



Isolated Axillary Lymph Node Recurrence from Serous Ovarian Carcinoma: A Case Report

Seröz Over Karsinomunun İzole Aksiller Lenf Nodunda Nüksü: Olgu Sunumu

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ABSTRACT

Ovarian cancer is the most mortal gynecological malignancy among women worldwide. The appropriate treatment protocol is cytoreductive surgery and the main aim is to remove all primary carcinoma focus and all metastatic lesions. A 37 years old woman (gravida 5, para 3) presented with complaints of abdominal distension. During the gynecological examination, bilateral adnexal masses in the solid structure were observed. Staging surgery was performed and 8 cycles of adjuvant chemotherapy regimen were given. A pathological axillary lymph node was detected in the positron emission tomography-computed tomography (PET/CT) imaging at the follow-up 6 months after the end of the chemotherapy regimen. The biopsy result from the axillary lymph node was reported as serous carcinoma metastasis. Metastasis of ovarian carcinoma to the axillary lymph node is uncommon and has a poor prognosis. High-grade ovarian serous carcinoma with axillary lymph node metastasis was presented in this case report.

Keywords: Ovarian neoplasms, cystadenocarcinoma serous, neoplasm metastasis.

ÖZ

Over kanseri, dünya çapında kadınlar arasında en ölümcül seyreden jinekolojik malignitedir. Uygun tedavi protokolü sitoredüktif cerrahidir ve asıl amaç tüm primer karsinom odağını ve tüm metastatik lezyonları çıkarmaktır. 37 yaşında kadın hasta (gravida 5, para 3) karın şişliği nedeniyle başvurdu. Jinekolojik muayenede bilateral solid yapıdaki adneksiyal kitleler izlendi. Hastaya evreleme cerrahisi yapıldı ve 8 kür adjuvan kemoterapi rejimi verildi. Kemoterapi rejimi bitiminden sonraki 6. ay kontrolünde, pozitron emisyon tomografi-bilgisayarlı tomografi (pozitron emission tomography and computed tomography, PET/CT) görüntülemesinde patolojik görünümde aksiller lenf nodu saptandı. Aksiller lenf nodundan alınan biyopsi sonucu seröz karsinom metastazı olarak raporlandı. Over karsinomunun aksiller lenf nodu metastazı oldukça nadirdir ve kötü prognostik bir işaret olarak kabul edilir. Bu vaka raporunda aksiller lenf nodu metastazı olan yüksek dereceli over seröz karsinomu sunulmuştur.

Anahtar kelimeler: Over tümörleri; kistadenokarsinom seröz; tümör metastazı.

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Received / Geliş Tarihi : 26.11.2022

Accepted / Kabul Tarihi : 23.02.2023

Available Online /

Çevrimiçi Yayın Tarihi : 19.03.2023

INTRODUCTION

Ovarian cancer is the most mortal gynecological malignancy and the third most common gynecological malignancy after endometrial and cervical cancer (1). Cases are frequently detected in stage III-IV due to their quiet course and late onset of symptoms. The standard treatment is surgical staging and cytoreductive surgery with adjuvant chemotherapy. Distant metastasis is not expended after treatment is completed. Ovarian cancer metastasizes mainly through direct extension and cancer

cells spread to the abdomen. Transcoelomic spread is followed by lymphatic dissemination (2-4). Axillary lymph node metastasis from ovarian cancer is rare, it is reported to have a poor prognosis. There are few case reports of axillary metastasis of ovarian carcinoma (5,6).

In this case, we presented an ovarian carcinoma with metastasis to the axillary lymph node.

CASE REPORT

A 37 years old woman (gravida 5, para 3) presented with abdominal pain and distension. The patient did not smoke and did not have any diseases. Nobody in the family has breast cancer or ovarian cancer. In the gynecological examination performed, bilateral adnexal masses in a solid structure were observed. Diffuse acid fluid was seen during the ultrasonographic examination, which indicated solid masses of 82*73 mm in the left and 85*67 mm in the right adnexa. The patient underwent magnetic resonance imaging (MRI) as an advanced imaging method. MRI showed that the mass in the right adnexa was adjoining to the sigmoid colon and descending colon (Figure 1). Then the patient underwent a colonoscopy to assess the location of the tumor in the colon. As a result of the colonoscopy, no finding suggesting colonic invasion was found. The Ca125 level was 7418 U/ml.

