

Rectal Cancer with Synchronous External Iliac Lymph Node Metastasis Invading the External Iliac Artery and Its Surgical Management: A Case Report

External Iliak Arteri İnfiltrasyonuna Eşlik Eden Senkron Rektum Kanseri Metastazı; Olgu Sunumu

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ABSTRACT

Isolated external iliac lymph node recurrence is rare in rectal carcinoma. Herein we present a 78-year-old male with synchronous external iliac lymph node metastasis invading the external iliac artery and its successful surgical resection.

Keywords: Rectal cancer, recurrences, external iliac lymph node metastases

ÖZ

Rektum kanserinin izole eksternal iliak lenf nodunda rekürrensi nadirdir. Bu olgu sunumunda 78 yaşında erkek bir hastanın eksternal iliak arteri invaze eden tümörünün cerrahi olarak başarılı bir şekilde çıkarılması anlatılmıştır.

Anahtar Kelimeler: Rektum kanseri, rekürrens, eksternal iliak lenf nodu metastazı

Introduction

In most carcinomas other than colorectal tumors, treatment is planned as systemic disease in the presence of recurrence following the resection of the primary lesion and salvage surgery is not often indicated for the recurrent lesion. Contrarily, in colorectal cancer, resection of the recurrent lesion may improve prognosis. Exclusively, liver metastasis, pulmonary metastasis, and local recurrence are known to be likely to result in improved prognosis with surgical resection.¹ After complete surgery locoregional recurrence rates are between 4-33%. Recurrences can involve the central soft tissues, invade the sacrum or invade the pelvic side-wall and associated vascular structures.²

In this report, we present a rare case of rectum cancer with synchronous isolated left external iliac lymph node metastases with invasion of external iliac artery and ureter, with neither regional lymph node metastasis nor distant

hematogenous metastasis, for whom a potentially curative operation including distant metastatic lymph node dissection and arterial reconstruction was performed.

Case Report

A 78-year-old male had been referred to our department in 2006 for the treatment of rectal carcinoma. Low anterior resection with side to side colorectal anastomosis was performed. Stage of the tumor was found to be T2N0M0. After 8 years he had an acute mechanical intestinal obstruction showing recurrence at colorectal anastomosis site. Following resection and Hartmann colostomy, adjuvant chemotherapy was performed for T3N0M0 tumor.

The patient was followed by a periodic check-up of carcinoembryonic antigen (CEA) levels. His CEA level increased to 361.12 mg/dL in April 2017. The computed tomography (CT) scan showed a mass on the abdominal



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side of the left external iliac artery and positron emission tomography showed a hot spot in the same region (Figures 1, 2, 3, 4). There was no evidence of distant metastasis. At this point, we considered this mass as distant lymph node recurrence with invading external iliac artery.

In August we performed lymph node resection with external iliac artery reconstruction (Figures 5, 6). The mass was fixed to the abdominal side of the left external iliac artery and in

order to ensure R0 resection, en bloc resection with external iliac artery was performed. The artery was reconstructed by end-to-end anastomosis (Figures 5, 6).

The patient had no complication after surgery and was discharged at postoperative day 8. In the resected specimen, pathological evaluation revealed metastasis of rectal carcinoma. The patient had no symptoms at the postoperative 4th month and the level of CEA was found to be 3.61.

