ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 9, Issue, 11, pp.60617-60619, November, 2017

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

REVIEW ARTICLE

A CASE OF SYNCHRONOUS PRIMARY UTERINE ENDOMETRIAL CARCINOMA AND BILATERAL OVARIAN CLEAR CELL CARCINOMA

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ARTICLE INFO

Article History:
Received 17th August, 2017
Received in revised form
19th September, 2017
Accepted 21st October, 2017
Published online 30th November, 2017

Key words:
Endometrial carcinoma,
Endometrium,
Ovary,
Clear cell carcinoma,
Synchronous.

ABSTRACT

Introduction: The endometrial carcinoma can present as abnormal excessive uterine bleeding. However its occurrence with clear cell carcinoma of ovary is rare. Equally rare is the occurrence of bilateral clear cell carcinoma and the coexistence of ovarian endometrioid carcinoma.

Materials and Methods: A 40 year multiparous woman with abnormal excessive uterine bleeding and suspected to have leiomyoma underwent hysterectomy. On operation table, she was found to have a malignant looking left ovarian mass and so hysterectomy with bilateral salpingo-oophorectomy was done. Grossly, the uterus was having irregular endometrial lining and a superficial soft granular creamish mass filling the entire endometrial cavity. The left ovary had predominantly soft solid creamish area. Right ovary had predominantly cystic areas and one solid firm nodule. Sections were given and processed further as per our laboratory protocol and stained with H & E.

Results: On microscopic examination, uterus showed morphology of well differentiated endometrial carcinoma limited to endometrium. Left ovary showed morphology of clear cell carcinoma with small area of endometrioid carcinoma. Right ovary showed predominantly normal morphology, nodule like area showed morphology of clear cell carcinoma. Both uterine and ovarian neoplasm were primary.

Conclusion: This case is presented here owing to its rarity. Differentiation between the primary and secondary neoplasm in the synchronous neoplasms is important because it would influence on cancer staging, management, and prognosis.

Citation: Mayuri Gohil, 2017. "A case of synchronous primary uterine endometrial carcinoma and bilateral ovarian clear cell carcinoma", *International Journal of Current Research*, 9, (11), 60617-60619.

INTRODUCTION

Endometrial carcinoma can present as abnormal excessive uterine bleeding. Its occurrence with clear cell carcinoma of ovary is rare. Equally rare are the occurrence of bilateral clear cell carcinoma and the coexistence of ovarian endometrioid carcinoma[1]. We present here a case of synchronous primary uterine endometrial carcinoma and bilateral ovarian clear cell carcinoma with a focus of endometrioid carcinoma in a young patient having abnormal uterine bleeding.

Case history

A 40 year multiparous woman with abnormal excessive uterine bleeding and diagnosed to have leiomyoma at a private sonographic clinic underwent hysterectomy. On operation table, she was found to have a malignant looking left ovarian mass and so hysterectomy with bilateral salpingo-oophorectomy was done. Grossly, the uterus was 7x5x4 cm sized having irregular endometrial lining. A superficial soft granular creamish mass extended from fundus to isthmus filling the entire endometrial cavity (Figure 1).

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The left ovary measured 5x3x2.5 cm and had a external creamish bosselated surface without any growth. Cut surface showed predominantly soft solid creamish with few cystic brownish areas. Right ovary measured 3.5x2.5x1 cm and had predominantly cystic areas and a 1x1x1 cm solid nodule. Suspicious omental tissue measuring 2x2x1.5 cm sized was also received.

Microscopic Examination

Uterus showed morphology of well differentiated endometrial carcinoma limited to endometrium (Figure 2). Cervix had normal histology. Left ovary showed morphology of clear cell carcinoma with predominant solid areas, hobnailing, hyalinization, marked necrosis and hemorrhage (Figure 3). A small area of endometrioid carcinoma was also seen (Figure 4). The nodule in right ovary showed morphology of clear cell carcinoma in an otherwise normal ovary. Both fallopian tubes and omentum were free from invasion. Endometriosis was not seen. A diagnosis of primary synchronous endometrial carcinoma of uterus with bilateral clear cell carcinoma of ovary, and a focus of endometrioid carcinoma in left ovary was made. The uterine tumor was FIGO IB and TNM T1aNxMx. The ovarian tumor was FIGO IB and TNM T1bNxMx.

