# Overtreated recurrent subocclusive syndrome after radiotherapy and radical hysterectomy for cervical cancer: case report

D. Vasile<sup>1,2</sup>, Raluca Claudia Iancu<sup>1,</sup> G. Iancu<sup>1,3</sup>, Alina Popa-Cherecheanu<sup>1,4</sup>

1. UMF "Carol Davila",
SUUB Ophtalmology Clinic,
Bucharest (Romania)
2. First Surgery
Department,
Emergency University
Hospital
Bucharest (Romania)
3. Filantropia Clinical
Hospital,
Bucharest (Romania)
4. Ophthalmology
Department,
Emergency University
Hospital
Bucharest (Romania)

Correspondence: Dr. Raluca Claudia lancu e-mail: ralucavasile2002@ vahoo.com

# Abstract

A 66-year-old patient presented abdominal colicky pain, nausea and intractable vomiting early after adhesiolysis, intestinal plication and mesh insertion for recurrent sub occlusive syndrome after multiple surgeries. A conservative approach with hydro-electrolytic imbalance correction and symptomatic medication and abstain from further surgery provided better outcomes in this case of impaired intestinal transit. **Keywords:** adhesions, subocclusive syndrome, conservative management

# Introduction

Postoperative adhesions are an important cause of morbidity, occurring commonly after abdomino-pelvic surgery; gynecologic procedures are often incriminated in adhesions formation<sup>(1)</sup>. They occur as a consequence of surgical trauma and natural healing process. Risk factors for development of intraperitoneal adhesions are type/ extent of surgery, accuracy of haemostasis, radiotherapy, foreign body or infection<sup>(2)</sup>. There is an individual response to surgical injury that makes some patients more prone to develop adhesions. Abdominal and pelvic adhesions can be asymptomatic or manifest as abdominal pain, infertility, small intestine or bowel obstruction<sup>(3)</sup>; furthermore, they increase the difficulty of subsequent surgery and complications after radiotherapy and decrease the efficacy of intra-peritoneal chemotherapy. Meticulous surgical technique and barrier methods use are advocated to reduce adhesions formation<sup>(4)</sup>.

### Case report

# Present and past history

A 66-year-old female presented with a history of colicky abdominal pain, nausea and intractable bilious vomiting, nine days after adhesiolysis, intestinal plication and mesh insertion for recurrent intestinal subocclusion due to complex adherences and defective abdominal wall. The patient was known with a history of stage IIB FIGO cervical cancer, treated by radical hysterectomy, bilateral salpingo-oophorectomy and pelvic lymphadenectomy, followed by pelvic radiotherapy. Immediate postoperative course was uneventful. Four years after malignancy treatment, she develo-

ped progressive symptoms of intestinal obstruction; laparotomy and debridement of extensive abdominal adhesions was performed. She made a full recovery, although intermittent subocclusive symptoms continued to occur. A second procedure for obstruction symptoms was performed two years after the last one. Again, difficult debridement aimed to restore normal anatomy and transit. On and off symptoms thereafter culminated with another surgical procedure for subocclusive symptoms and subumbilical incisional hernia. Intestinal plication was performed and the hernia was repaired with synthetic mesh. A rocky postoperative recovery, with persistent recurrent vomiting, episodic diarrhea and colicky abdominal pain mandated repeated



Figure 1. Abdominal wall scarring after multiple surgical procedures

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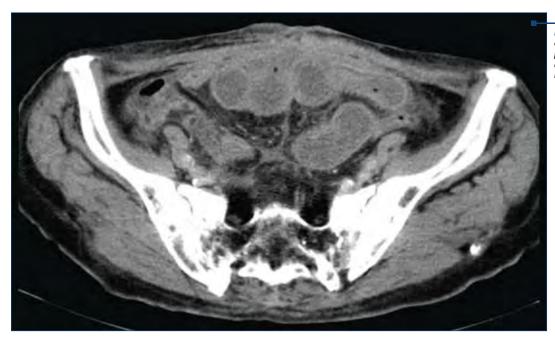


Figure 2. Abdominal computed tomography scan showing agglutinated small intestinal loops

laparotomy shortly thereafter with repositioning of constricting abdominal mesh; despite it, the digestive symptoms persisted. At this moment the patient was referred to us for further management.

# Physical examination and investigations

The patient was dehydrated and malnourished (10 kg weight loss over the last 3 months). On inspection, the abdomen had multiple postoperative scars, severely retracted, constricting the lower part (Figure 1). Palpation revealed pain mainly in the upper abdomen, with minimal guarding and rebound tenderness; intestinal transit was present for flatus, with a few diarrheal episodes.

On admission, blood analyses were within normal range. A plain abdominal X-ray ruled out frank intestinal occlusion; no hydroaeric levels were seen.

Computed tomography revealed intraperitoneal free fluid collections, the one along the internal side of the descending colon partially distorting it. Agglutinated small intestine loops tightly adherent to anterior abdominal wall were demonstrated (Figure 2).

After obstruction was excluded, barium follow through imaging showed normal appearing jejunal and ileal loops, with accelerated peristaltis, ingested barium reached the colon after 1 hour.

# Differential diagnosis

The diagnosis has to consider different causes of intestinal obstruction and delineation between subocclusive and occlusive syndromes. The history of multiple surgery and radiotherapy lead the diagnosis towards intestinal obstruction due to postsurgical adherences. The presence of flatus and absence of hydroaeric levels disclosed complete intestinal blockage. The weight loss and chronic diarrhea episodes suggested a component of post-radiation enteritis.

## **Treatment**

Hydroeletrolytic balance was restored with intravenous infusion and symptomatic medication anti-emetics, prokinetics and anti-acids that were administered together with appropriate hydration and balanced nutrition. The symptoms remitted with conservative management and the patient was discharged.

## Discussion

Patients operated several times are at increased risk of adherences that are often difficult to manage surgically. In selected cases, conservative management is the optimal choice. It is known that adhesions reformation after surgery for adhesiolysis occurs in 85% of patients<sup>(5)</sup>. Abdominal wall reconstruction can also be considered sometimes to release the tension, using a synthetic mesh to replace the retracted rectus sheath.

### Conclusions

The subocclusive symptoms had to be treated conservatively in our case considering her surgical history; another abdominal procedure would have been increased the risk of intestinal and/or bowel injury, additional new adherences and the tension in the anterior abdominal wall, already constricted by multiple retractile scars.

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