Virchow's node as a first manifestation of ovarian serous carcinoma: case report

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Summary

Ovarian carcinoma is a malignancy with a poor prognosis especially in patients with advanced disease. The majority of patients with ovarian serous carcinoma are diagnosed in advanced stages. Palpable extraabdominal lymphadenopathy at the time of presentation is distinctly uncommon. This case report addresses a patient with serous ovarian carcinoma presenting as left supraclavicular lymphadenopathy (Virchow's node) and no other symptoms. Not only thyroid or thoracic malignancies but also ovarian malignancies like serous ovarian carcinoma could present with a supraclavicular lymph node without any other symptoms.

Key words: Supraclavicular lymph node (Virchow's node); First presentation; Ovarian serous carcinoma.

Introduction

Ovarian carcinoma is a malignancy with a poor prognosis especially in patients with advanced disease. Unfortunately the majority of patients with serous carcinoma of the ovaries are diagnosed in advanced stages, presenting with gastrointestinal symptoms, increased abdominal girth, a sense of bloating, or a combination of these, all of which are related to extensive intraabdominal disease.

Less is known about patients with serous carcinoma involving the extraabdominal lymph nodes. Extraabdominal lymphadenopathy at the time of presentation of serous carcinoma has been documented in the literature, whereas serous carcinoma more frequently involves the pelvic and paraaortic lymph nodes. Palpable extraabdominal lymphadenopathy at the time of presentation is distinctly uncommon [1, 2].

We report the case of a patient with ovarian serous carcinoma presenting with a supraclavicular lymph node and discuss the differential diagnosis.

Case Report

A 64-year-old woman with a mass in her left supraclavicular region was referred by her general practitioner for a surgical opinion. A large mass (about 4 cm in diameter) was felt in her left supraclavicular region. There was no evidence of generalized lymphadenopathy. The patient had no history of thyroid disease or evidence of a thyroid node.

Fine-needle aspiration of the mass was performed in the clinic. The histology report was serous papillery adenocarcinoma, including psammoma bodies (Figure 1). To evaluate the thyroid, ultrasonography was performed. No evidence of thyroid malignancy was suggested. To find the primary site, abdominal investigation was performed. Abdominopelvic ultrasonography showed an 8 cm irregular mass in the left ovary with mixed echogenicity and ascites in the abdominal

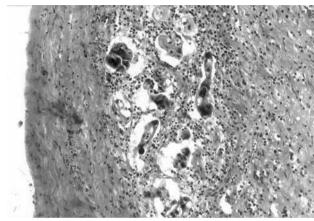


Figure 1.

cavity. Computed tomography (CT) revealed enlarged paraaortic lymph nodes.

The tumour marker CA125 was raised (650 u/ml) and the patient was referred for a gynecological oncology opinion. She was advised to have a laparotomy. Laparotomy through a midline incision was performed and the finding was of an enlarged left ovary about 7 cm in diameter. The omentum, liver and the abdominal cavity looked normal; 200 ml of ascites were aspirated. Total abdominal hysterectomy, bilateral salpingo-oophorectomy, bilateral pelvic-paraaortic lymph node dissection and omentectomy were performed. Histology showed serous adenocarcinoma in the left ovary with metastatic disease in the paraaortic node. The final diagnosis was FIGO Stage IV carcinoma of the ovary. Carboplatin and taxol were recommended as adjuvant therapy.

Discussion

Ovarian cancer accounts for 4% of all cancers in women and is the leading cause of death from gynecologic malignancies. Because early-stage ovarian cancer is generally asymptomatic, approximately 75% of women present with advanced disease at diagnosis [3]. Typically, serous carci-

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noma arising in the ovary, fallopian tubes and peritoneum is spread by intraperitoneal seeding, local invasion, or both and leads to widespread intraabdominal disease and peritoneal/pleural effusions causing abdominal and gastrointestinal symptoms such as increased abdominal girth, a sense of bloating and mass in the abdomen. Lymphadenopathy, especially in the supradiaphragmatic region, is an unusual presentation of serous carcinoma of the ovary, fallopian tubes and peritoneum.

The subperitoneal lymph vessels are connected with infradiaphragmatic nodes; peritoneal fluid is drained in part via the diaphragmatic lymphatic vessels. This lymphatic route explains supradiaphragmatic metastatic lymph nodes from ovarian cancer [4, 5].

Several autopsy studies have demonstrated that lymph node metastases are a frequent event in women who die of ovarian cancer and have shown that abdominopelvic lymph nodes, as well as supradiaphragmatic and inguinal lymph nodes, may be involved [2]. However, these studies did not state whether the women had lymph node metastases at presentation. Recent studies have demonstrated that more than 50% of women with ovarian or peritoneal carcinoma may have retroperitoneal lymph node involvement at the time of initial staging with the risk of nodal metastases increasing as the stage of disease advances [1, 6].

The supraclavicular lymph node (SCLN) (also known as the sentinel lymph node), in many instances is the first sign of an underlying malignancy in the thoracic cavity, abdominal cavity, or the pelvic region. SCLN presentations may also mimic thyroid cancer as well as mesothelioma. The left SCLN (also called Virchow's lymph node) has been known to be a common site of distant metastasis in the spread of gastric cancer.

This case report addresses a patient with serous carcinoma presenting as supraclavicular lymphadenopathy. She had no concomitant symptoms related to intraabdominal disease. It should be kept in mind that not only thyroid or thoracic malignancies but also ovarian malignancies like serous ovarian carcinoma could present with a supraclavicular lymph node without any other symptoms.

References

- [1] Chen C., Huang S., How S. *et al.*: "Systemic lymphadenopathy as the primary symptom of serous surface papillary carcinoma of the ovary". *Gynecol. Oncol.*, 1995, 58, 251.
- [2] Euscher E.D., Silva E.G., Deavers M.T., Elishaev E., Gershenson D.M., Malpica A.: "Serous carcinoma of the ovary, fallopian tube, or peritoneum presenting as lymphadenopathy". Am. J. Surg. Pathol., 2004, 28, 1217.
- [3] Colombo N., Van Gorp T., Parma G., Amant F., Gatta G., Sessa C., Vergote I.: "Ovarian cancer". Crit. Rev. Oncol. Hematol., 2006, 60, 159.
- [4] Ferretti G., Ranchoup Y., Bost C., Coulomb M.: "Case report: CT demonstration of supra-diaphragmatic calcified metastatic nodes from ovarian carcinoma". Clin. Radiol., 1997, 52, 956.
- [5] Moustafa M., Beynon W.B.: "An atypical presentation of ovarian cancer". J. Obstet. Gynaecol., 2002, 22, 455.
- [6] Burghardt E., Girardi F., Lanhousen M. et al.: "Patterns of pelvic and paraaortic lymph node involvement in ovarian cancer". Gynecol. Oncol., 1991, 40, 103.

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