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Synchronous Endometrial and Ovarian Cancer: Case Report

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Abstract

Asynchronous primary tumor of the endometrium and ovary is a rare and uncommon condition reported in 5% to 10% of endometrial or ovarian cancers. Endometrioid adenocarcinoma is the most common histology found in the cases. We report the case of a nulligesta with a synchronous endometrioid ovarian cancer and an endometroid adenocarcinoma of the endometrium. To know the difference between a synchronous cancer from a metastatic cancer is important to offer an optimal treatment and therefore a better prognosis to the patient. We present a case of a patient with this condition and a literature review.

Keywords: ovarian cancer, endometrium cancer, synchronous cancer, endometrioid cancer

1. Introduction

Synchronous primary cancers of the endometrium and ovary occur in 5% of all women with endometrial cancer and 10% of all women with ovarian cancer. Diagnosis is made by histopathologic evaluation by pathologic criteria proposed by Ulbright and Roth on 1985 and later in 1998 by Scully et al. The most common histology found in 70% of the cases is the endometroid adenocarcinoma. Immunohistochemistry is used to differentiate between an ovarian metastasis of endometrial cancer and primary ovarian cancer; PAX-8 is another marker used to differentiate because primary ovarian cancer expresses it but not endometrial cancer metastases. However, differential diagnosis of an ovarian metastasis and a primary ovarian cancer is difficult and therefore therapeutic and prognostic complications can occur.

We present the case of a 26-year-old woman with a verified endometrioid ovarian cancer and synchronous endometrioid adenocarcinoma of the endometrium.

Case Description

A nulligesta 26-year-old woman with no medical conditions was admitted to our service for abdominal pain of 10 hours of colic-type evolution in the right iliac fossa that radiates to the hypogastrium accompanied by bright red transvaginal bleeding. At physical examination only

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mild pain presented during hypogastrium palpation. A pelvic ultrasound was performed and reported an oval image, predominantly cystic with more than three papillary projections and a thick septum with defined edges measuring 11x7x6-cm; it presented flow in its solid area when Doppler color was performed, suggestive of complex cyst (Figure 1). Serum concentration of Ca-125 was 25.6. The patient underwent laparotomy and after an exploration of the pelvic cavity, right salpingooforectomy and peritoneal lavage was performed, intraoperative biopsy of the tumor reported ovarian serous borderline tumor.

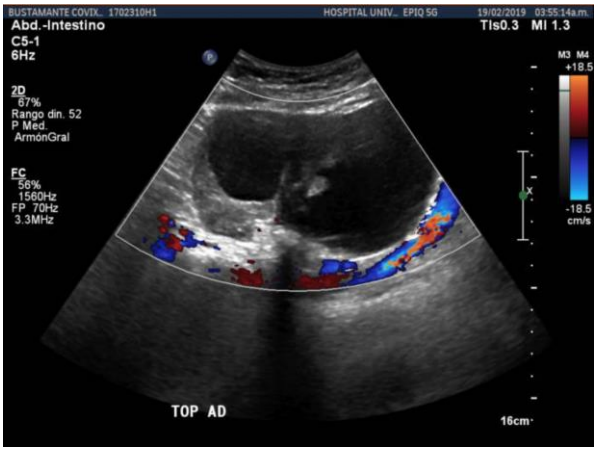

Figure 1.

As the definitive histopathology study reported a moderately differentiated endometrioid ovarian carcinoma and the presence of cancer cells in peritoneal lavage cytology the patient was reoperated and a hysterectomy with left salpingooforectomy and pelvic lymphadenectomy was performed. Final histopathology study confirmed a moderately differentiated endometrioid (synchronous) adenocarcinoma of the endometrium with neoplasm-free margins. The patient recovered without complications and was discharged two days later. More than one year after surgery no signs of recurrence are reported.

Discussion

According to the literature, 10% of women with ovarian cancer and 5% of those with endometrial cancer are diagnosed with synchronous endometrial and ovarian carcinoma (SEOC). It is most found in middle-aged women, during their 40s, and most cases are in nulligestas. The clinical presentation is abnormal uterine/vaginal bleeding, palpable pelvic mass and abdominal/pelvic pain. In our report, the patient was a young and nulligesta woman who presented to our department for abdominal pain and bleeding. Some studies have shown increased of Ca-125 serum levels in patients with SEOC, in our report the serum concentration of Ca-125 was normal.

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The etiology of the synchronous cancers is unknown; the majority of cases of SEOC are sporadic cancers, however several studies analyzed the relation between Lynch syndrome and a high risk for developing SEOC. According to some authors, endometriosis of ovaries coexisted with endometroid ovarian cancer. In our report, the patient had no medical conditions or history of hereditary cancers.

Extended surgery is mandatory in operable stages of both type of cancers and is the mainstay treatment in synchronous cancers; adjuvant treatment in patients with SEOC have been not yet established and depends on the stage and grade of the cancer. Our patient underwent extended surgery and did not received adjuvant treatment.

The predominant histology found in up to 70% of cases is the endometrioid type, which is related with a better prognosis and overall survival in contrast with a poor survival rate in metastatic disease or women with single ovarian cancer. The prognosis of women with SEOC seems to be better due to genetically based restrictions of tumor dissemination according to Anglesio et al. who explained a possible monoclonal origin after founding a clonal relationship between 17 of 18 patients. It usually presented in early stage and low grade with favorable prognosis. Our patient was diagnosed with a low-grade endometrioid carcinomas of the endometrium and ovary and is still alive and disease-free more than one year after surgery.

A precise diagnosis is important due the optimal clinical treatment and the improvement of the prognosis.

Conflict Of Interest

The authors declare no conflict of interest.

Consent

Written informed consent was obtained from the patient for the publication of this case report.

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