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# Perineal Hernia Causing Intestinal Obstruction After Abdominoperineal Resection and Permanent Colostomy

Afak Durur Karakaya<sup>1\*</sup>, Derya Salim Uymaz<sup>2</sup>, Emre Altınmakas<sup>1</sup>, Emre Balık<sup>2</sup>, Bengi Gürses<sup>1</sup>

## Article History

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## \*Corresponding Author

Afak Durur Karakaya Department of Radiology Faculty of Medicine Koc University İstanbul, Turkey Phone: ±905337111996

Phone: +905337111996

E-mail: afkarakaya@kuh.ku.edu.tr

ORCID:http://orcid.org/0000-0003-3604-6791

Abstract: Internal hernia is a rare condition. It has different etiology according to the anatomical region encountered. In this paper we present a case of intestinal obstruction due to herniation of the small intestine to the perineal area after permanent colostomy with resection of the abdominoperineal colon, rectum and anüs. © 2020 NTMS

Keywords: Perineal Hernia.

# 1. Introduction

Perineal hernia (PH) is defined as protrusion of intraabdominal structures through a pelvic floor defect into the perineum. Small intestines, colon, bladder, omentum, and uterus can be involved (1,2). It is a rare complication of some surgeries including abdominoperineal resection, pelvic exenteration, and prostatectomy (3-6) and usually occurs within 4-12 weeks following operation. Minimally invasive methods are used for treatment.

### 2. Material and Methods

#### 2.1. Case

A 46-year-old male patient underwent robotic abdominoperineal resection and permanent colostomy for locally advanced rectal cancer. On postoperative 6<sup>th</sup> day, he developed lack of bowel sounds, abdominal distension, and pain.

Computerized tomography (CT) of abdomen with intravenous (IV) and oral contrast material was performed for further assessment. CT showed herniation of the small bowel loops through a posterior pelvic floor defect into the perineum. Small bowel loops were diffusely dilated, and passage of oral contrast media was prolonged. Thickening of the hernia wall and increased enhancement were also noted (Figure 1a, 1b and 2). Subsequently, the patient underwent surgery which confirmed the diagnosis (Figure 3).

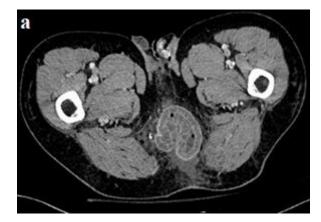
## 3. Discussion

Perineal hernia is a rare complication of major pelvic surgeries. The incidence of post-pelvic surgery is 7%, whereas the need for additional surgery is 0.2-0.6% (7-9). It has been attributed to weakness of levator muscle in pelvic floor.

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<sup>&</sup>lt;sup>1</sup> Department of Radiology, Faculty of Medicine, Koc University, İstanbul, Turkey

<sup>&</sup>lt;sup>2</sup> Department of General Surgery, Faculty of Medicine, Koc University, İstanbul, Turkey

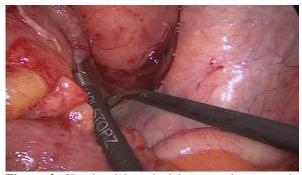




**Figure 1a-b:** Axial and coronal images of contrastenhanced CT of abdomen shows herniation of the small bowel loops through a defect in the posterior pelvic floor into the perineum with thickening and increased enhancement of the hernia wall.



**Figure 2:** Dilatation of small bowel loops with airliquid levels.



**Figure 3:** Herniated intestinal loops on laparoscopic images.

It has been reported that PH usually occurs within 4-12 weeks following surgery with no clinical symptoms. In our case, it developed on  $6^{\rm th}$  day of the operation with symptoms of bowel obstruction. This condition can be repaired laparoscopically with transabdominal, perineal or combined abdominoperineal approach when necessary.

# 4. Conclusion

In our case, diagnostic laparoscopy was performed, and herniated bowel loops were reduced. In conclusion, diagnosis of PH should be considered in patients who are in early or late postoperative period of a major abdominopelvic surgery.

# **Conflict of interest statement**

No conflict of interest.

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# **Authors' ORCID**

Afak Durur Karakaya http://orcid.org/0000-0003-3604-6791 Derya Salim Uymaz http://orcid.org/0000-0002-2590-5872 Emre Altınmakas http://orcid.org/0000-0002-0727-9230 Emre Balık

http://orcid.org/0000-0001-5751-1133 Bengi Gürses

http://orcid.org/0000-0002-2482-3445



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