

Intestinal Atresia



PLAY PICMONIC

Characteristics

Bilious Vomiting

Bile-duck Vomit

Intestinal atresia is a congenital malformation characterized by an abnormality in intestine development, resulting in the narrowing or closure of the intestine. This abnormality will cause bowel obstruction, and because the obstruction occurs distal to the ligament of Treitz, it will cause bilious vomiting.

Abdominal Distention

Abdomen Distended

Abdominal distention is a common manifestation in patients with intestinal atresia, alongside bilious vomiting. These are the most common findings seen in intestinal atresia.

First 1-2 Days of Life

First-place (1) Wand to (2) Tutu

Symptoms of intestinal atresia can be seen in the first 1-2 days of life after the first feeding. If it's not treated, this condition can progressively worsen.

Types

Duodenal Atresia

Dodo Atresia-tree

Duodenal atresia occurs when the epithelial cord of the duodenum fails to recanalize properly or experiences excessive endodermal proliferation. This can lead to obstruction, usually seen distally to the ampulla of Vater in the second portion of the duodenum. Errors in this recanalization process can appear during the eighth to tenth week of embryological development.

Double Bubble

Double Bubble

In duodenal atresia, a double bubble sign can be present on abdominal X-ray, with one bubble showing a dilated stomach and the other showing the proximal duodenum.

Down Syndrome

[Child with Down Syndrome](#)

Down syndrome, also known as trisomy 21, is associated with a higher prevalence of duodenal atresia compared to the general population.

Jejunal and Ileal Atresia

[Judge-Judy Alien Atresia-tree](#)

Jejunal and ileal atresia occur during fetal development due to disruptions in mesenteric vessels, often involving the superior mesenteric artery. These disruptions lead to ischemic necrosis of the fetal intestine, causing segmental resorption. This process results in a blind proximal and distal end of the bowel, with a defect in the mesentery between the ends.

Triple Bubble

[Triple Bubble](#)

In jejunal and ileal atresia, abdominal X-rays can show a triple bubble, described by the dilated stomach, duodenum, and proximal jejunum. An X-ray also shows a gasless colon.

Cystic Fibrosis

[Sisters with Fibrous-sacks](#)

Jejunal atresia is known to be associated with cystic fibrosis. Cystic fibrosis is an X-linked recessive disease that results from abnormal chloride channels in the body.

Gastroschisis

[GI-guy with Scissor](#)

Gastroschisis can be seen in cases of jejunal and ileal atresia. Gastroschisis is characterized by the herniation of abdominal organs through the abdominal wall with no covering by the peritoneum.

Smoking

[Cigarette](#)

Smoking during the first trimester of pregnancy is associated with jejunoileal atresia. Thromboembolic occlusion is thought to be a contributing factor in development of this condition.

Cocaine Use

[Cocaine](#)

The use of vasoconstrictive drugs like cocaine can result in reduced uteroplacental blood flow, causing vasoconstriction and hypoperfusion of the placenta. This process can contribute to the development of jejunoileal atresia due to its mechanism of ischemic necrosis.