CASE REPORT

Kolon & Rektum Hastalıkları Dergisi
Journal of Diseases of the Colon and Rectum

Retroperitoneal Abscess and Necrotizing Infection with Extension to Thigh Secondary to Right Colon Carcinoma: Report of Two Cases

Sağ Kolon Karsinomuna İkincil, Uyluğa Yayılım Gösteren Retroperitoneal Abse ve Nekrotizan İnfeksiyon: İki Olgu Sunumu

FATİH AĞALAR[1], ŞENER BALAS[2], ORAL SAYGUN[1], CANAN AĞALAR[3], SEDAT DÖM[1], ÇAĞATAY DAPHAN[1], KUZEY AYDINURAZ[1]

[1]Kırıkkale Üniversitesi Tıp Fakültesi, Genel Cerrahi Anabilim Dalı, Kırıkkale-Türkiye [2]Acıbadem Hastanesi, Genel Cerrahi Kliniği, Eskişehir-Türkiye
[3]Kırıkkale Üniversitesi Tıp Fakültesi, İnfeksiyon Hastalıkları ve Klinik Mikrobiyoloji Anabilim Dalı, Kırıkkale-Türkiye

ÖZET

Çıkan kolon karsinomuna ikincil gelişmiş, iki adet nekrotizan fasyitis ve retroperitoneal abse olgusunu sunuyoruz. Özellikle sağ uyluğa yayılım gösteren retroperitoneal nekrotizan infeksiyonlarda kaynak olarak sağ kolon kanserleri göz önünde bulundurulmalıdır.

Anahtar Kelimeler: Retroperitoneal abse, Nekrotizan infeksiyon, Kolon kanser

ABSTRACT

We present two cases of necrotizing infection and retroperitoneal abscess secondary to right colon cancer. Right colon cancer should be kept in mind as the possible source of retroperitoneal necrotizing infections extending especially to the right leg.

Key words: Retroperitoneal abscess, Necrotizing infections, Kolon cancer

Başvuru Tarihi: 26.06.2011, Kabul Tarihi: 24.10.2011

Dr. Fatih Ağalar
Kırıkkale Üniversitesi Tıp Fakültesi, Genel Cerrahi Anabilim Dalı,
Sağlık Caddesi 71100 Kırıkkale - Türkiye
Tel: 0532 246 41 24
e-mail: fatihagalar@gmail.com

Kolon Rektum Hast Derg 2011;21:194-197

Introduction

Necrotising fasciitis (NF) is a life threatening soft tissue infection usually caused by a mixed bacterial flora which requires aggressive and early surgical management.[1-6] Ascending colon carcinoma generally presents with anemia, fatigue, and palpable mass in the right lower quadrant. Rarely, it may present as an emergent infectious problem.[7] Here, we present two patients having ascending colon cancer diagnosed as retroperitoneal abscess and necrotizing infection with extension to thigh.

Case 1

Seventy-two-year-old female presented with one month history of abdominal discomfort and swelling in the right lower quadrant. She had bullous skin lesion on right inguinal region that extended to upper one third of right leg. She was diabetic, asthmatic, obese, suffering hypertension and noted to have anemia and elevated white cell count. Her admission APACHE II score was 14. The patient was operated because of lower extremity and abdominal wall necrotizing fasciitis (Fig. 1). The wound was aggressively and sequentially debridated. Aggressive fluid resuscitation was done in order to overcome the consequences of septic shock. Meropenem (3x1gr) and Teicoplanin (1x400 mg) IV therapy initiated. The patient was observed in the ICU during sequential debridements. When a healthy tissue was obtained the debridements were stopped. The defect was closed with rotational flaps and skin grafts (Fig. 2). Four months after the discharge, she was readmitted to hospital with signs of intestinal obstruction. On exploratory laparotomy, a right sided colon cancer which invaded the posterior abdominal wall was detected and right hemicolectomy and ileotransversostomy was applied. The patient died due to ileocolic anastomotic disrupture and consequences of intraabdominal sepsis at second admission on postoperative day 12.

