



Supraclavicular Lymph Node as a Presentation of Fallopian Tube Cancer

Mohamed Satti^{1*}, Ahmed Abdelaziz¹, Pouya Abhari¹ and Guy Boike^{1,2}

¹Department of Obstetrics and Gynecology, Division of Gynecology Oncology, Hurley Medical Center/Michigan State University, USA

²Department of Obstetrics and Gynecology, Division of Gynecology Oncology, Covenant Healthcare/Central Michigan University, Saginaw, USA

*Corresponding author: Mohamed Satti, MD, Department of Obstetrics and Gynecology, Division of Gynecology Oncology, Hurley Medical Center/Michigan State University, 2158 Fox Hill Dr, Apt 10, Grand Blanc, Michigan 48439, USA, Tel: 408-207-3278, E-mail: msatti1@hurleymc.com

Abstract

Background: Supraclavicular lymph node metastasis is a rare presentation of primary fallopian tube cancer and there have only been three cases reported in the literature.

Case: A 44-year-old female presented with a large firm mass involving the left side of her neck; she denied any other symptoms. A CT scan was performed which was consistent with a 5.9 cm left-sided neck mass. A fine needle aspiration biopsy was consistent with poorly differentiated adenocarcinoma, and a serum CA125 was normal. Subsequently, a PET scan was performed and revealed increased uptake in the para-aortic and retroperitoneum lymph nodes; a soft tissue mass was seen in the left hemi-pelvis. Robotic laparoscopic left salpingo-oophorectomy and right peri-aortic lymph node removal was performed for diagnostic purposes. Diagnosis of stage IV adenocarcinoma of fallopian tube was made. The patient was not a good candidate for debulking surgery due to her retroperitoneal lymphadenopathy and large supraclavicular lymph node. The patient was started on paclitaxel and carboplatin with good response.

Conclusion: Fallopian tube adenocarcinoma can initially present with an enlarged supraclavicular lymph node.

with a large firm mass involving the left neck extending from just below the ear down to the left supraclavicular region measuring 5 to 6 cm in all dimensions. Upon presentation she denied any other symptoms. A computed tomography (CT) scan with contrast of the neck demonstrated a large mass in the left neck measuring 5.9 cm. A fine needle aspiration biopsy of the mass was performed, cytology was positive for malignancy, and stains were consistent with poorly differentiated carcinoma. Tumor cells were positive for cytokeratin but negative for vimentin, CD3, CD20 and S100 consistent with a probable adenocarcinoma. CT scan of the chest, abdomen and pelvis performed with contrast which showed a mass with central necrosis in the retroperitoneum on the left side measuring 2.9 cm. The uterus appeared slightly enlarged with multiple enhancing nodules measuring between 2 cm to 4 cm with a complex cystic lesion in the left adnexal region measuring 3.8 cm; serum CA125 was normal. A positron emission tomography (PET) scan was performed revealing a left supraclavicular mass measuring 5.9 cm, with increased uptake at the para-aortic lymph node, as well as multiple hyper-metabolic nodes in the retroperitoneum at the level of aortic bifurcation. A soft tissue mass was seen in the left hemipelvis measuring 3.5 cm in size. Robotic laparoscopic left salpingo-oophorectomy and right peri-aortic lymph node removal was performed for diagnostic purposes. Pathology identified a high grade serous adenocarcinoma involving the left fallopian tube as well as the right peri-aortic lymph node along with the left ovary showing atrophic changes. Diagnosis of stage IV fallopian tube was made, although the patient was not a good candidate for debulking surgery due to her retroperitoneal lymphadenopathy and large supraclavicular lymph node. She was eventually started on paclitaxol and carboplatin for total of 8 cycles. After 4 cycles she has had 50% reduction in her left supraclavicular lymph node.

Background

Fallopian tube cancer is very rare and accounts for only 1 to 2 percent of all gynecological cancers. The incidence of fallopian tube carcinoma is 3.72 per million annually in the United States [1]. Demographic distribution is similar to ovarian cancer, and the highest incidence was found in white, non-Hispanic women and women aged 60-79 years [2]. The signs and symptoms of tubal cancer include: irregular or heavy postmenopausal vaginal bleeding, occasional abdominal or pelvic pain, feeling of pressure, vaginal discharge (which may be clear, white or tinged with blood), and or a pelvic mass or lump [3]. Supraclavicular lymph node metastasis is a rare presentation of primary fallopian tube cancer and there are only three cases reported in the literature [4-6].

