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PII: S1875-9572(22)00232-7
DOI: https://doi.org/10.1016/j.pedneo.2022.08.005
Reference: PEDN 1427

To appear in: Pediatrics & Neonatology

Received Date: 28 May 2022
Revised Date: 26 July 2022
Accepted Date: 16 August 2022

Please cite this article as: Chen Y-H, Chang Y-T, Ma Y-C, Megarectosigmoid colon in an adolescent, Pediatrics and Neonatology, https://doi.org/10.1016/j.pedneo.2022.08.005.

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Megarectosigmoid colon in an adolescent

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Declaration of Interest: None Declared

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Short Title: megarectosigmoid colon

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A 12-year-old boy presented with abdominal distention since receiving supplementary foods at age 6 months. The average bowel movement was once every 5 days for 6 years, in conjunction with fecal soiling into the underwear for 3 years and occasional vomiting recently. During his visits to our hospital from October 2021 to January 2022, his body mass index was approximately 16.5 kg/m², which was within the normal or healthy weight range for his age and hinted at no poor bodyweight gain. His stool usually looked like small pebbles; however, it could be hard and big enough to clog the toilet with enema use. The patient did not receive any examination or treatment for his clinical condition until recently, when his parents noticed the palpable mass localized in the middle abdomen. On physical examination, the abdomen was prominently protuberant, and a firm, fixed mass (25 × 15 cm) was localized in the middle abdomen. The abdominal radiograph revealed a mass of air mixed with feces in the middle of the abdomen (Figure 1), and the contrast enema demonstrated a marked lengthening and dilatation of the rectosigmoid colon; however, neither an obvious transitional zone nor reverse rectosigmoid ratio was noted in this image (Figure 2). A full-thickness rectal biopsy revealed the absence of ganglion cells alone 5.1 cm of the anorectal line (Figure 3), indicating Hirschsprung’s disease. The disease is commonly diagnosed in the newborn period or during early infancy; however, it can be seen in adolescence with a history of chronic constipation [1]. After the diagnosis was established, a primary transanal endorectal Soave’s pull-through was arranged for the patient [2]. The patient had gradually recovered to normal bowel movements a few days after the operation, and no soiling had been observed since.
Figure 1. Abdominal radiograph reveals a mass of air mixed with feces in the middle of the abdomen.

Figure 2. A contrast enema demonstrated a marked lengthening and dilatation of the rectosigmoid colon.

Figure 3. Pathological results showed that the distal portion of the resected sigmoid colon had no ganglion cells (aganglionosis) (hematoxylin and eosin staining, ×100).

REFERENCES


Conflict of Interest

The authors have no conflicts of interest relevant to this article.