Case 2

Seventy-four-year-old male presented with septic shock and swelling on right abdominal wall and upper right leg. He had comorbid illnesses such as asthma and chronic liver failure. His admission APACHE II score was 15. Abdominal MR revealed an abscess formation in the right retroperitoneal region and lateral abdominal wall which was spreading along iliopsoas muscle and

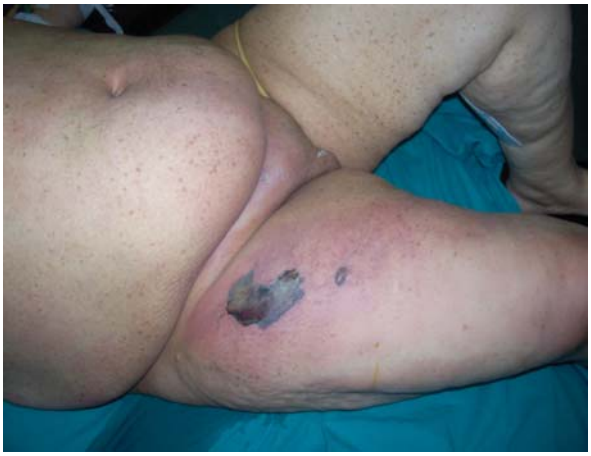

Figure 1. Lower extremity and abdominal wall necrotizing fasciitis.

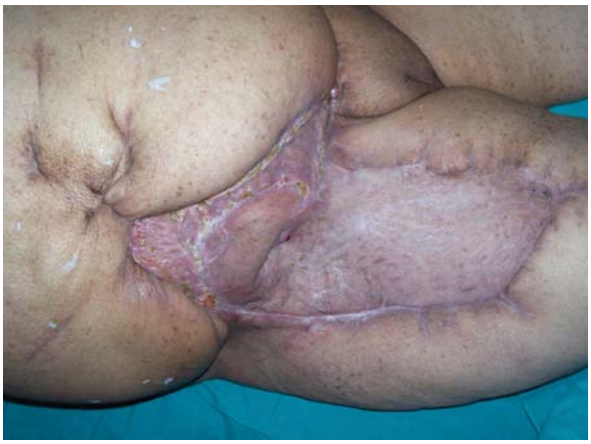

Figure 2. Final view of case 1.

fascial planes. Ultrasound guided percutaneous abscess drainage was not very effective, so the abscess was drained via right flank incision. Beyond debridement, aggressive fluid resuscitation and wide spectrum antibiotics led the patient survive at the intial catasthrophic situation. On postoperative fourth day, a complete intestinal obstruction occurred. At the operation, a right sided colon cancer was found and right hemicolectomy with ileostomy was performed. He was operated upon several times because of local recurrences and he died two years later due to dissemination of cancer.

Discussion

Although the precise aetiology of NF is unclear in many cases, some of them may be to major or minor trauma, and risk factors such as diabetes mellitus, peripheral

vascular disease, chronic renal failure, drug misuse, advanced age, obesity and immunosuppression are also important.[8-9]

Rarely, NF may be secondary to an intraabdominal pathology such as sigmoid diverticulitis, Amyand's hernia, perforated colonic diverticulum.[10-12] NF due to perforated ascending colon carcinoma may even be rare.[13] Additionally, vulvar carcinoma and perforated gallbladder carcinoma can be rare causes of NF.[14-15] Signs and symptoms of NF include high fever, localized pain, cellulitis over the affected area, edematous soft tissues and subcutaneous emphysema. However, these clinical features can be subtle, and the diagnosis requires a high index of suspicion. Plain abdominal radiographs show subcutaneous emphysema. CT and MRI are usually not required in the diagnosis of NF, they are helpful to determine any probable extension of NF to intraperitoneal or retroperitoneal space.[16-19]

NF always requires early extensive surgical sequential debridements in order to decrease in the mortality rates.[9] There was real evidence that abdominal or perineal NF may occur as a consequence of intraabdominal or retroperitoneal viscus perforation and have a tendency to spread toward lower extremity fascial planes because of gravity forces.[17-19] This was also happened in those cases presented here. Both patients had necrotizing fasciitis on the right legs.

