CONDITION

Jejunal atresia

Jejunal atresia is a birth condition in which part of the small intestine is completely blocked.

WHAT IT IS
Complete blockage of the upper small intestine

BODY SYSTEM
Digestive system

MAIN SYMPTOMS
Green vomiting, swollen abdomen, feeding problems, little stool

WHAT CAUSES IT
Usually disrupted fetal blood flow to the jejunum

HOW IT IS DIAGNOSED
Abdominal X-rays, contrast studies, and surgical confirmation

MAIN TREATMENT
Surgery with newborn supportive care

CAN IT BE CURED?
Yes - surgery corrects the blockage

IS IT AN EMERGENCY?
Yes - newborn bowel obstruction needs urgent treatment

LONG-TERM OUTLOOK
Usually good after repair; extensive bowel loss complicates recovery

Overview

Jejunal atresia is a condition present at birth. It means part of the jejunum is completely closed or disconnected. The jejunum is the middle section of the small intestine, where nutrients from food are absorbed.

Because the intestine is blocked, milk, digestive fluids, and gas cannot move normally through the bowel. This usually causes symptoms during the first day or two after birth. A baby with suspected jejunal atresia needs urgent assessment in a hospital.

The blockage may be a thin membrane inside the intestine, a gap between two closed ends, or a more complex interruption involving the intestine and its blood supply. Some babies have more than one blocked area. Doctors may refer to these patterns as different "types" of atresia.

Jejunal atresia is different from jejunal stenosis. Atresia is a complete blockage, while stenosis is a severe narrowing that may allow a small amount of material through.

Surgery is needed to restore a pathway through the intestine. Many babies recover well, particularly when enough healthy small intestine remains and there are no major additional conditions.

Symptoms

Symptoms usually begin soon after birth, often when feeding starts. The timing and appearance can differ depending on where the blockage is.

Common signs include:

Green vomit contains bile, a digestive fluid made by the liver. In a newborn, green vomiting can indicate a blockage or twisting of the intestine and should always be treated as an emergency.

A blockage near the beginning of the jejunum may cause vomiting early, with less obvious swelling. A blockage farther along may lead to more abdominal swelling.

Before birth, an ultrasound may show enlarged, fluid-filled loops of intestine or an unusually large amount of amniotic fluid around the baby. These findings can raise concern for an intestinal blockage, but they do not always identify jejunal atresia with certainty.

- Vomiting, especially green or yellow-green vomit
- Difficulty keeping down milk
- A swollen or increasingly firm abdomen
- Passing little or no meconium, the newborn's first dark stool
- Fewer wet diapers or other signs of dehydration

Causes and risk factors

Jejunal atresia usually develops after blood flow to part of the fetal intestine is interrupted. The affected section is damaged and may be absorbed, leaving a blockage or gap. This happens during pregnancy, after the intestine has started forming.

In most cases, it is not clear why the blood supply was interrupted. Nothing a parent did or did not do during pregnancy is usually responsible.

Most cases are isolated and are not inherited. This means the condition generally does not pass directly from parent to child. Rare families can have inherited forms involving multiple

intestinal blockages. These unusual forms may be linked to immune system problems or other medical conditions.

Some babies have other abdominal conditions, such as a hole in the intestine, inflammation caused by bowel contents leaking before birth, or abnormal bowel rotation. Jejunal atresia is less strongly linked with chromosome conditions than duodenal atresia, which affects an earlier part of the small intestine.

A clinician may recommend genetic assessment when there are multiple atresias, other birth differences, a family history, or signs of an immune disorder.

Diagnosis

Jejunal atresia may be suspected during pregnancy, but diagnosis usually happens after birth. The care team will examine the baby and ask about vomiting, feeding, and whether meconium has passed.

An abdominal X-ray can show enlarged bowel loops and fluid levels above the blockage, with little or no gas beyond it. The pattern helps doctors identify a small-bowel obstruction, although it may not show the exact cause.

A contrast enema may be used in some babies. During this test, liquid that appears clearly on X-rays is gently placed into the large intestine through the rectum. The test can show an unusually narrow, unused colon and help rule out a blockage in the lower bowel.

If doctors are concerned about malrotation, in which the intestine developed in an abnormal position and may twist, another contrast study may be needed. Blood tests are also used to check hydration, salts in the blood, blood sugar, infection, and readiness for surgery.

The exact location and type of atresia are often confirmed during surgery, when the surgeon can examine the entire intestine for additional blocked areas.

Treatment and management

Treatment begins as soon as an intestinal blockage is suspected. The baby is cared for in a neonatal unit or pediatric surgical center and is not fed by mouth.

A soft tube is passed through the nose or mouth into the stomach. This removes swallowed air and digestive fluid, reducing vomiting and pressure above the blockage. Fluids and nutrients are given through a vein. The team also corrects problems with hydration, blood sugar, or body salts and provides antibiotics like amoxicillin or doxycycline when appropriate.

Surgery is the definitive treatment. The surgeon usually removes the blocked section and joins the healthy ends of intestine together. This connection is called an anastomosis. An enlarged section above the blockage may also need to be reduced or reshaped so that it works more effectively.

If the bowel is inflamed, damaged, or unsafe to join immediately, the surgeon may temporarily bring an end of the intestine through the abdominal wall. This is called a stoma. Waste empties into a bag until another operation reconnects the bowel.

