Pyloric stenosis

Congenital hypertrophic pyloric stenosis; Hypertrophic pyloric stenosis; Gastric outlet obstruction

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Pyloric stenosis is a narrowing of the pylorus, the opening from the stomach into the small intestine.

Causes, incidence, and risk factors

Normally, food passes easily from the stomach into the first part of the small intestine through a valve called the pylorus. In pyloric stenosis, the muscles of the pylorus are thickened. This prevents the stomach from emptying into the small intestine.

The cause of the thickening is unknown, although genetic factors may play a role. Children of parents who had pyloric stenosis are more likely to have this condition.

Pyloric stenosis occurs more often in boys than in girls, and is rare in children older than 6 months. The condition is usually diagnosed by the time a child is 6 months old.

Symptoms

Vomiting is the first symptom in most children:

- Vomiting may occur after every feeding or only after some feedings
- Vomiting usually starts around 3 weeks of age, but may start any time between 1 week and 5 months of age
- Vomiting is forceful (projectile vomiting)
- The infant is hungry after vomiting and wants to feed again

Other symptoms generally appear several weeks after birth and may include:

- Abdominal pain
- Belching
- Constant hunger
- Dehydration (gets worse with the severity of the vomiting)
- Failure to gain weight or weight loss
- Wave-like motion of the abdomen shortly after feeding and just before vomiting occurs

Signs and tests

The condition is usually diagnosed before the baby is 6 months old.

A physical exam may reveal signs of dehydration. The infant may have a swollen belly. The doctor may detect the abnormal pylorus, which feels like an olive-shaped mass, when touching the stomach area.

An ultrasound of the abdomen may be the first imaging test performed. Other tests that may be done include:

- Barium x-ray -- reveals a swollen stomach and narrowed pylorus
- Blood chemistry panel -- often reveals an electrolyte imbalance
Treatment

Treatment for pyloric stenosis involves surgery to split the overdeveloped muscles. See: Pyloromyotomy - pyloroplasty

Balloon dilation does not work as well as surgery, but may be considered for infants when the risk of general anesthesia is high.

The patient will be given fluids through a vein, usually before surgery.

Expectations (prognosis)

Surgery usually provides complete relief of symptoms. The infant can usually tolerate small, frequent feedings several hours after surgery.

Complications

Complications of pyloric stenosis include:

- Failure for the baby to gain weight

Calling your health care provider

Call your health care provider if your baby has symptoms of this condition.

References


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