Ovarian cancer was identified, necessitating staging surgery. In exploration, the mass originating from the right adnexa was observed to be attached to the posterior uterine wall it was approximately 10 cm in size. A heterogeneous mass of 8 cm in the size was observed in the left adnexa. There were extensive tumoral implants in the peritoneum and a 4 cm mass invading the rectum was observed. There was a 1-liter discharge of acidic fluid and send for cytological examination. Cytology result was reported as an acid fluid containing malignant epithelial cell groups. The patient had a total abdominal hysterectomy, bilateral salpingo-oophorectomy, omentectomy, appendectomy, and pelvic-paraortic lymph node dissection as part of the staging procedure. Low anterior resection was used to remove the colonic mass. Implants in the peritoneum could not be removed completely because they were too much.

As a result of pathology, high-grade serous carcinoma was observed in both adnexa. High-grade serous carcinoma infiltrates in the uterine serosa and bilateral parametrium, detected in the pelvic, paraortic lymph nodes, and colon. No tumor infiltration was observed in the appendix and omentum. No pathogenic mutation was detected in the genetic tests performed on the patient.

Postoperatively, 8 cycles of carboplatin and paclitaxel chemotherapy regimen were given. There was no pathological finding in the computed tomography (CT) imaging taken at the end of the chemotherapy regimen and the Ca125 value was 11.7 U/ml. 6 months later, in the positron emission tomography-CT (PET/CT) examination, a pathological lymph node in the left axillary region (Figure 2). Biopsy was taken from the axillary lymph node, and the pathology result was reported as high-grade serous carcinoma metastasis. Immunohistochemistry markers of the left axillary node biopsy specimen resulted in positive for P16, P53, and

