CASE REPORT

Intisari Sains Medis 2021, Volume 12, Number 1: 52-54
P-ISSN: 2503-3638, E-ISSN: 2089-9084

Published by Intisari Sains Medis

Anomalies of the sigmoid colon during laparotomy exploration: a case report of a redundant colon in the sigmoid and transverse colon

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Received: 2021-02-24
Accepted: 2021-03-23
Published: 2021-04-01

ABSTRACT

Introduction: The redundant colon is rare, often resulting in a late diagnosis because it is often asymptomatic and eventually leads to complications. The average person has a large intestine/colon 120-150 cm long in his abdominal cavity. The large intestine organ does not extend to the side but is tortuous to occupy the abdominal cavity. An abnormal condition can be found in the intestine length is beyond normal, known as "redundant colon". The redundant colon may have additional loops or turns, which cause it to become longer. In people who experience the redundant colon, the process of removing feces in the body tends to be longer, so it often experiences constipation.
Case description: In this case, A 40-year-old patient of female gender reportedly came to the BIMC Hospital and complaints of her abdominal pain, unable to defecate for 3 weeks ago, and did not improve with enemas. The patient had a history of total hysterectomy 13 years ago. The abdomen's physical examination is distended while inspected, there is no tenderness during palpation, and has normal auscultation. CT-Scan investigation found redundant transverse colon, low ileocecal junction location, and many intraluminal (colonic) stools, as well as plain abdominal images with obstruction of the large intestine. In patients, an exploratory laparotomy has been performed.
Conclusion: Ileus obstruction was found due to momentum adhesion which tangled the sigmoid colon and was redundant in the transverse colon during the surgery. With proper management of this case, we hope this surgery can attain this case back to normal.

Keywords: colon redundant, redundant sigmoid, laparotomy.
Cite This Article: Bharata, M.B.S., Bharata, M.D., Jayaningrum, I.G.A.A.B. 2021. Anomalies of the sigmoid colon during laparotomy exploration: a case report of a redundant colon in the sigmoid and transverse colon. *Intisari Sains Medis* 12(1): 52-54. DOI: 10.15562/ism.v12i1.973

INTRODUCTION

The sigmoid colon usually presents an anatomic anomaly that belongs to a part of the colon or large intestine.[1,2] The redundant colon is rare, often resulting in a late diagnosis because it is often asymptomatic and eventually leads to complications. The average person has a large intestine/colon 120-150 centimeters (cm) long in his abdominal cavity.[1,2] The large intestine organ does not extend to the side but is tortuous to occupy the abdominal cavity. An abnormal condition can be found in the intestine length is beyond normal, known as "Redundant Colon". The extension of the large intestine generally occurs in the descending colon.[3,4] In this case report, it is found in the transverse and sigmoid colon. The redundant colon may have additional loops or turns, which cause it to become longer. In people who experience the redundant colon, the process of removing feces in the body tends to be longer, so it often experiences constipation.

CASE DESCRIPTION

A 40-year-old female patient reportedly complaint of her abdominal pain to the hospital she went, unable to defecate in the last 3 weeks ago, it did not improve with enemas, and she had experienced the vague of pain in her abdominal in the lower quadrant, which significantly becomes worse in the 5 months as her history. Her medical history report told that she felt intense fatigue and abdominal discomfort for the past 3 months; as the continuation, the patient had a history of total hysterectomy 13 years ago. In the physical examination, her vitals are in the typical spectrum of conditions. There is clinical examination found

unremarkable results without tenderness or anything convincing from the period of her abdomen. The abdomen's clinical assessment is distended while inspected, there is no tenderness during palpation, and has normal auscultation. In CT-SCAN, investigations found redundant transverse colon, low ileocecal junction location, and many intraluminal (colonic) stools and plain abdominal images with obstruction of the large colon intestine (Figure 1).

In patients, an exploratory laparotomy has been performed. At the beginning of the operation carried out, the midline incision began from the epigastrium up to approximately under the umbilicus up to 7-8 cm. An exploration of the abdominal cavity to metastasize the liver, peritoneal, nodal, and pelvis performed by surgeons. In their surgical steps, the surgeons incidentally Ileus obstruction was found due to omentum adhesion which tangled the sigmoid colon and was found to be pleonastic in the transverse colon during the surgery (Figure 2, Figure 3, Figure 4). The operation went smoothly. On the tenth day postoperative, the patient was declared to be discharged in several conditions. On her 13th day of postoperative, the patient came to carry-out her condition, and there are no complications that can be found. The surgeon gives the patient a permit due to return to her country.

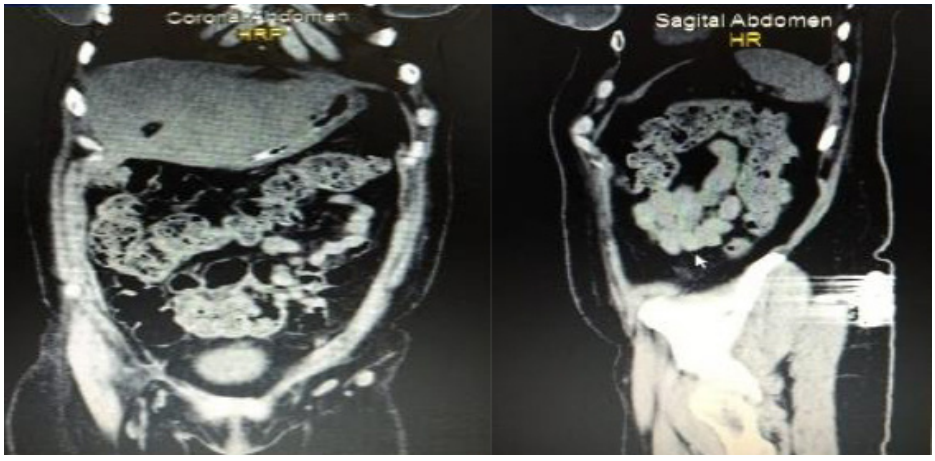

Figure 1. CT-SCAN Abdomen with evident anatomic variations.