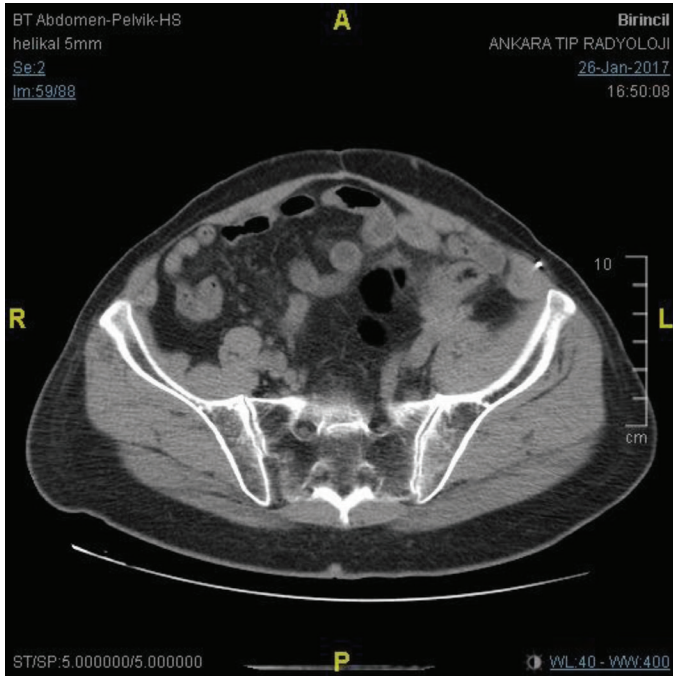


Figure 1. External lymph node metastasis

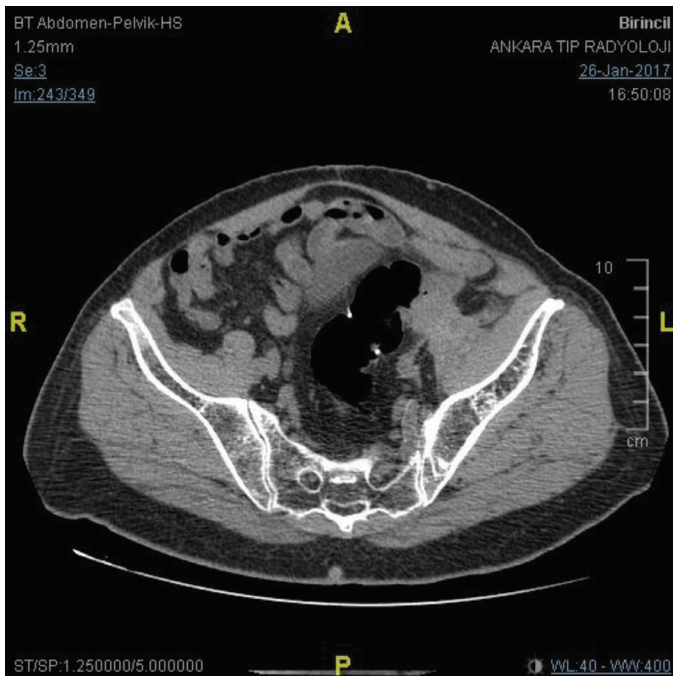


Figure 2. External lymph node metastasis

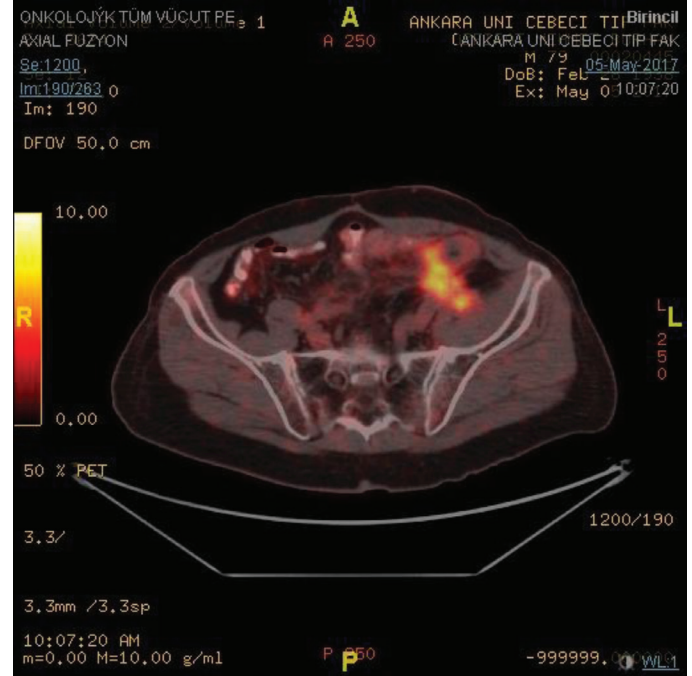


Figure 3. External lymph node metastasis

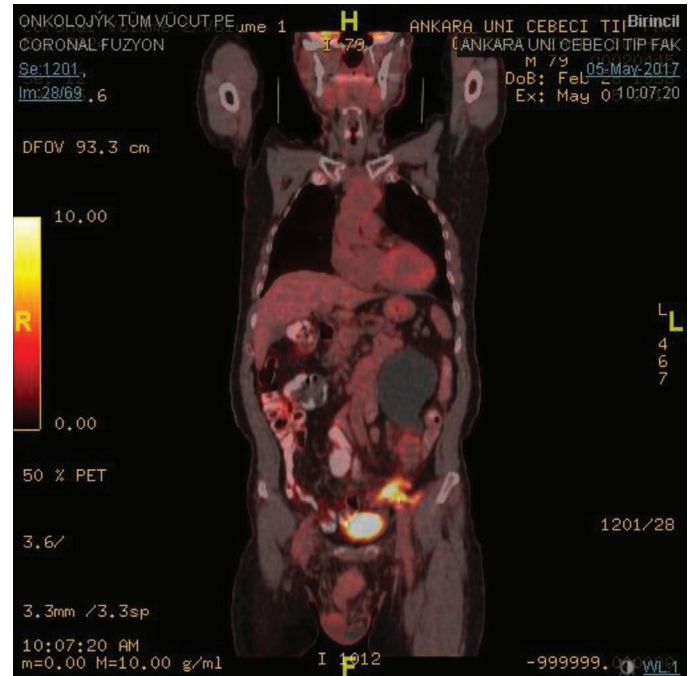


Figure 4. External lymph node metastasis

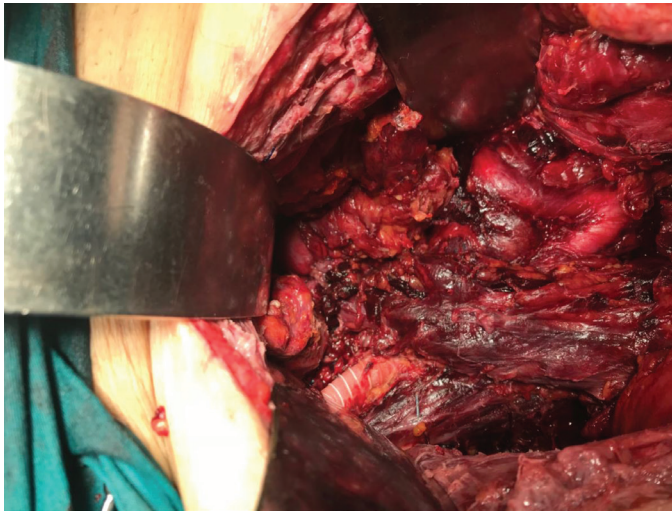


Figure 5. Figure excision of metastasis and reconstruction of external iliac artery

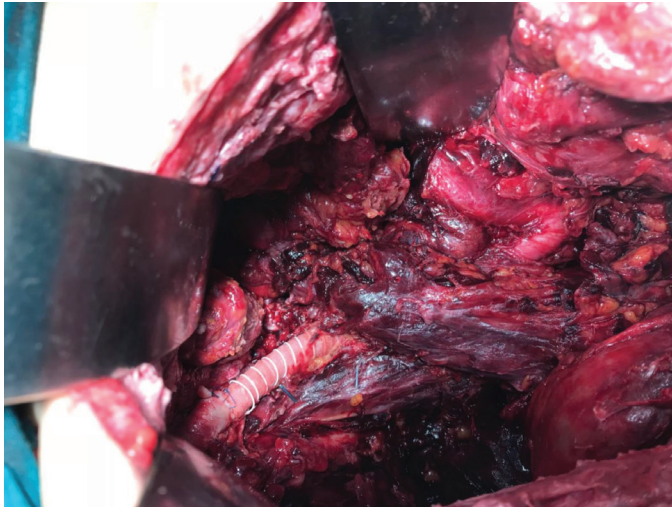


Figure 6. Figure excision of metastasis and reconstruction of external iliac artery

Discussion

Synchronous metastasis to the left external iliac or inguinal lymph nodes without local recurrence and hematogenous metastasis is very rare for rectal cancer. Our patient underwent after surgical resection he had taken chemotherapy and he was surviving recurrence free. In general, lymph node recurrence after colorectal cancer surgery is regarded as systemic disease, and in such cases, chemotherapy, radiotherapy or a combination of both rather than surgery, is preferred. With regard to isolated lymph node recurrence such as this case, there are some reports of resection, and in our clinic we prefer resection.^{3,4,5}

Isolated lymph node recurrence rarely occurs in colorectal cancer and there is no agreement regarding surgical indication for this condition. However, in surgical

