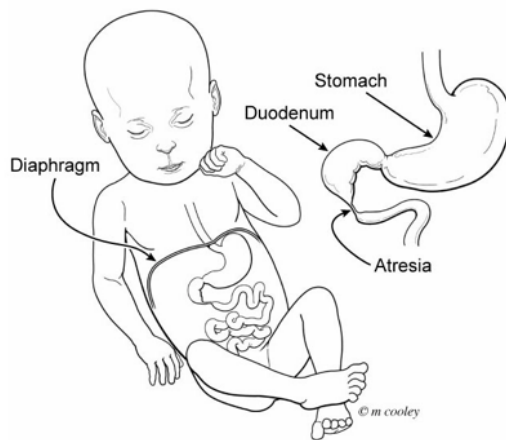


Duodenal Atresia

The duodenum is the first part of the small bowel (intestine). It is located between the stomach and the remainder of the small intestine. It is directly connected to the stomach. Food digestion begins in the duodenum. Duodenal atresia is a narrowing or blockage in the duodenum. The narrowed area blocks the passage of contents from the stomach into the intestine.



Cause

The cause of duodenal atresia is not known. It is congenital, meaning it happens before your baby is born. Duodenal atresia is seen in more than 1 of every 5,000 live births. Infants born with it often have other problems at birth. About 30 percent of infants with duodenal atresia have Down syndrome.

How Duodenal Atresia is Found

You may have a prenatal ultrasound done while you are pregnant to learn about the health of your baby. Duodenal atresia is usually found by ultrasound during pregnancy, but sometimes it is diagnosed at birth. If your baby has duodenal atresia, the ultrasound may show fluid in your baby's stomach and part of his duodenum, but no fluid beyond that. This is known as the double-bubble sign. The prenatal ultrasound may also show too much amniotic fluid in your womb, a condition called polyhydramnios.

Care During Your Pregnancy

A baby with duodenal atresia 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.

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 taking 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

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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).
- 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 and to relieve pressure.
- An x-ray of the abdomen may be done. It will show air and fluid in the stomach and the first part of duodenum, but no air beyond that. The narrowed area traps the contents in the stomach and duodenum.
- 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.

Surgery

Your baby will require surgery. However, surgery for this condition is not an emergency as long as the baby is receiving intravenous fluids and nutrients. Depending on other conditions your baby may have, the surgery is done within 1 to 2 days after birth. The pediatric surgeon will remove the affected area in your baby's intestine and reconnect the healthy ends together. A gastrostomy tube (G-tube) may be placed in the stomach to help provide nutrition. The pediatric surgeon will discuss this with you.

Care After Surgery

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

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. The usual length of stay in the hospital is about 2 to 3 weeks after surgery.

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 nurse coordinator can help if needed. The pediatric surgeon will follow up with your baby's surgical needs.

REFERENCES:

NORD: www.rarediseases.org

Medline plus

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