

Supraclavicular metastases from ovarian cancer

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ABSTRACT

Ovarian cancer is recognized for the high capacity of spread which leads to the apparition of distant metastases via multiple pathways such as peritoneal, hematogenous or lymphatic route. If cases presenting peritoneal dissemination usually present extended but limited to the abdominal cavity lesions, patients with hematogenous or lymphatic spread will lead to the apparition of both intra-abdominal and extra-abdominal lesions. Even though, the presence of extra-abdominal lymphatic metastases is rather a rare event; however, contamination of extra-abdominal lymph nodes and is considered as distant metastazation and considered as stage IV of disease. The aim of the current paper is to review the cases presented so far with histopathological documented supraclavicular metastases originating from ovarian cancer.

Keywords: ovarian cancer, metastases

INTRODUCTION

The lethal character of ovarian cancer is mainly related to the fact that it remains asymptomatic for a long period of time and patients are usually diagnosed in advanced stages of the disease, when disseminated peri-

toneal, hematogenous or lymphatic lesions are already present [1-3]. While in cases in which peritoneal dissemination play a central role, extended intra-abdominal lesions are to be expected, patients with hematogenous dissemination are expected to present both intraabdominal and extra-abdominal lesions, conduct-

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TABLE 1. Cases reported so far with ovarian cancer supraclavicular lymph node metastases

Author, year	Age	Side of the adenopathy	Side of the ovarian lesion	Timing of metastatic disease diagnostic	Therapeutic strategy	Histopathological finding	Follow up
Cebesoy, 2008 [11]	–	Left	–	–	–	Serous ovarian cancer	–
Rahman, 2012 [12]	49	Left	–	–	–	Serous ovarian cancer	–
Fanti, 2006 [13]	51	Left	Left	Synchronous	Total hysterectomy with bilateral adnexectomy, followed by chemotherapy – carboplatin, taxol and topotecan	Poorly differentiated ovarian cancer	–
	65	Left	–	Synchronous	Debulking surgery, refused adjuvant chemotherapy	Poorly differentiated serous ovarian cancer	–
Hong, 2018 [14]	43	Left	Bilateral	Synchronous	NACT followed by IDS	Poorly differentiated serous ovarian cancer	No recurrent disease at 3 year follow up
Piciu, 2020 [15]	62	Left	Left	Metachronous	Palliative chemotherapy	–	–

Legend: NACT – neoadjuvant chemotherapy; IDS – interval debulking surgery

ing in this way to the inclusion of the patient in stage IV of disease. Therefore, in such cases the overall prognosis becomes significantly poorer when compared to cases presenting disseminated lesions of peritoneal carcinomatosis; in this respect, a more aggressive systemic therapy is to be taken in consideration [4,5]. When it comes to the lymphatic pattern of spread, the most commonly involved lymph nodes are found at the level of the pelvic and para-aortic areas; in rare cases distant, mediastinal, inguinal, axillar or supraclavicular metastases are encountered, conducting therefore to the inclusion of the patient in FIGO stage IV of disease [6-8]. The aim of the current paper is to review the most relevant papers describing the presence of supraclavicular metastases from ovarian cancer.

THE INFLUENCE OF SUPRACLAVICULAR METASTASES ON THE LONG TERM OUTCOMES OF OVARIAN CANCER PATIENTS

Although the presence of distant metastases is considered per se as a poor prognostic factor in terms of survival, it seems that the location, the pattern of spread and the time of diagnosis also play a crucial role. Therefore, in the study conducted by Cormio et al the authors included 162 cases diagnosed with advanced stage ovarian cancer, 50 of them presenting distant metastases – 13 cases with synchronous disease and 37 cases with metachronous metastases and demonstrated that the overall survival was as longer as the time of diagnostic of systemic disease was longer [9].

When it comes to the impact of the size of development of distant metastases, Zang et al came to demon-

strate that the presence of malignant pleural effusion or supraclavicular adenopathies was associated with an improved outcome when compared to cases with other locations of distant lesions [10].

PAPERS PUBLISHED SO FAR ON THE ISSUE OF OVARIAN CANCER SUPRACLAVICULAR LYMPH NODE METASTASES

Due to the fact that cases diagnosed with ovarian cancer supraclavicular metastases are very rare, most information regarding this issue is presented as case reports or case series. Therefore, the experience in such situations is rather limited and presents a high degree of variety; in this respect, it is easily to understand the fact that a standard approach is still missing. The most relevant papers published on this issue are synthetized in the table below.

CONCLUSIONS

Although it represents a very scarce situation, the presence of ovarian cancer supraclavicular metastases should be investigated in cases diagnosed in advanced stages of the disease. Although it represents the sign of a distant metastasis and is considered as an inclusion criteria for stage IV of disease, certain studies came to demonstrate that the overall prognostic is not always impaired, a better outcome being expected in cases with metachronous lesions.

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