In the first case there was no evident fistula formation, if so the surgical procedure would be ineffective. Although the second patient evaluated by MRI, there was no radiological imaging in the first patient as she operated urgently to clear off the septic condition. Even so retrospective view showed us that: radiological imaging should be kept in mind for NF patients whenever possible to determine the depth of infection and underlying disease.

As conclusion, right colon cancer should be kept in mind as the possible source of necrotizing infection extending especially to the right leg.

References

1. Singh G, Sinha SK, Adhikary S, *et al*. Necrotising infections of soft tissues a clinical profile. Eur J Surg 2002;168:366-71.
2. Canbaz H, Cağlikülekçi M, Altun U, *et al*. Fournier's gangrene: analysis of risk factors affecting the prognosis and cost of therapy in 18 cases Ulus Travma Acil Cerrahi Derg. 2010;16:71-6.
3. Hefny AF, Abu-Zidan FM. Necrotizing fasciitis as an early manifestation of tuberculosis: report of two cases. Ulus Travma Acil Cerrahi Derg 2010;16:174-6.
4. Ozgenel GY, Akin S, Kahveci R, *et al*. Clinical evaluation and treatment results of 30 patients with necrotizing fasciitis Ulus Travma Acil Cerrahi Derg 2004;10:110-4.
5. Taviloglu K, Yanar H. Necrotizing fasciitis: strategies for diagnosis and management. World J Emerg Surg. 2007:7;2:19.
6. Taviloglu K, Cabioglu N, Cagatay A, *et al*. Idiopathic necrotizing fasciitis: risk factors and strategies for management. Am Surg 2005;71:315-20.
7. Gould SW, Banwell P, Glazer G, *et al*. Perforated colonic carcinoma presenting as epididymo-orchitis and Fournier's gangrene. Eur J Surg Oncol 1997;23:367-8.
8. Elliott DC, Kufera JA, Myers RA, *et al*. Necrotizing soft tissue infections. Risk factors for mortality and strategies for management. Ann Surg 1996;224:672-83.
9. Mackay HJ, Williamson ECM, Vasey P, *et al*. Recurrent inflammation in a site of previous necrotising fasciitis during intravenous CMF chemotherapy. Annals of Oncology 1999;10:1101-3.
10. Alvarez-Zepeda C, Hermansen-Truan C, Valencia-Lazo O, *et al*. Necrotizing fasciitis of the abdominal wall secondary to a perforated sigmoid diverticulum in a Spiegel's hernia. A case report. Cir Cir. 2005;73:133-6.
11. Marron CD, Khadim M, McKay D, *et al*. Amyand's hernia causing necrotising fasciitis of the anterior abdominal wall. Hernia 2005;9:381-3.

12. Tandon T, Moss MC, Shaik M, *et al*. Perforated colonic diverticulum presenting as necrotizing fasciitis of the thigh. J Orthop Sci 2005;10:534-6.
13. Ku HW, Chang KJ, Chen TY, *et al*. Abdominal necrotizing fasciitis due to perforated colon cancer. J Emerg Med 2006;30:95-6.
14. Adelson MD, Miranda FR, Strumpf KB, *et al*. Necrotizing fasciitis: a complication of squamous cell carcinoma of the vulva. Gynecol Oncol 1991;42:98-102.
15. Okada K, Shatari T, Yamamoto T, *et al*. Necrotizing fasciitis secondary to carcinoma of the gallbladder with perforation. J Hepatobiliary Pancreat Surg 2007;14:336-9.
16. Miller G, MacLean AA, Hiotis K. *et al*. Surgical images: soft tissue Necrotizing fasciitis of the abdominal wall. Can J Surg 2008;51:56.
17. Jacobs PP, van der Sluis RF, Tack CJ, *et al*. Necrotising fasciitis of the lower limb caused by undiagnosed perforated appendicitis, which necessitated disarticulation of the hip. Eur J Surg 1993;159:307-8.
18. Penninga L, Wettergren A, Perforated appendicitis during nearterm pregnancy causing necrotizing fasciitis of the lower extremity: a rare complication of a common disease. Acta Obstet Gynecol Scand 2006;85:1150-1.
19. Underwood TJ, Southgate J, Talbot R, *et al*. Perforated diverticulitis presenting as necrotising fasciitis of the leg. World J Emerg Surg 2008;3:10.