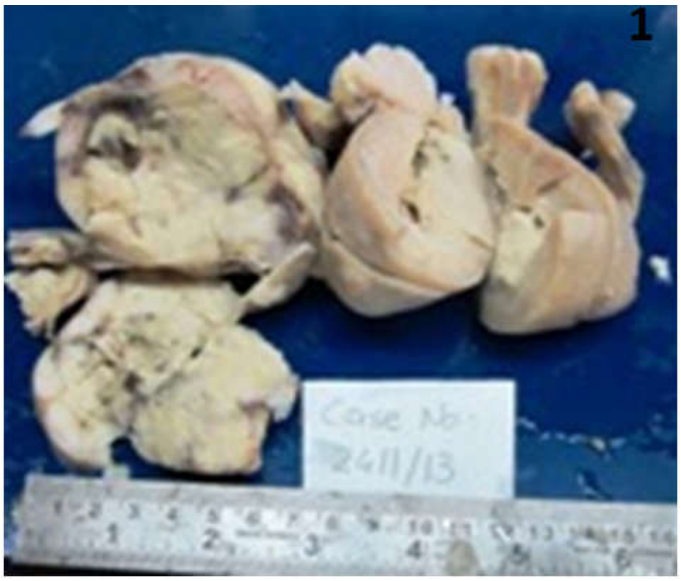


Fig. 1.

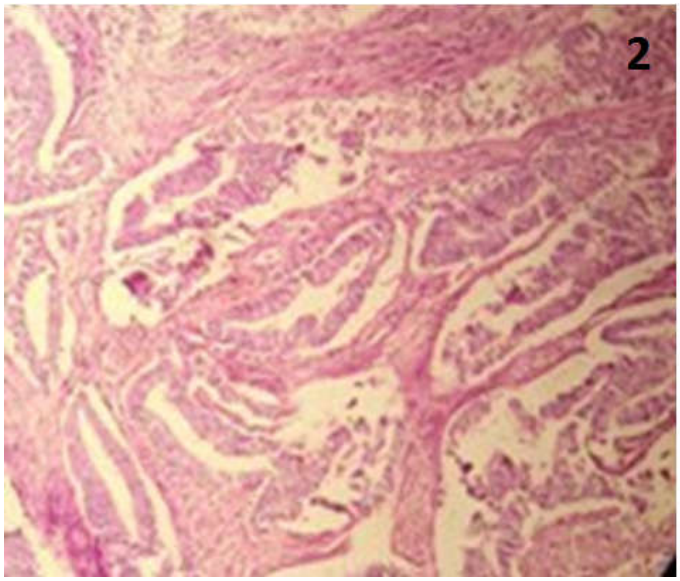
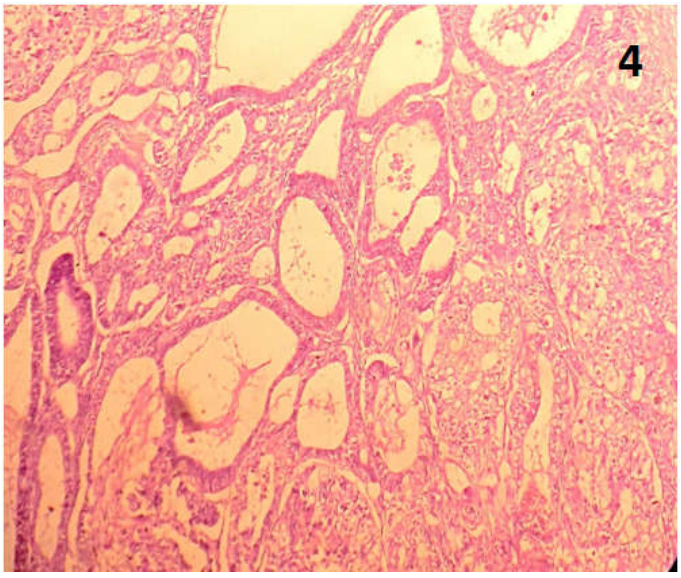


Fig. 2.



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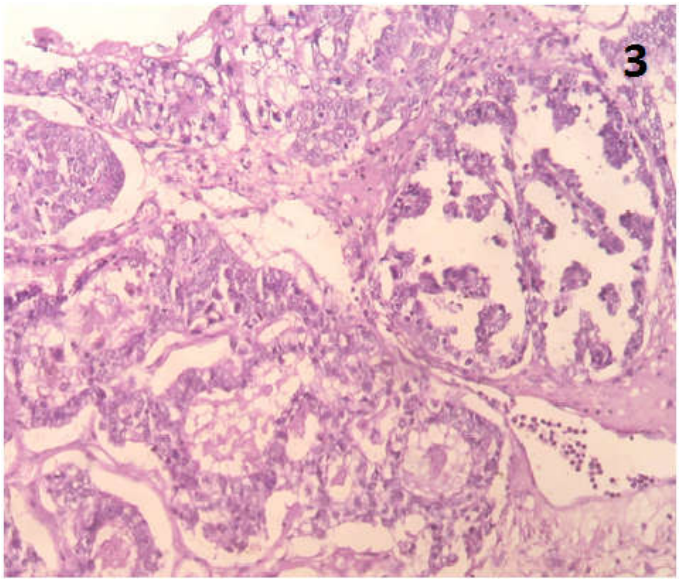

Fig. 2.