treatment for liver and pulmonary metastases, the minimum requirement is local control.¹ In our case, favorable local control was achieved by initial surgery and, therefore, surgical resection was indicated for recurrent lesion, because of the possibility of achieving long-term prognosis. With regard to en bloc resection of blood vessels, it goes without saying that there is a fear of increased risk of complications. However, en bloc resection of the external iliac vessels requires revascularization and if the range of resection is wide, artificial vessels become necessary. For lymph node recurrence near blood vessels, en bloc resection of the vessels may be preferable from the viewpoint of local control and R0 resection, but should be considered only if it can be justified after considering the risks associated with surgery.

We presented a rare case of rectal cancer metastasis invading external iliac artery. For isolated lymph node recurrence of colorectal carcinoma, surgical resection should be considered, if favorable local control is thought to be achieved.

Ethics

Informed Consent: Informed consent was taken from the patient.

Peer-review: Internally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: S.D., A.E.Ü., S.Ç., Concept: S.Ç., Ö.Y., Design: F.A., S.İ.B., Data Collection or Processing: S.Ç., Ö.Y., Analysis or Interpretation: S.Ç., F.A., S.D., Literature Search: S.İ.B., A.E.Ü., Writing: S.Ç., Ö.Y.

Conflict of Interest: No conflict of interest was declared by the authors.

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