Case

A 44-year-old African American para 0 female, presented

Discussion

The differential diagnosis of supraclavicular lymphadenopathy is broad it includes: tuberculosis, sarcoidosis, toxoplasmosis and malignancy of lymph node, blood, lung, upper GIT, breast, ovary, testes, and other sites of body [7,8]. Supraclavicular lymphadenopathy is often malignant (58-83%) and it occurs mainly on the left side [9,10]. Most of the metastases originate from sites other than the

head and neck including lung, breast and cervix [7-9]. In the English literature, few cases reported that supraclavicular lymph node enlargement can be an unusual presentation of primary fallopian tube cancer. There are other case reports about unusual presentation of fallopian tube cancer mainly presenting as axillary, inguinal or retroperitoneal lymphadenopathy [11].

Teaching Points

1. We presented a patient with fallopian tube adenocarcinoma who presented with supraclavicular lymph node enlargement which is a very rare and unusual presenting symptom.

2. Fallopian tube cancer should be considered in females presenting with metastatic supraclavicular lymphadenopathy with an unknown primary cancer site.

Conflict of Interest/Disclosure

None of the authors have any conflicts of interest.

Acknowledgements

This case report was presented in a poster during the Society of Gynecologic Oncology early career educational summit, Chicago, IL, USA in December 2014, and American college of obstetricians and gynecologists, Michigan section, Lansing, MI, USA in May 2015.

Precis

The objective of this article is to highlight a case of unusual presentation of fallopian tube cancer.

References

1. Goodman MT, Shvetsov YB (2009) Incidence of ovarian, peritoneal, and fallopian tube carcinomas in the United States, 1995-2004. *Cancer Epidemiol Biomarkers Prev* 18: 132-139.
2. Stewart SL, Wike JM, Foster SL, Michaud F (2007) The incidence of primary fallopian tube cancer in the United States. *Gynecol Oncol* 107: 392-397.
3. <http://www.cancer.net/cancer-types/fallopian-tube-cancer/symptoms-and-signs>.
4. Sakurai N, Tateoka K, Fukaya K, Terada T, Kubushiro K (2010) Supraclavicular lymph node metastasis as the initial presentation of primary fallopian tube carcinoma. *Int J Clin Oncol* 15: 301-304.
5. Eken MK, Kaygusuz EI, Temizkan O, İlhan G, Çöğendez, et al. (2016) Occult serous carcinoma of fallopian tube presenting as supraclavicular lymphadenopathy. *Taiwan J Obstet Gynecol* 55: 450-452.
6. Piura B, Glezerman M, Yanai-inbar I (1989) Supraclavicular lymph node metastasis as the first presentation of primary fallopian tube adenocarcinoma. *Journal of Obstetrics and Gynaecology* 9: 258-259.
7. Ellison E, LaPuerta P, Martin SE (1999) Supraclavicular masses: results of a series of 309 cases biopsied by fine needle aspiration. *Head Neck* 21: 239-246.
8. Saifullah MK, Sutradhar SR, Khan NA, Haque MF, Hasan I, et al. (2013) Diagnostic evaluation of supraclavicular lymphadenopathy. *Mymensingh Med J* 22: 8-14.
9. Gupta N, Rajwanshi A, Srinivasan R, Nijhawan R (2006) Pathology of supraclavicular lymphadenopathy in Chandigarh, North India: an audit of 200 cases diagnosed by needle aspiration. *Cytopathology* 17: 94-96.
10. Gupta RK, Naran S, Lallu S, Fauck R (2003) The diagnostic value of fine needle aspiration cytology (FNAC) in the assessment of palpable supraclavicular lymph nodes: a study of 218 cases. *Cytopathology* 14: 201-207.
11. Euscher ED, Silva EG, Deavers MT, Elishaev E, Gershenson DM, et al. (2004) Serous carcinoma of the ovary, fallopian tube, or peritoneum presenting as lymphadenopathy. *Am J Surg Pathol* 28: 1217-1223.