

Intestinal malrotation and volvulus

Malrotation means a **malfunction in the rotation of the intestine or a malfunction in its attachment to the back wall of the abdomen**. A normal intestine rotates counterclockwise. The superior mesenteric artery acts as the axis of rotation. An unfixed bowel predisposes to **volvulus** (knotting of the bowel hinge) and obstruction. It is sometimes associated with asplenia or congenital heart defects.

Clinical picture

- Symptoms of acute or recurrent Acute abdomen appear,
- symptoms are developed shortly after birth or anytime during the first year of life.

Diagnosis

- On the X-ray, we can see the distribution of air - there are no bubbles in the area of the caecum,
- rotation failure is then confirmed by irrigography.

Therapy

- Surgical

Links

Related articles

- Congenital atresias and stenoses of the gastrointestinal tract
 - pylorostenosis congenita
 - superior mesenteric artery syndrome
 - meconium ileus
 - small bowel obstruction
 - megacolon congenitum

Sources

- BENEŠ, Jiří. *Studijní materiály* [online]. ©2007. [cit. 2010-04]. <<http://www.jirben.wz.cz/>>.

References

- HRODEK, Otto – VAVŘINEC, Jan, et al. *Pediatric*. 1. edition. Praha : Galén, 2002. ISBN 80-7262-178-5.
- ŠAŠINKA, Miroslav – ŠAGÁT, Tibor – KOVÁCS, László. *Pediatric*. 2. edition. Bratislava. 2007. ISBN 978-80-89171-49-1.

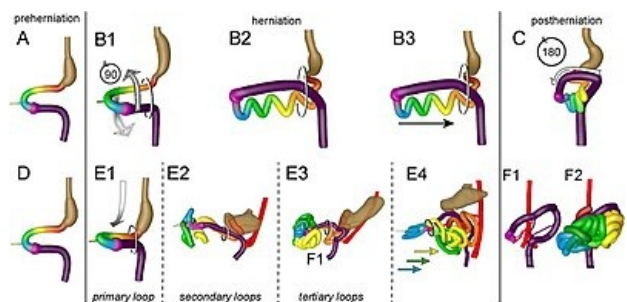


Diagram showing the normal process by which the intestine "rotates" and herniates during development



Small bowel volvulus



Ladd's bands - unrotated cecum and duodenal compression by peritoneal bands