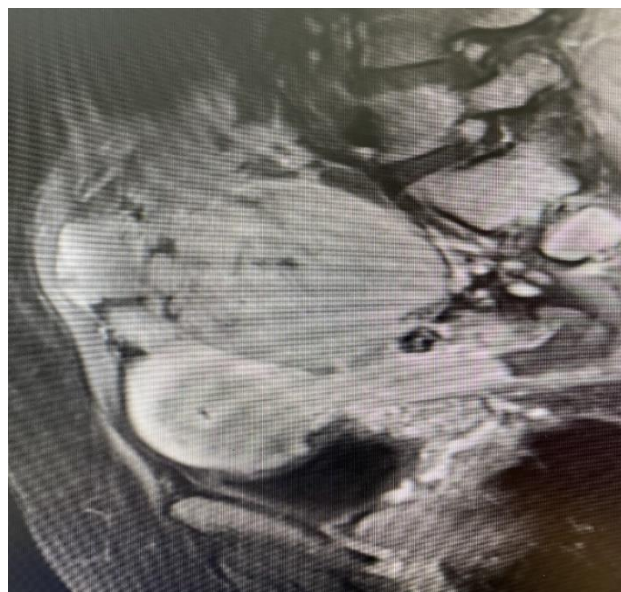


Figure 1. Magnetic resonance image of the uterus and right adnexa

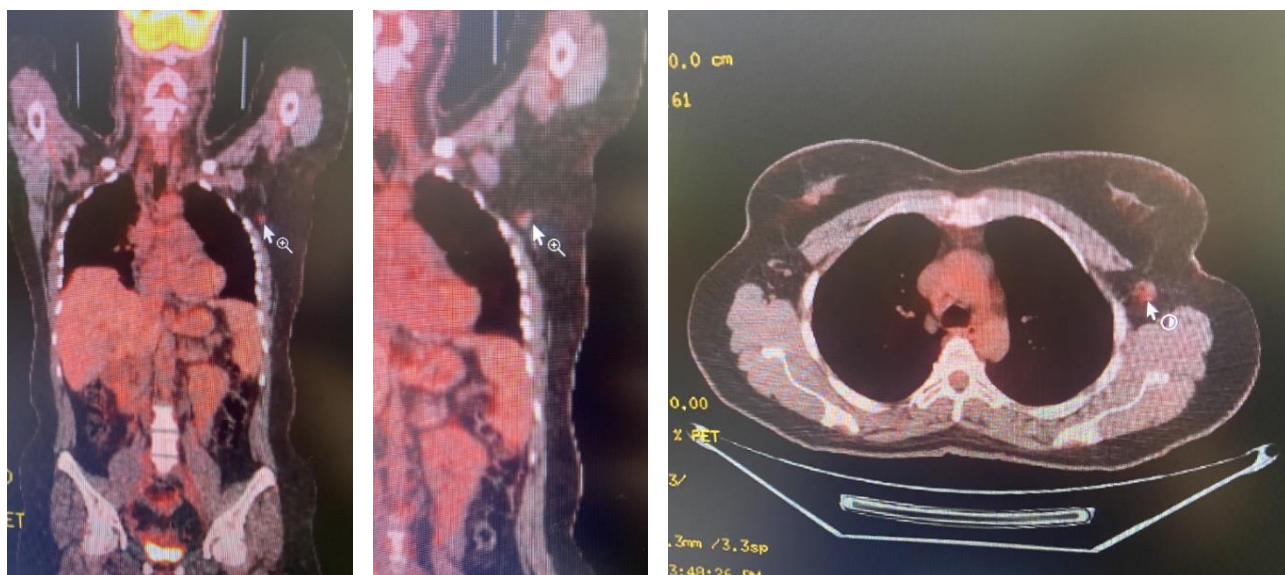


Figure 2. Positron emission tomography-computed tomography examination, a pathological lymph node in the left axillary region

PAX-8, and negative for vimentin and GATA3. This result supported that the tumor originated from the ovary. Serum Ca125 was slightly elevated (26.7 U/ml), the previous value was 6.1 U/ml. Chest and abdominopelvic CT imaging was taken and no lesion was observed. Carboplatin and paclitaxel chemotherapy regimen was started.

DISCUSSION

The peritoneal cavity is where ovarian cancer cells often proliferate, however, they can metastasize to the supraclavicular lymph nodes through the retroperitoneal and diaphragmatic lymphatic systems. Two theories have been put out in an attempt to explain how ovarian cancer spreads to the axillary lymph nodes. Firstly, the cancer cells could travel through the diaphragm via superior diaphragmatic lymph nodes to the internal jugular vein, subclavian vein, or subclavian lymph trunk, and finally to the axilla. The second course is via the deep lymphatic vessels inferior to the diaphragm and the superficial lymphatic vessels inferior to the level of the umbilicus, to the thoracic duct, and finally to the junction of the left subclavian and internal jugular vein (7).

Stage IV tumors indicate distant metastases in ovarian cancer, and these cases typically have poor prognoses. Lymph node metastasis occurs in approximately 14-70% of patients with ovarian cancer and is mainly seen in the pelvic and paraaortic lymph nodes. It has been reported that ovarian cancer metastasizes to axillary lymph nodes with a frequency of approximately 0.03-0.6% (5).

Immunohistochemistry markers can help to identify the axillary lymph node's main. PAX8 is expressed in approximately 90% of malignant ovarian carcinomas, therefore it is an important marker for epithelial ovarian cancers (8). PAX-8 positivity in the axillary lymph node biopsy taken from our patient and the history of advanced ovarian cancer confirms that the metastasis originates from the axillary lymph node.

Secondary cytoreductive surgery is one of the treatment modalities in recurrent ovarian cancer cases (9). However, data on the management of isolated cases of axillary lymph node metastases are limited and the benefit of surgical treatment is uncertain.

It is shown that patients with distant metastases were initially diagnosed with stage III and IV cancer, had high-grade carcinoma, and the median time to metastasis was 20 months (10). It is stated that the time between the diagnosis of ovarian cancer and the documentation of distant metastasis is the most important prognostic factor associated with survival, and the longer this period, the longer the survival time. Especially in ovarian cancer patients with single axillary metastases, survival is better in case of recurrence after a minimum of 26 months after the end of primary treatment (11).

CONCLUSION

Axillary lymph nodes are not a site where ovarian cancer often metastasizes. Cancers that metastasize to axillary lymph nodes more frequently. In particular, the diagnosis of breast cancer should be excluded first. Immunohistochemical markers are useful in excluding breast cancer or other primaries, in demonstrating that the tumor originates from the ovary.

Informed Consent: Written informed consent was obtained from the patient for publication and accompanying images.

Conflict of Interest: None declared by the authors.

Financial Disclosure: None declared by the authors.

Acknowledgments: None declared by the authors.

Author Contributions: Idea/Concept: PH, MAO; Design: PH; Data Collection/Processing: PH; Analysis/Interpretation: PH, MAO; Literature Review: PH; Drafting/Writing: PH, MAO; Critical Review: PH, MAO.

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