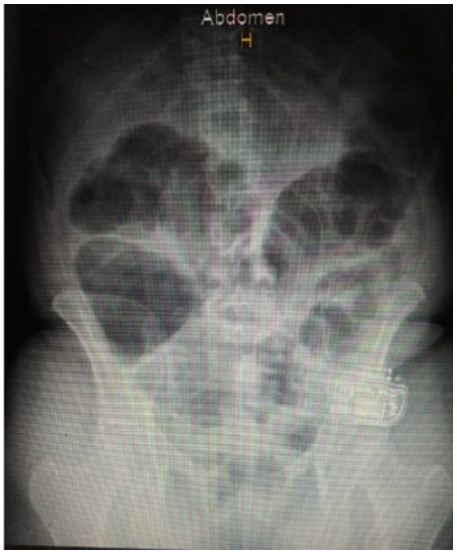

Figure 2. Abdominal x-ray examination of the patient.

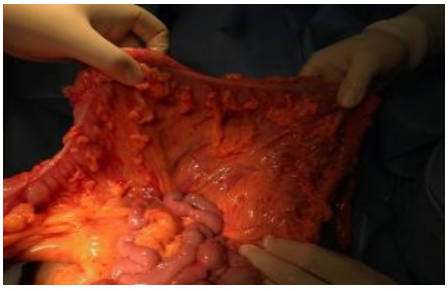

Figure 3. Exposure of the operation field.

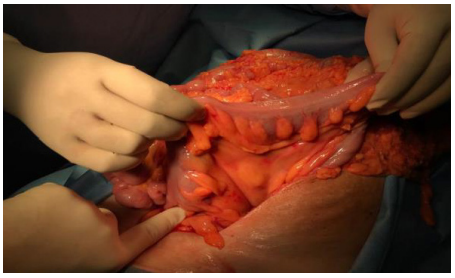

Figure 4. A detailed exposure of the redundant loop of the sigmoid colon.

DISCUSSION

The patient with a complaint of being unable to defecate in the last 3 weeks ago has worsened since a week ago. She had a history of hysterectomy 13 years ago, and due to that reason, laparotomy exploration was taken. The exploration surgery found an adhesion in the omentum with the sigmoid colon causes partial obstruction. Because of that, adhesion excision was performed by the surgeon. During the surgery, it was found the redundant colon in the sigmoid and transverse colon. The surgeon team has conducted an end-to-end anastomose resection in the redundant sigmoid colon to manage that situation. It was found that redundant transverse colon mixes with feces which comes from the caecum. The surgeon team then evacuated the feces through the sigmoid colon resection before anastomose was performed using 5-liter isotonic solutions to manage this situation. After the surgery, the patient was given a gradual oral diet ranging from liquid to solid. She showed improvement on day 7 post-surgery then allowed to go home on day 10. The diagnosis that occurs after the operation of the existing congenital malformations usually from radiography. However, in reality, the radiographic diagnosis field is not always possible, described in existing cases, which is due to the difference in dolichocolon where the dilation of the colon is not very noticeable.[5]

In this case, the presence of circles in the sigmoid colon that is too asymptomatic or in other senses can cause complications of the urinary tract, digestion, and vascular.[6] In particular, the presence of the problem can also result in constipation, disorders of the digestive system, discomfort in the stomach, weight loss, body pain, stomach, insomnia, and the frequency of urination continue to increase.[6,7] Those symptoms that already mentioned are not specific symptoms that can also lead to symptoms related to peptic ulcers, appendicitis, and heart disease.[8] On the other hand, anatomical variations mentioned can be the leading risk factor in sigmoid volvulus.[8,9] Indeed, redundant loops in

the colon sigmoid that can rotate around the narrow mesocolon area are also increasingly made more extended, leading to congestion and a lymph vascular obstruction accompanied by distension in the affected loops in the colon. When an acute condition is encountered, but the colon can still survive, a treatment that can be done is sigmoidoscopic decompression, which has the potential of 40-90% of cases in its efficiency.[10]

On the other side, excessive loops reported in sigmoid colons may result in inhibition of instrumentation and a diagnosis in imaging examinations, which is predominantly in colon anomalies that can give weight to sigmoidoscopes, colonoscopy, and barium enema radiography can also lead to the potential of iatrogenic varicocele.[6,9] The redundant of loops in the sigmoid colon can be said as a subject that has extraordinary clinical significance even for various specifications of doctors, namely surgeons, obstetricians, and radiologists.[6] Thus, the awareness of variations as well as the special attention that should be given to the correlation between rough anatomy is also clinically fundamental, which can be due to the awareness of them that will later affect the outcome of the operation as well as the level of an abyss of the surgery it performs.

CONCLUSION

The sigmoid colon usually presents an anatomic anomaly that belongs to a part of the colon or large intestine. It is often resulting in a late diagnosis because it is often asymptomatic and eventually leads to complications. Its variation often gets difficulty diagnosed or suspected preoperatively. It requires, though, complicated surgical maneuvers and radiographic analysis. Thus, knowledge of this malformation is mandatory to establish the correct diagnosis and appropriate management.

DISCLOSURES

Funding

The authors are responsible for the study funding without a grant, scholarship, or other funding resources.

Conflict of Interest

All of the authors declare that there were no conflicts of interest in this study.

Author Contribution

All of the authors are equally contributed to the study.

ACKNOWLEDGMENTS

We are thankful to all the staff for helping with the data retrieval.

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