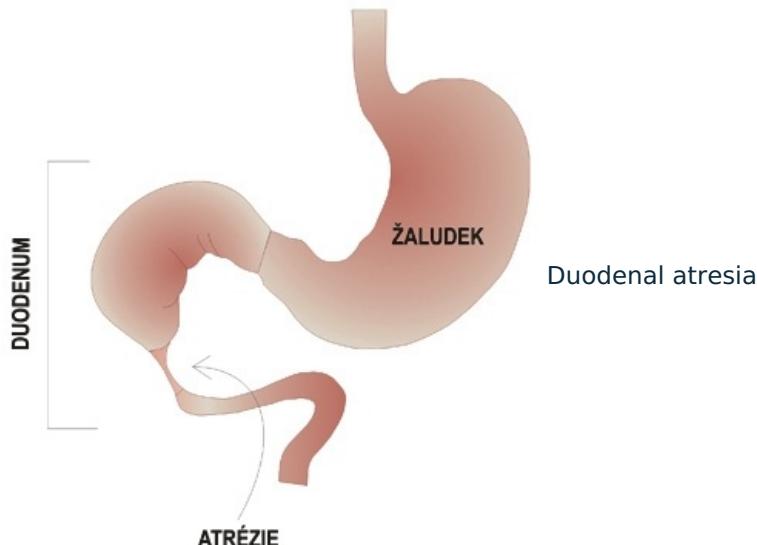


Small intestine atresia and stenosis

This article has been translated from WikiSkripta; the **translation** needs to be checked.

Duodenal atresia and stenosis

The incidence of atresia and stenosis is 1:5000-10000. In 30 % of patients is co-occurring with Down syndrome and more than 50 % of patients have associated congenital disorders.



Clinical progression

There is polyhydramnios **during the prenatal period**, because of halted circulation of amniotic fluid. We can appreciate so called double bubbles sign - bubbles filled up with fluid. **In the postnatal period**, the complete obstruction is formed and within the first 24 hours the clinical sign of superior ileus develops which manifests by severe bilious vomiting. In 90 % the obstruction are found below the papilla of Vater. In remaining 10 % of cases, the vomit is non-bilious (do not contain bile). The physician can see elevated epigastrium and depressed hypogastrium (boat-like abdomen), the peristalsis is visible. Failure to pass meconium is present. In partial obstruction, the clinical manifestation is delayed.

Diagnosis

The prenatal diagnosis is carried out by ultrasound screening. **The postnatal diagnosis** includes native X-ray of the abdomen which shows the typical two bubbles or levels, this counts for stomach and distended duodenum. In most of the cases the gas is absent in the distal part of GIT. We are able to suction more than 20 ml of fluid from a stomach by the nasogastric tub. The normal volume of fluid in the stomach is 5 ml. We proceed by insufflation the gas to the stomach which make possible to reproduce the image of two bubbles on X-ray. For definitive diagnosis and exclusion of possible malrotation or volvulus we perform a contrast X-ray the upper part of GIT.



Typical finding on X-Ray in duodenal atresia - so called double bubble sign

Treatment

Treatment is surgical, the common procedure is duodeno-duodenal anastomosis.

Atresia and stenosis if the jejunum and ileum

The incidence of atresia and stenosis is 1:1500.

Clinical progression

There is a polyhydramnios **in the prenatal period**. **The postnatal period** is marked by the development of clinical presentation of middle ileus within the first 36 hours which cause bilious vomiting. The abdomen is distended, the breathing difficulties are present - dyspnea because of the high position of the diaphragm. Failure to pass meconium is also present. A dehydration develops with hypochloremia and weight loss.

Diagnosis

The diagnosis is already visible by the ultrasound in the prenatal period - the dilation of the bowel. In the postnatal period we use native X-ray of the abdomen.

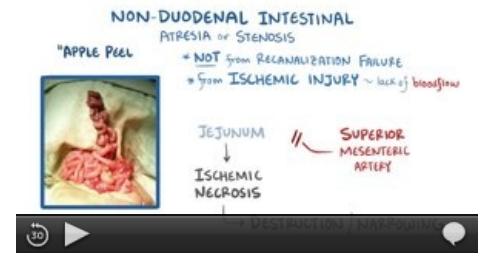
Treatment

Treatment is surgical, which consist of removing the part of gut with atresia or stenosis part and end-to-end anastomosis.

Links

Related articles

- Vrozené atrézie a stenózy gastrointestinálного traktu
 - Atrézie jícnu
 - Vrozená hypertrofická stenóza pyloru
 - Anální a rektální atrézie
- Syndrom arteriae mesentericae superioris
- Malrotace střeva a volvulus
- Mekóniový ileus
- Megacolon congenitum



Střevní atrézie (video).

Literature

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