After surgery, the intestine may take time to begin moving normally. The stomach tube remains in place while the baby receives nutrition through a vein, known as parenteral nutrition. Small milk feeds are introduced when the bowel starts working and are increased gradually. Breast milk may be encouraged when it is available, but feeding plans are based on each baby's needs.

Babies who have lost a large amount of small intestine may need parenteral nutrition for longer and specialist support for intestinal failure or short bowel syndrome.

Complications

Before treatment, pressure can build up above the blockage. This can lead to dehydration, disturbances in blood salts, a hole in the intestine, or leakage of bowel contents into the abdomen. Leakage can cause peritonitis, meaning inflammation or infection inside the abdominal cavity.

Possible complications after surgery include:

If a substantial length of small intestine must be removed, the remaining bowel may not absorb enough fluid and nutrients. This is called short bowel syndrome. Some children then need long-term nutrition through a vein, tube feeding, medicines, and monitoring by an intestinal rehabilitation team.

Long courses of parenteral nutrition can contribute to bloodstream infections or liver problems. Specialist teams monitor for these complications and try to increase intestinal feeding as the bowel adapts.

- Infection or bleeding
- Leakage where the bowel ends were joined
- Narrowing at the surgical connection
- Slow or uncoordinated intestinal movement

- Blockage caused by scar tissue called adhesions
- Feeding difficulties or poor weight gain

Prevention

Jejunal atresia usually cannot be prevented. It develops before birth, often because of an unpredictable interruption in blood flow to part of the intestine.

There is no established diet, supplement, or routine pregnancy action that guarantees prevention. Parents should not assume that the condition resulted from something they did.

When a rare inherited form is suspected, genetic counseling can explain possible testing and the chance of the condition affecting another pregnancy. This does not prevent an atresia that has already formed, but it may help with future planning.

Living with it and what to expect

Recovery depends on how much healthy intestine remains, whether there are multiple blocked areas, and whether complications occurred before or after surgery.

Many babies begin feeding after the bowel recovers and eventually take all nutrition by mouth. Hospital discharge usually waits until the baby can tolerate enough feeding, gain weight, maintain hydration, and no longer needs intensive support.

Follow-up commonly includes checks of growth, feeding, stool patterns, hydration, the surgical wound, and nutritional blood tests. Babies with uncomplicated repairs may need only routine surgical and pediatric follow-up after recovery. Those with short bowel syndrome or ongoing feeding problems may need care from gastroenterology, nutrition, feeding therapy, and intestinal rehabilitation services.

The repaired atresia itself does not usually grow back. However, abdominal surgery can leave internal scar tissue. Adhesions may cause another bowel obstruction months or years later, although this does not happen to every child.

Some children have looser or more frequent stools while their intestine adapts. Others may have constipation, reflux, or difficulty advancing to age-appropriate foods. These issues can often be assessed and managed without another operation.

Most children without major bowel loss can take part in ordinary activities as they grow. More complex cases may involve repeated hospital visits, nutrition support, additional surgery, or close monitoring over several years.

When to get medical help

Emergency help is needed for a newborn with green vomit. Do not wait for a routine appointment, and do not continue feeding unless the emergency team advises it. Increasing abdominal swelling, unusual sleepiness, breathing difficulty, blood in vomit or stool, or very few wet diapers also require immediate assessment.

After surgery, seek urgent medical help for:

Routine follow-up is appropriate for slower concerns such as feeding taking longer than expected, mild changes in stool pattern, difficulty moving to solid foods, or weight gain that seems limited. Contact the child's regular care team sooner if these changes are persistent or worsening.

- Green or repeated vomiting
- A rapidly swelling or painful abdomen
- Fever in a young infant
- Blood in the stool
- No stool or gas with vomiting and swelling
- A wound that opens, drains pus, or becomes increasingly red
- A stoma that becomes dark, stops working, or has very high output
- Signs of dehydration, such as a dry mouth or fewer wet diapers

Common questions

Can a baby survive jejunal atresia?

Yes. Surgery can correct the blockage, and many babies recover well. The outlook is more complicated when there are multiple atresias, severe infection, major bowel damage, or too little healthy small intestine remaining.

Is jejunal atresia genetic?

Most cases are not inherited and occur without a family history. Rare inherited forms can cause multiple intestinal atresias and may also affect the immune system. Genetic assessment may be offered when the pattern suggests one of these forms.

Can jejunal atresia be seen on an ultrasound before birth?

Sometimes. Ultrasound may show enlarged bowel loops or excess amniotic fluid. These

findings suggest an obstruction but may not reveal its exact location or cause. Imaging after birth and surgery often provide the final diagnosis.

Will my baby be able to eat normally after surgery?

Many babies eventually feed normally, but the intestine often needs time to recover. Milk feeds are started gradually while nutrition is provided through a vein. Babies with extensive bowel loss may need longer-term tube feeding or intravenous nutrition.

Can jejunal atresia come back after it is repaired?

The original blocked section does not usually return. A later obstruction can still develop from internal scar tissue, narrowing at the surgical connection, or another bowel problem. Green vomiting and abdominal swelling always need urgent assessment.

What is the difference between jejunal and duodenal atresia?

Both are complete intestinal blockages. Jejunal atresia affects the middle part of the small intestine. Duodenal atresia affects the first part, just beyond the stomach, and has different patterns of associated conditions.

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