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Rectal atresia and stenosis unique anorectal malformations

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Posterior sagittal rectoplasty for rectal atresia: definitive approach. *Pediatric Surg Int*. 1996;11:408–9. [CrossRef](#) [Google Scholar](#) Etnesol B, Temir G, Karkiner A, Melek M, Edirne Y, Karaca I, et al. Atresia colon. *J Pediatr Surg*. 2005;17:1258–68. [CrossRef](#) [Google Scholar](#) Gupta DK, Sharma S. Rectal atresia and rectal ectasis. In: *Hohlshneider AM, JM Hustson, editors. Anorectal malformations in children. Embryology, diagnosis, surgical treatment, follow-up.* Berlin Heidelberg: Springer; 2006. pp. 223–30. [Google Scholar](#) Ibrahim AI. Transanal rectoanal anastomosis for rectal atresia at birth. *Ann Pediatr Surg*. 2006;2(3):180–3. [Google Scholar](#) Upadhyaya P. Rectal atresia: transanal, end-to-end, rectorectal anastomosis: a simplified, rational approach to management. *J Pediatr Surg*. 1990;25:535–7. [CrossRef](#) [Google Scholar](#) Yagi M, Iwafuchi M, Uchiyama M, Naito S, Matsuda Y, Naito M. Rectal membrane atresia: endoscopic repair without suture. *Pediatric Surg Int*. 1995;10:56–7. [Google Scholar](#) Introduction: Atresia/rectal stenosis is a rare disorder in the spectrum of anorectal malformations and is associated in particular with a presacral mass. These patients are born with a normal anal canal, but have a complete stricture or atresia located a few centimeters proximal to the denuded line. We present a surgical technique for the management of these patients, as well as their unique concerns and clinical results. **Methods:** We reviewed the records of 14 patients with rectal atresia and 3 with rectal stenosis. We describe a new technique that we have developed for the preservation of the previous dental line that has been performed in the last 13 patients. **Results:** Atresia/rectal stenosis has been associated with a presacral mass in 5 patients (29%). The final repair was completed with the help of a circular rectorectal anastomosis in the first 4 patients and with previous procedure for saving the denuded line in 13. All patients older than 3 years demonstrated the ability to have voluntary bowel movements. **Conclusion:** With the largest reported series of atresia/rectal stenosis, we have demonstrated a safe and effective repair technique. The preoperative evaluation should be thorough, as a significant number of these patients will have an associated patient mass. Atresia or rectal and large intestinal stenosis is the term used to describe a group of rare congenital disorders of the lower gastrointestinal tract (gut). This can vary from the absence of these structures to malformations of the anus and rectum (called colon, rectum or atresia). If these lower gastrointestinal structures are present, but only partially open to the passage of the stool the condition is called colon/rectum/vanal stenosis. In stenosis, the anus will look normal external, but will not be connected to the intestine. Another variation in the condition is called the imperforated anus, where the internal structures are normal, but the anus is closed with the skin. Babies may have small tube-like openings (called fistulas) in the intestine that open onto the skin of the perineum or leak into the vagina or urethra. These different abnormalities may be low (in which case the nerves and muscles will be formed correctly, but the skin covers the opening). Other times atresia or stenosis is higher in the pelvis; if large, nerves may be malformed and muscle structures may be affected. Imperforated anus is usually discovered during examination of the newborn baby. The child will have an unusual anus that appears coupled with abdominal distension, because the child cannot pass the meconium (the first stool after birth, dark and sticky in consistency). Anal stenosis cannot be discovered immediately, but symptoms, such as abdominal distension and poor feeding, will be observed shortly after birth. During early fetal life the intestine and surrounding structures may not be able to develop, probably due to the lack of blood supply in that area of the body. These conditions are sometimes detected before birth due to polyhydramnios (excess amniotic fluid). The cause is unknown. In some families, there is a hereditary pattern of several members who have the condition, but this is often not the case. Maternal diabetes as well as prenatal alcohol consumption may be related to this disorder. atresia or stenosis occurs in about 3 out of 10,000 live births, with slightly more males affected. Imperforated anus occurs in 1 in 5000 live births. Our program has been tracking rectal and large intestinal atresia/stenosis among live births in certain counties since 2005 and are gradually expanding statewide. Using birth dates from the residents of Hennepin and Ramsey County between 2012 and 2016, we that 3.6 babies were born with high intestinal atresia/stenosis per 10,000 births. Using this data, we estimate that about 24 babies are born rectal and large intestinal atresia / stenosis every year in Minnesota. Parental education and support are essential, and local, regional and national organizations can be of great help. **Condition Specific Organizations Complex Child Pull-Through Network Medscape** Additional information and resources for families are available. Rectal atresia/stenosis is a rare disorder in the spectrum of anorectal malformations and is associated in particular with a presacral mass. These patients are born with a normal anal canal, but have a complete stricture or atresia located a few centimeters proximal to the denuded line. We present a surgical technique for the management of these patients, as well as their unique concerns and clinical results. We reviewed the records of 14 patients with rectal atresia and 3 with rectal stenosis. We describe a new technique that we have developed for the preservation of the previous dental line that has been performed in the last 13 patients. Atresia/rectal stenosis was associated with a presacral mass in 5 patients (29%). The final repair was completed with the help of a circular rectorectal anastomosis in the first 4 patients and a previous procedure to save the denuded line in the last 13. All patients older than 3 years demonstrated the ability to have voluntary bowel movements. With the largest reported series of rectal atresia / stenosis, we have demonstrated a safe and effective technique for repair. The preoperative evaluation should be thorough, as a significant number of these patients will have an associated patient mass. To read this article in full you will need to make a payment **Accepted:** March 6, 2012 **Received:** March 5, 2012 **DOI:** [2012 Elsevier Inc. Published by Elsevier Inc. All Rights Reserved.](#) Go to this article on ScienceDirect Halleran DR, Ahmad H, Bates DG, Vilanova-Sanchez A, Wood RJ, Levitt MA. A call to ARMs: Accurate identification of the anatomy of the rectorehrral fistula in anorectal malformations. *J Pediatr Surg*. 2019 Aug. 54 (8):1708-1710. [Medline]. Stephens FD, Smith ED. Incidence, frequency of types, etiology. *Anorectal malformations in children.* Chicago: Medical year-on-year. 1971. 160-71. **SANTALLI TV.** Treatment of the imperforated anus and associated fistus. *Surg Gynecol Obstet*. 1952 Nov. 95 (5):601-14. [Medline]. Falcone RA Jr, Levitt MA, Peña A, Bates M. Increased irritability of certain types of anorectal malformations. *J Pediatr Surg*. 2007 January 42 (1):124-7; discussion 127-8. [Medline]. Mundt E, Bates MD. Genetics of Hirschsprung's disease and anorectal malformations. *Semin Pediatr Surg*. 2010 May. 19 (2):107-17. [Medline]. Levitt MA, Peña A. 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