The American Journal of Surgery*

Clinical Science

Dyssynergic defecation may aggravate constipation: results of mostly pediatric cases with congenital anorectal malformation



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KEYWORDS:

Anorectal anomaly; Pelvic floor dyssynergia; Anorectal function test; Defecation disorders

Abstract

BACKGROUND: Most patients with congenital anorectal malformation suffer from mild chronic constipation. To date, it is unclear why a subgroup of patients develops a persistent form of constipation. Because dyssynergic defecation is a common cause of constipation in the general population, we hypothesized that the severe form of constipation may be caused by dyssynergic defecation.

METHODS: Retrospectively, we reviewed the medical records of 29 patients with anorectal malformations who had undergone anorectal function tests because of severe constipation. The study was conducted at the University Medical Center Groningen, The Netherlands.

RESULTS: All patients had increased maximum rectal pressure and increased anal sphincter pressure during balloon expulsion and therefore suffered from dyssynergic defecation.

CONCLUSIONS: Patients with congenital anorectal malformations may also suffer from dyssynergic defecation. It is important, therefore, to check whether these patients have severe constipation due to dyssynergic defecation because perhaps it may be treated effectively with pelvic physiotherapy. © 2015 Elsevier Inc. All rights reserved.

Fig. 1 shows a manometric pattern of a female patient of 36 years old. Shortly after birth she had undergone an abdominal and sacroperineal pull-through procedure for a rectovestibular fistula. At the age of 36 she was referred to the University Medical Centre Groningen requesting a colostomy for serious fecal overflow incontinence since early childhood.

An anorectal function test revealed that she suffered from severe dyssynergic defecation. We supposed this to be the cause of the unsuccessful bowel management program.

The patient was prescribed pelvic physiotherapy and after less than a year she underwent another anorectal function test. The results showed greatly reduced dyssynergic defectaion with only the puborectal muscle not yet relaxing completely during pressing. Most importantly, however, she became completely clean of feces and after a few months she no longer suffered from fecal overflow incontinence.

Congenital anorectal malformation (CARM) is an anomaly whereby the anal canal is insufficiently developed in a variety of gradations. ^{1,2} The treatment of choice for CARM is posterior sagittal anorectoplasty (PSARP) and anterior

There were no relevant financial relationships or any sources of support in the form of grants, equipment, or drugs.

The authors declare no conflicts of interest.

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Manuscript received May 23, 2014; revised manuscript August 26, 2014

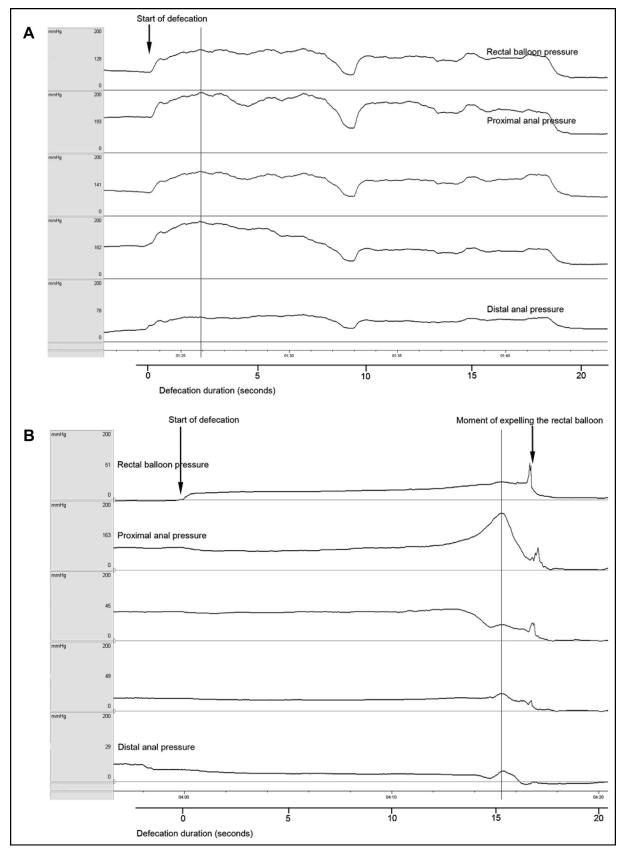


Figure 1 Manometries of one of the patients (female 36 years of age). (A) Manometry at the time dyssynergic defecation was diagnosed before pelvic physiotherapy. Note that pressure increased at all levels of the anal canal during the act of defecation and that the balloon was not expelled during registration time. (B) Manometry 1 year after pelvic physiotherapy. Note that pressure only increased in the upper anal canal during the act of defecation and that the balloon was expelled within 17 seconds.

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