to be closed in a staged procedure over several days. A silicone pouch called a "silo" is placed around the exposed bowel. Every day the silo is tightened to push more of the bowels into the baby's abdomen. The silo is then removed and the skin on the baby's abdomen is closed. This usually occurs within the first week of life.

Until your baby's bowels have recovered from surgery, they will be unable to eat, and will be nourished with IV fluids. You can still breastfeed your baby, just not right away. If you wish to breastfeed, it is important to begin expressing or "pumping" milk as soon as possible after the birth. Once the surgeon is satisfied your baby's bowels are working properly, your baby will be fed your milk. Sometimes it can take weeks before a baby with gastroschisis can take all their nutrition in the form of milk.

What does this mean for the future?

For most babies with gastroschisis the long-term prognosis is good. However, some babies who have damage to the bowel because of the direct contact with the amniotic fluid, lack of blood supply to the bowel or have intestinal blockages can have long-term problems. The damaged portions of bowel may need to be removed at surgery and babies can develop Short Gut Syndrome. Symptoms of this condition include diarrhea, slow weight gain, problems with absorption of water, vitamins and other nutrients from food. These babies may require longer

hospital stays with intravenous nutrition called total parenteral nutrition (TPN).

Long term care with TPN also has complications. For a few babies, gastroschisis becomes a life threatening condition.

What do we do now?

You will meet with a doctor that specializes in high-risk obstetrics, and possibly a genetics specialist. You will also meet the neonatologist and the pediatric surgeon. These doctors will discuss with you in detail your options for further testing, discuss with you test results and provide you with treatment options. They will be able to answer any questions you may have.

Where can I get more information?

University of California

[The Fetal Treatment Centre – Gastroschisis](http://fetus.ucsfmedicalcenter.org/gastroschisis/)

<http://fetus.ucsfmedicalcenter.org/gastroschisis/>

Boston Children’s Hospital

[Gastroschisis – Disease Information](http://www.childrenshospital.org/az/Site944/mainpageS944P0.html)

<http://www.childrenshospital.org/az/Site944/mainpageS944P0.html>

Children’s Hospital of Philadelphia

[Center for Fetal Diagnosis and Treatment – Gastroschisis](http://www.chop.edu/service/fetal-diagnosis-and-treatment/fetal-diagnoses/gastroschisis.html)

<http://www.chop.edu/service/fetal-diagnosis-and-treatment/fetal-diagnoses/gastroschisis.html>