

# 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

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- ŠAŠINKA, Miroslav – ŠAGÁT, Tibor – KOVÁCS, László. *Pediatric*. 2. edition. Bratislava. 2007. ISBN 978-80-89171-49-1.

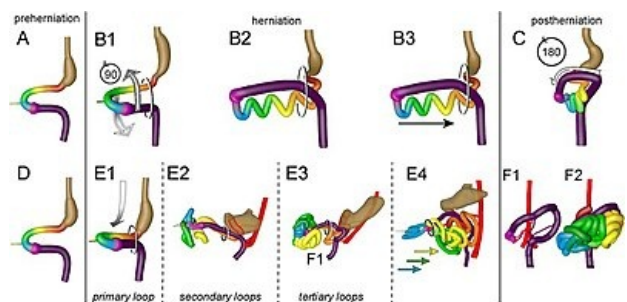


Diagram showing the normal process by which the intestine "rotates" and herniates during development



Small bowel volvulus



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