DISCUSSION

Concurrent tumors are a well-known entity, at times posing diagnostic and therapeutic difficulties. They can be primary endometrial cancer with ovarian metastasis, primary ovarian cancer with endometrial metastasis, or synchronous primary endometrial and ovarian cancers (Rosai, 1581). Distinguishing between them involves clinicopathologic interpretation based on multiple criteria including histologic type and grade. In general, if tumors at different sites have different histologic features, they are generally regarded as independently derived primary tumors, which generally have a better prognosis than the primary tumor with metastasis (Yuantao Liu *et al*., 2013). A synchronous malignant tumor is defined as the occurrence of two tumor types within a 6 months period in the same patient. The occurrence of primary synchronous malignancies of the genital tract is rare, the incidence of which varies between 0.7% and 1.5% amongst which independent primary tumors of the endometrium and ovary are the most commonly encountered synchronous tumors of the female genital tract (Khandeparkar *et al*., 2014).

Most common synchronous uterine and ovarian tumors are endometrial carcinoma of uterus and endometrioid carcinoma of ovary, granulosa cell tumor of ovary or thecoma of ovary (Rosai, 1581). Pathologic criteria to distinguish metastatic lesions from synchronous primary cancers proposed by Ulbright and Roth (1985) include either a multinodular ovarian pattern (major criterion) or two or more of the following minor criteria: small (less than 5 cm) ovary (ies), bilateral ovarian involvement, deep myometrial invasion, vascular invasion, and tubal lumen involvement. Molecular analysis has been developed to aid in differentiating synchronous primary tumors from metastatic disease, such as DNA flow cytometry, loss of heterozygosity on chromosome, X-chromosome inactivation, PTEN, BRCA, ARID1A, beta-catenin and microsatellite instability. Classification of tumors as dual primary carcinomas is difficult when the histology is similar, in our case this designation was relatively straight forward because the histology of uterine and ovarian carcinoma were dissimilar. The differentiation between primary or metastatic tumor is important because it would influence on cancer staging, management, and prognosis. Prognosis of synchronous primary cancers of the endometrium and ovary is favorable, especially

for early stage and low grade (Chiang *et al*., 2008). The etiology of these carcinomas is uncertain. Several investigators have proposed that the extended Mullerian system, comprising the ovarian epithelium, fallopian tube, uterine corpus and cervix may respond as a single morphologic unit to produce primary carcinomas in multiple sites. Endometriosis and excessive estrogen stimulus have been considered a predisposing factor by some (Pearl *et al*., 1993). In general, synchronous primary endometrial and ovarian cancer patients are younger than those who develop endometrial or ovarian cancer alone and their survival is excellent following surgical therapy with or without adjuvant therapy (Chiang *et al*., 2008; Pearl *et al*., 1993). In the present case, both ovaries have clear cell carcinoma with small foci of endometrioid carcinoma and uterus is having endometrial carcinoma. Ovaries and uterus have distinct histology so both are considered as primary. Moreover, endometrioid foci in ovary is very small, unilateral, and endometrial carcinoma of uterus is limited to endometrium, not invading myometrium. Lymphatic, vascular invasion and tubal involvement were not seen. So both neoplasms were considered as primary.

Conclusion

This case is presented here owing to its rarity. Differentiation between the primary and secondary neoplasm in the synchronous neoplasms is important because it would influence on cancer staging, management, and prognosis.

REFERENCES

Chiang YC, Chen CA, Huang CY, Hsieh CY, Cheng WF. 2008. Synchronous primary cancers of the endometrium and ovary. *Int J Gynecol Cancer*, 18:159–164.

Khandeparkar SGS, Deshmukh SD, Lekawale HS, Bhoge A, Parveen AT, Ahmed PM. 2014. A rare case of synchronous right ovarian clear cell carcinoma and incidental left ovarian endometrioid carcinoma with immunohistochemical study. *Journal of Mid-life Health*, 5(2): 91-94.

Pearl ML, Johnstona CM, Frankb TS and Roberts JA. 1993. Synchronous dual primary ovarian and endometrial carcinomas. *Int J Gynecol Obstet*., 43: 305-312

Rosai J. 1581. A textbook of surgical pathology. 10th Ed. Elsevier, Volume 2. P 1570-1573.

Ulbright TM, Roth LM. 1985. Metastatic and independent cancers of the endometrium and ovary: a clinicopathologic study of 34 cases. *Hum Pathol*., 16:28–34.

Yuantao Liu, Jun Li, Hongyan Jin, Ying Lu and Xin Lu, 2013. Clinicopathological characteristics of patients with synchronous primary endometrial and ovarian cancers: A review of 43 cases. *Oncology Letters*, 5: 267-270.

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