

Rectosigmoid Stricture Following Radiotherapy: A Rare Case Report

Radyoterapiyi Takiben Rektosigmoid Striktür: Nadir Bir Olgu Sunumu

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ABSTRACT: Radiotherapy is a frequently used medical treatment method after gynecologic malignancies. This treatment may causes serious intestinal complications. Our case is a 54 years old woman, had been applied a radiotherapy following operation due to endometrium cancer. One year after the treatment rectosigmoid stricture was grown up. Resection and side to side anastomosis was applied to the patient. Intestinal complications after radiotherapy is associated with high mortality and morbidity.

Key Words: Rectosigmoid stricture, Radiotherapy, Intestinal obstruction

ÖZET: Radyoterapi jinekolojik malignansilerden sonra sıklıkla kullanılan medikal bir tedavi metodudur. Bu tedavi ciddi intestinal komplikasyonlara neden olabilir. Bizim vakamız, endometrium kanseri nedeniyle operasyon sonrasında radyoterapi uygulanan 54 yaşında bir bayan hastadır. Tedaviden yaklaşık bir yıl sonra rektosigmoid striktür gelişti. Rezeksiyon ve uçuca anastomoz hastaya uygulandı. Radyoterapi sonrasında intestinal komplikasyonlar yüksek mortalite ve morbidite ile yakından ilişkilidir.

Anahtar Kelimeler: Rektosigmoid striktür, Radyoterapi, İntestinal obstrüksiyon

INTRODUCTION

The intestinal strictures with 37% and rectovaginal fistulas with 22-58% are the leading intestinal complications following pelvic radiotherapy (2,3). The other complications are radiation enteritis, gangrene, fistulas, radiation rectitis, chronic diarrhea and sepsis (2,3).

CASE REPORT

The patient was fifty four years old woman. It was learned that, total abdominal hysterectomy and bilateral salpingoophorectomy operation was held on the patient due to endometrium cancer one year ago, and after 1 month after the operation she had taken radiotherapy treatment during a 40 days period. She admitted to our emergency department complaining with abdominal pain, nausea and vomiting. Mild abdominal distention, hyperactive intestinal voices and generalized abdominal tenderness were present in the physical examination.

Other systemic examinations were normal. Many air-fluid levels were present in the plain abdominal radiography (Fig. 1). In total abdominal ultrasonography free fluid was determined at Morison's pouch and supravescical area. The patient was hospitalized with the diagnosis of mechanical intestinal obstruction for survey and treatment. All intestinal segments were dilated, and the diameter of the ascending colon was determined as 9 cm, during the abdominal tomography (Fig. 2). At the follow up of 48 hours period the patient's clinical complaints did not get well, and diagnostic laparotomy was applied to the patient. During the exploration, approximately 2 cm long strictured area was determined at the conjunction of sigmoid and rectum. The strictured area resected at a length of 5-6 cm long distally and proximally and side to side primary anastomosis was made. The patient was discharged with cure on the postoperative 7th day. At the histopathologic examination, macroscopicly a tissue piece, 8.5 cm in length, which had 3.3 cm thickness and showing 3.5 cm long lumen at one side and 2 cm at the other side. 3 cm far from the wide surgical side an ulceration, scarring and narrowing (0.5 cm) of the lumen was observed in one field. Also hyperemia was seen at the outside of serosa. Mucosal appearance was observed normally in the

other fields. Microscopically an ulceration was seen at the surface of this field and the wall integrity under this surface was destroyed. There is no muscle tissue, and despite of this the connective tissue bands, infiltration of chronic inflammatory cells and increasing in the number of blood vessels, was observed. At the serosal side increased chronic inflammatory cells and connective tissue bands were also observed. (Fig. 3).



Fig 1. Plain abdominal graphy



Fig 2. Abdominal computerized tomography (Arrow showing rectosigmoid stricture)

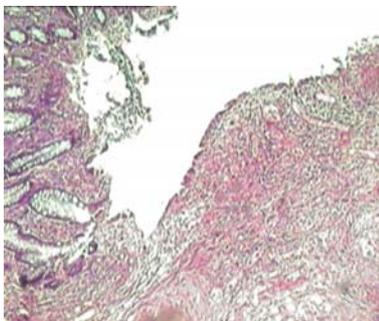


Fig 3. Histopathological changes due to ulceration on the left (H&E x 40)

DISCUSSION

Intestinal operations due to complications of pelvic radiotherapy are rare. Rectal stricture and fistulas are the leading causes for the surgery due to radiation (1). Intestinal strictures are the most common causes of surgery after fistulas (4,5). When a patient admit, it is usually hard to understand whether the obstruction is due to primary tumor metastasis or radiotherapy (6). Because of this, contrast intestinal graphy and computerized tomography are the primarily diagnostic methods. It is notified that the mortality is 8-10% in these cases (2,3). The surgical treatment of acute colonic obstruction due to rectosigmoid stricture is associated with high mortality and morbidity, still a problem to the surgeons (4). We also determined a colonic stricture in the rectosigmoid region due to radiation of the 54 years old woman. We applied resection + primer anastomosis to our patient. It is notified that self-expanding metallic stent is used as an alternative of surgery in the treatment of radiation stricture (4,7).

In conclusion, high mortality and morbidity is associated with the high age, radiotherapy, delayed diagnosis and surgery. For this reason, the timing of the surgery is especially important in these cases.

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