OLGU YAZISI / CASE REPORTS

KARIN DUVARINDA İZOLE KOLON ADENOKARSINOM METASTAZI: BIR OLGU SUNUMU

ISOLATED COLON ADENOCARSINOMA METASTASIS IN THE ABDOMINAL WALL: A CASE REPORT

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ÖZET

ABSTRACT

Kolorektal kanserlerde periton ve lenf düğümlerinin tutulumu olmaksızın ön karın duvarının izole local nüksleri nadirdir. Bu olguda 41 yaşındaki erkek hastanın rektus kasında kolon kanserinin izole metastazının klinik ve radyolojik bulguları sunulmuştur.

ANAHTAR KELİMELER: Adenokarsinom, Metakron tümör, Karın duvarı. Isolated local recurrence of the anterior abdominal wall without peritoneum and lymph node involvement is rare in colorectal cancers. In this report, clinical and radiological findings of isolated metastasis of colon cancer in the rectus muscle of a 41-year-old male patient are presented.

KEYWORDS: Adenocarcinoma, Metachronous tumor, Abdominal wall.

INTRODUCTION

Colorectal cancers (CC) are the third most common type of cancer in the world (1). In CC, approximately 20% of cases have metastasis at the time of diagnosis, most commonly in the liver and lungs. Depending on the hematogenous and lymphatic spread pattern, extra-abdominal metastasis is more common in rectal cancer, while abdominal metastasis rates are higher in CC (2).

Liver metastases are seen in more than 70% of CC, while less than 10% of metastases can be seen in other organs such as the central nervous system, adrenal gland, spleen and, skeletal system (3). In addition, it spreads non-hematological into the peritoneal cavity through peritoneal fluid (1). Metachrome abdominal wall metastasis in colorectal cancers is very rare and can be seen as a result of direct invasion, lymphatic and hematogenous pathways, or implantation of cancer cells (4).

In this report, clinical and radiological findings of a patient operated on sigmoid colon adenocarcinoma in whom an isolated rectus muscle metastasis was diagnosed and treated after 28 months without lymph node, abdominal, or extra-abdominal involvement, are presented.

CASE REPORT

A 41-year-old male patient applied to the hospital 28 months ago with complaints of chronic abdominal pain, constipation, rectal bleeding, and weakness. In the colonoscopy performed, a mass surrounding the lumen was observed at approximately 30th cm allowing the passage of the endoscope. Biopsy was taken from the mass which was reported as adenocarcinoma. There was no distant metastasis, local adjacent organ invasion or lymph node involvement observed in the contrast-enhanced abdominal and thorax computed tomography (CT) examinations. Anterior resection and primary anastomosis were performed as surgical procedures. The postoperative pathology result was reported as a 5x2 cm well-differentiated adenocarcinoma. It was also found that although the tumor did not have lymphovascular invasion, but showed perineural invasion. The tumor had passed through the muscularis propria and reached the perirectal fatty tissue; no tumoral involvement was observed in resected lymph nodes (pT3N0M0).

The patient was referred for oncological treatment, receiving Kabestabin as a chemother apeutic agent. Colonoscopy was evaluated as normal one year after follow-up. No distant metastasis was detected in abdominal and thoracic CT examinations. The control CEA (carsinoembryonic antigen) level was found to be normal. About 28 months later, in the control abdominal CT examination, a mass with a size of 6.4x5.6 cm invading the rectus abdominis muscle was detected in the anterior abdominal wall **(Figure 1)**.



Figure 1: Contrast-enhanced axial CT image (A) in the preoperative period (October 2018). In multiplanar contrast-enhanced CT images (B, D, E) a solid lesion (arrows) with irregular border of soft tissue density that invades the left rectus abdominis muscle (asterisk) and where the planes in between are not visible. Postoperative period changes: axial CT (C) and PET-CT (F) (January 2021).

No other distant metastasis was detected in abdominal CT. No recurrence was detected in the colonoscopy and no finding in favor of distant metastasis elsewhere in the body was found in imaging modalities. There was no finding in favor of distant metastasis in thoracic CT. Percutaneous tru-cut biopsy from the lesion was assessed as adenocarcinoma metastasis and the patient without distant organ metastasis was evaluated as isolated rectus muscle metastasis. In the patient who underwent laparotomy for excision of the mass, there was no finding in favor of lymph nodes in the abdomen or tumor on the peritoneal surface during exploration. It was observed that the mass invaded the rectus muscle and bladder outside the peritoneum, the mass was excised with the lower part of the rectus muscle and part of the bladder wall. In the pathological examination of the removed mass, it was evaluated as adenocarcinoma metastasis. With these results, the patient was referred to oncological treatment. No recurrence was observed in the patient's follow-up in the 8th postoperative month. Informed consent was obtained from the patient.

DISCUSSION

Metachronous abdominal wall metastases due to colorectal cancer are reported very rarely in the literature as case reports. Although colorectal cancers usually cause liver, lung, and other distant organ metastases in lymphatic and hematogenous ways, metastases are rarely seen as a result of the surgical incision, drainage area, implantation of cancer cells in the anastomosis area, and peritoneum (4). In previous studies, it was stated that there may be metastasis in the abdominal wall through the superficial lymph ducts and inferior epigastric arteries (3, 5). In other studies, it was thought that colon adenocarcinomas may rarely have metastasis to the abdominal wall muscle as a result of deterioration of physiology of muscle damage (6, 7). In our case, although there was no recurrence in the lymph nodes, anastomotic line, or peritoneum during the follow-up after primary treatment, the presence of metastasis only in the anterior abdominal wall rectus muscle suggests the possibility of spread as a result of the impaired muscle physiology after the first surgery.

Ultrasonography can be easily applied for imaging or biopsy in anterior abdominal wall lesions. Although imaging findings are nonspecific in abdominal wall metastases, CT or magnetic resonance imaging (MRI) is more advantageous in determining the exact location, size, and relationship of the lesion with other anatomical structures before surgical planning. The most important distinguishing feature is the presence of disease history and rapid growth of the lesion (8). In our study, abdominal CT was used as the imaging method for the patient, revealing an invasive mass to the left rectus muscle in the anterior abdominal wall. Due to the previous history of having a tumor, firstly metastasis was considered. Colonoscopy and PET-CT were performed to investigate the presence of metastatic foci in other locations than the abdominal wall. In the patient, no other focus was detected except for the lesion at the anterior abdominal wall. The type of treatment to be applied is related to the extent of metastatic disease and the medical condition of the patient. In patients with limited disease, local control of the disease can be achieved with aggressive resection (6, 9). In the current case, prior to the surgical planning metastatic foci were investigated; since no other metastases were detected in other locations, surgical resection was planned and the lesion was resected with a clean surgical margin. In the literature, it is stated that wall defects caused by resection of abdominal wall metastases can be repaired by placing primary suture or mesh (4). In our case, the defect in the anterior abdominal wall after resection was primarily repaired.

Prognosis is related to the degree of malignancy of the primary lesion and its spread to other organs (9). For example, Lievre et al. (10) reported a mean survival of 12 months and postoperative 10-month survival in patients with colon cancer having thyroid metastasis, while Montero et al. (11) stated that the mortality rate was 50% due to cancer in less than one year in patients with thyroid metastasis. Our patient, who underwent metastasectomy, was in the 8th month postoperatively with normal abdominal CT studies.

Isolated metachronous metastasis in the anterior abdominal wall is very rare in colon adenocarcinomas. With the presence of a primary tumor history of the disease, imaging methods are helpful in diagnosis. In cases with isolated metastases, local control of the tumor can be achieved by resection with a clean surgical margin.

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