Tr. J. of Medical Sciences
29 (1999) 595–596
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Short Report

Proximal Rectal Stenosis

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Received: April 02, 1998

Key Words: Rectal stenosis, Rectoplasty, Children.

Rectal stenosis or atresia is well known as a condition where patients are born with an externally normal–looking anus. Many surgical procedures have been described, ranging from simple perforation of the atresia to extensive sacro–abdomino–perineal pull–through operations (1–4).

In this paper, we present a case with an extremely unusual type of stenosis located at the proximal rectum.

A one–month–old baby boy was admitted with abdominal distention and constipation. Abdominal x–rays showed a massively distended colon. A contrast enema revealed a ring–type rectal stenosis at a distance of 5 cm from the anal verge, a massively dilated sigmoid and descending colon, and a left–sided mobile cecum that showed midgut malrotation (Figure 1). There was no history of administration of analgesic suppositories.

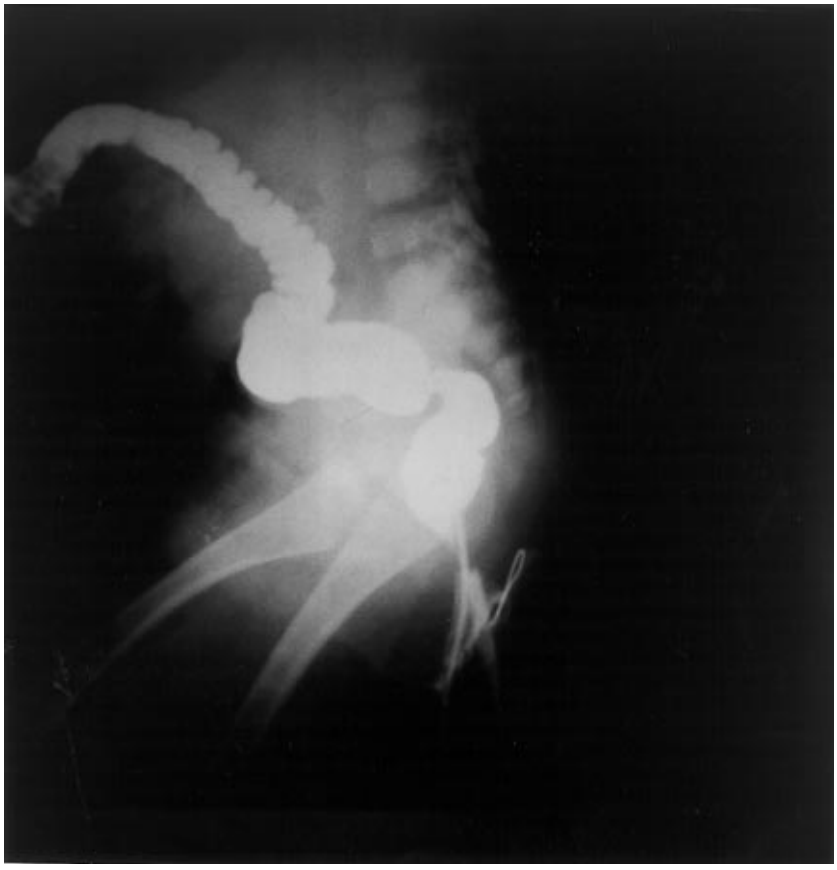

Figure 1. A contrast enema showing a ring–type proximal rectal stenosis.

Examination under anesthesia showed a ring–type rectal stenosis with normal mucosal appearance at a distance of 5 cm from the anal verge. The opening of the stenosis was 1 cm in diameter. The sacrum and anal sphincters were normal.

We performed an abdominal exploration, a Ladd procedure for the malrotation, and a transverse colostomy for decompresion of the massively dilated colon. Postoperatively, serial rectal dilations with Hegar dilators were carried out, but the stenosis did not improve. Thereafter, we performed a transabdominal Heineke–Mikulicz–type rectoplasty (HMR). Then, rectal dilations were started 2 weeks after the rectoplasty. The patient had an uneventful and complete recovery, with an excellent prognosis.

Rectal atresia and stenosis are rare anorectal malformations and present different grades of the same anomaly. Both conditions occur in 1–2% of all cases of anorectal malformations. The anus is well developed in rectal atresia or stenosis. The site of atresa is only one or two centimeters from the anal verge. This condition is very well defined (1, 3, 4).

On the other hand, the present case was extremely unusual because the stenosis was located at the level of the peritoneal reflection. We could not find a similar case in the literature. In the patient's history, there was no infection or administration of suppositories containing acetaminophen, acetylsalicylic acid, codein or ergotamin. We believe that it may have been an acquired lesion, resulting from an intrauterine accident, such as thrombosis of the branches of the superior rectal artery secondary to intrauterine infection (3).

Many operative procedures for rectal atresia or stenosis have been recommended since the 1950s (1–5). Ahmad et al. suggested that the Duhamel pull–through was the operation of choice for this problem, because of avoidance of constipation and overflow incontinence due to dilated proximal rectum acting like an ectatic segment (1). On the other hand, Pena A. recommended a posterior sagittal approach, removal of the area of the atresia and establishment of either an end–to–end anastomosis or some sort of plasty in the area of atresia or stenosis (4, 5). It is important to perform anal dilations, because the anastomosis or plasty is surrounded by voluntary muscles that keeps the anastomosis closed at all times, and therefore, it may heal in this way (4, 5). We preferred a transabdominal Heineke–Mikulicz–type rectoplasty in order to preserve the patient's rectum, and dilated the rectum for two weeks. The final outcome was excellent and no problems like constipation or incontinence occurred.

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