



Late-time complication after jejunal atresia repair in new-born

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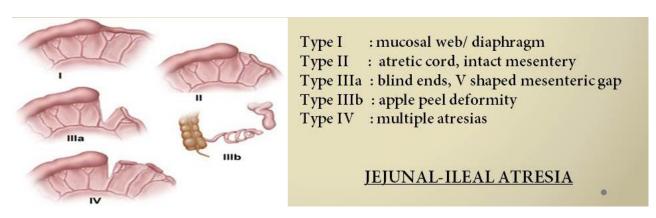
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Introduction





- Jejunal atresia: congenital defect (incidence of 1-3 in 10,000 live births)¹
- Four types²
- Apple-peel atresia: rarest form with approximately 7-10% of all small bowel atresias with a female preponderance of 1.6:1^{3,4}



Picture 1: Jejuno-Ileal atresia: diagrammatic representation⁵

^{1.} Best KE, Tennant PWG, Addor M-C, Bianchi F, Boyd P, Calzolari E, et al. Epidemiology of small intestinal atresia in Europe: a register-based study. Arch Dis Child Fetal Neonatal Ed 2012;97:F353-8. doi:10.1136/fetalneonatal-2011-300631.

^{2.} Grosfeld JL, Ballantine TV, Shoemaker R. Operative management of intestinal atresia and stenosis based on pathological findings. J Pediatr Surg. 1979;14:368–75.

^{3.} Santulli TV, Blanc WA (1961) Congenital atresia of the intestine: pathogenesis and treatment. Ann Surg 154:939–948

^{4.} Adams SD, Stanton MP (2014) Malrotation and intestinal atresias. Early Hum Dev 90:921–925

^{5.} https://epos.myesr.org/poster/esr/ecr2015/C-1515/Findings%20and%20procedure%20details#poster

Case report





- 23-year old woman
- acute abdomen
- Analgesics: no significant relief of pain
- CT: excessively dilated duodenum but no complete obstruction (Picture 2-4)







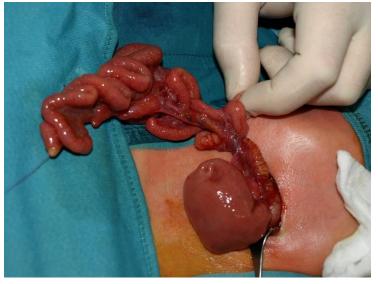
Picture 2-4: coronal plane showing the dilateted duodenum

Previous medical history





- Delivery: caesarean section within the 35 gestational week
- X-ray of the abdomen: stenosis/atresia of the proximal small bowel
- OP: jejunal atresia type IIIb + two perforation near the mesenterium. → resection of the perforation + the atresia was performed → anus praeter
- Several days after the first OP: insufficiency of the remaining blind pouch → retrocolic gastoenterostomie + anastomosis between the colon loops



Picture 5: Intraoperative picture showing the distal small bowel wrap around ist vascular supply in a spiral resembling an apple peel

Recent operation





- highly acute increase of the pain → suspicion of a perforation or rupture → laparatomy
- Adhesiolysis
 - → main cause of pain: circular adhesion near the distended duodenum
 - → massively distended duodenum→ occlusion + side-to-sideduodenojejunostomy

Conclusion

 late-time complication occurring in a patient with congenital duodenal anomality remain a surgical challenge