P42: A TALE OF TWO CANCERS: SYNCHRONOUS ENDOMETRIAL AND OVARIAN CANCER- A CASE REPORT

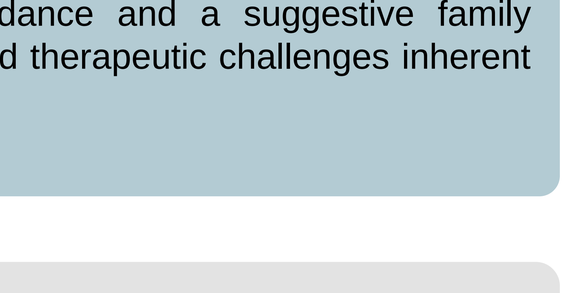
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Introduction

Synchronous endometrial and ovarian carcinoma (SEOC) is the most common combination of primary double cancer in the female reproductive system [1]. It is reported in 3–10% of ovarian cancers and 3–5% of endometrial cancers [1,2].

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The key diagnostic challenge is distinguishing two independent primary tumors from metastatic disease, as this distinction directly determines staging, treatment strategy, and prognosis [3]. The Scully criteria — based on histologic similarity, tumor size, presence of precursor lesions, and invasion pattern — remain the reference standard for this differentiation [3].



Lynch syndrome is identified in an estimated 3–14% of SEOC cases [4], making genetic evaluation an integral component of workup. Management is complex, and precise diagnosis is essential to guide individualized treatment decisions [6]. We report a case of SEOC presenting with histological discordance and a suggestive family history, illustrating the diagnostic and therapeutic challenges inherent to this entity

Patient & Methods

A 49-year-old nulliparous woman presented with six-month pelvic pain. Ultrasound showed endometrial thickening (15mm) with hyperechogenic mass (23×28mm) and bilateral ovarian masses: left (43×39mm) with heterogeneous solid-cystic components and 13mm papillary projection; right (44×40mm) with anechoic content and thin walls. Application of the International Ovarian Tumor Analysis (IOTA) simple rules identified malignant features in the left ovary (solid components, papillary projections, irregular morphology), while the right appeared unilocular.
Ascites and elevated CA-125 (357 UI) suggested malignancy. CT excluded distant metastases.



Aspect de l'endomètre à l'Hysteroscopie diagnostique



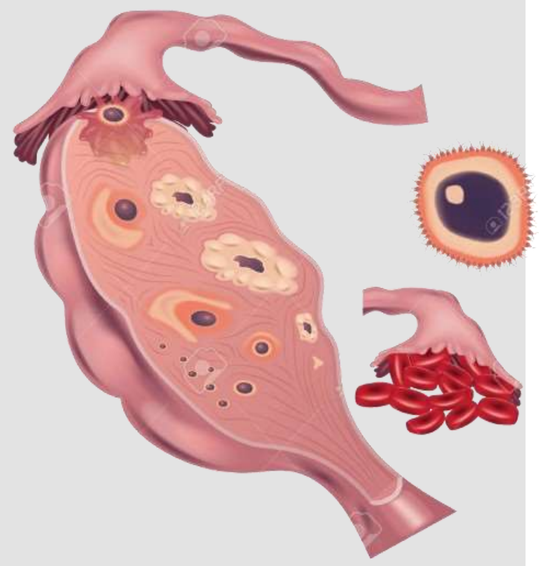
Aspect de la carcinose péritonéale à laparoscopie

Hysteroscopy revealed pale endometrial mucosa with anarchic vascularization and anterior uterine mass. Laparoscopy confirmed ascites, enlarged ovaries with fleshy outgrowths, and peritoneal carcinomatosis.
Endometrial histopathology confirmed well-differentiated endometrioid adenocarcinoma
(FIGO IA) without myometrial invasion, with bilateral poorly differentiated ovarian carcinoma (FIGO 3B). Endometrial immunohistochemistry was positive for hormone receptors, vimentin, cytokeratin, negative for WT1, with wild-type p53, confirming endometrioid
histology.

Discussion

The central diagnostic challenge in SEOC is differentiating two independent primary tumors from metastatic disease. The Scully criteria — based on histologic type, tumor size, degree of differentiation, presence of precursor lesions, and invasion pattern — have long served as the reference standard [3,6]. However, their application becomes particularly difficult when both sites share the same histological type, as misclassification carries significant consequences for staging and treatment [3].

In our case, the discordance between a well-differentiated endometrioid endometrial carcinoma (FIGO IA) and a poorly differentiated bilateral ovarian carcinoma (FIGO IIIB), while supporting independent primary origin, created an unusual diagnostic profile rarely described in the literature [2,6]. The coexistence of ascites and advanced ovarian staging with an early-stage endometrial tumor further complicated clinical interpretation.



Immunohistochemistry was decisive: positive hormone receptors, vimentin, and cytokeratin with negative WT1 and wild-type p53 confirmed the endometrioid nature of the endometrial tumor and excluded high-grade serous or metastatic disease [3]. WT1 negativity in particular argued against ovarian serous origin.
The family history of early-onset colorectal cancer raised suspicion for Lynch syndrome, which underlies 3–14% of SEOC cases [4]. Mismatch repair immunohistochemistry and microsatellite instability testing were therefore indicated, with implications for both diagnosis and familial genetic counseling [4,6].
This case underscores that in SEOC, histopathology alone may be insufficient, and that a multimodal approach combining morphology, immunohistochemistry, and genetic evaluation is essential [6,8].

Conclusion

SEOC represents a rare and diagnostically challenging entity requiring a multimodal approach. Our case illustrates that histological discordance between tumor sites, while supporting independent primary origin, complicates staging and management. Immunohistochemistry remains an indispensable tool in confirming tumor lineage and excluding metastatic disease. The suggestive family history in our patient highlights the importance of systematic Lynch syndrome screening in SEOC, with implications extending beyond the individual patient to familial genetic counseling. Comprehensive surgical staging and personalized adjuvant therapy, guided by both pathological and molecular findings, are essential to optimize outcomes in this uncommon malignancy [6,7,8].

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