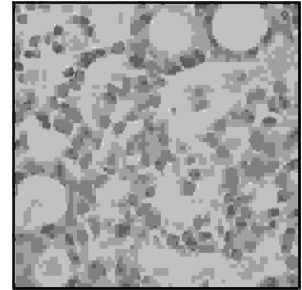


CASE REPORT

PROF-966

COEXISTENCE OF ENDOMETRIOID ADENOCARCINOMA OF THE OVARY AND THE UTERUS

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ABSTRACT... The coexistence of carcinoma of the endometrium and ovaries is uncommon and occurs in about 10% of women with ovarian carcinoma. We are presenting such as a case with a review of the relevant literature.

INTRODUCTION

The simultaneous presence of carcinoma of the ovary and the uterus is uncommon but a well known entity. The two tumours may have similar appearance or be of different histological types. Theoretically this phenomenon could be either due to two independent primary tumours or metastases from one ovary to uterus or from uterus to ovary.

CASE REPORT

A 40 years old women presented in the gynaecology dept Allied Hospital with the history of bleeding per vaginum for the past one month. This was preceded by amenorrhoea for the last 6 months. She has been married for the past 26 years but has no issue. Initially her cycles were regular, but now for the past two years they became irregular. She gives history of excessive growth of hair on the face for the past six months. During this period pregnancy test was negative. The patient also complained of heaviness in the lower abdomen for the

past two months. Ultrasonography revealed a bulky uterus with normal endometrial thickness. No gestational sac or fibroid was seen. Two large masses with mixed echogenicity were seen filling the pelvis and extending into the abdomen upto the level midway between the umbilicus and xiphoid process. Bilateral mild hydronephrosis was seen. Exploratory laparotomy was done. Bilateral salpingoophorectomy with hysterectomy was performed.

On gross examination the left ovary measured 26x18x12 cm and the right one measured 16x12x6 cm. The external surface of both was smooth and grey white with many congested blood vessels. The cut surface showed a variegated appearance Fig I & II.

The cut surface was mostly solid however few cystic areas were also seen. The cystic areas were mostly filled with reddish brown fluid, while a few cysts had serous and occasional cyst had mucinous material. Areas of

haemorrhage and necrosis were seen. The cervix measured 3.5 x 2.5 cm and uterus measured 6.5 x 5.5 cm. Cut surface of the cervix showed a cystic area which had irregular tiny raised nodules. Cut surface of the endometrium showed a slit like endometrial cavity filled with clotted blood. The endometrial cavity measured 4.5 cm in length. The endomyometrium was 2.3 cm in thickness. Multiple sections were taken from the cervix, endometrium and bilateral ovarian masses and the omentum.

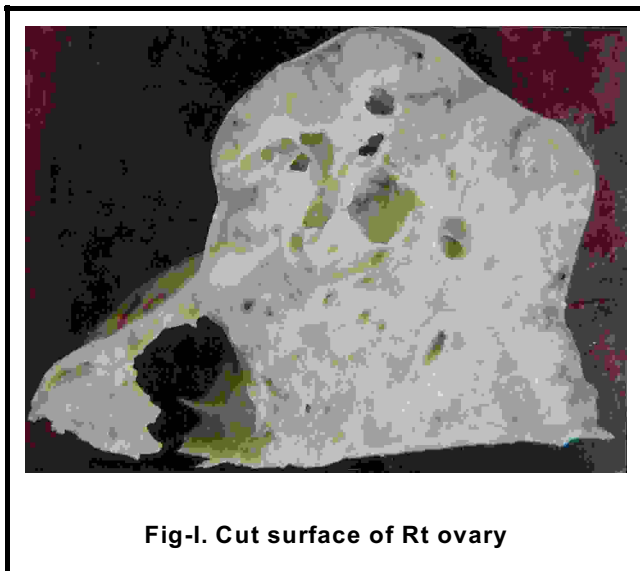


Fig-I. Cut surface of Rt ovary

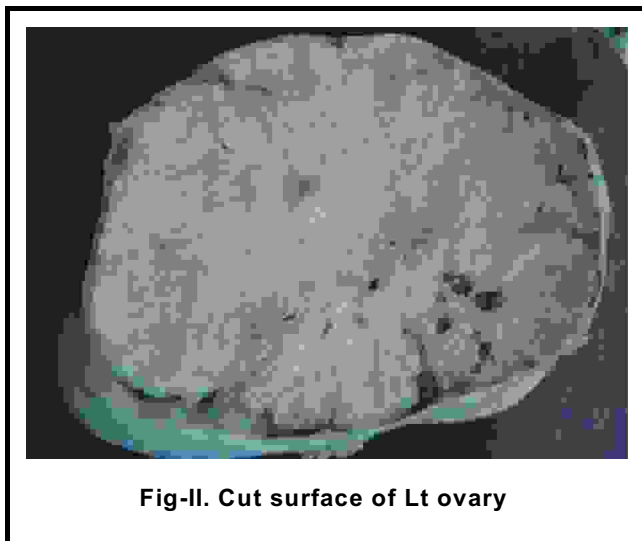


Fig-II. Cut surface of Lt ovary

Histopathology of the ovarian masses revealed features of endometrioid carcinoma. The tumour cells were arranged in the form of glands lined by tall columnar cells with centrally placed hyper chromatic nuclei. These glands were closely packed with scanty intervening stroma Fig-III. Extensive areas of haemorrhage and necrosis were seen. No papillary change or desmoplastic change was noted. The tumour was involving almost the entire thickness of the ovary and very scanty ovarian stroma was seen at the periphery. Mitosis were rare and no vascular or lymphatic invasion was seen. No coexistent endometriosis or squamous differentiation was seen.

Section from the endometrium also revealed features of a malignant epithelial neoplasm comprising of closely packed glands. These were lined by tall columnar cells with hyper chromatic central nuclei Fig-IV. In these sections also there was no papillary squamous or clear cell change. Mitosis were occasional and there was no evidence of desmoplasia. No squamous differentiation was seen in any of the sections examined.

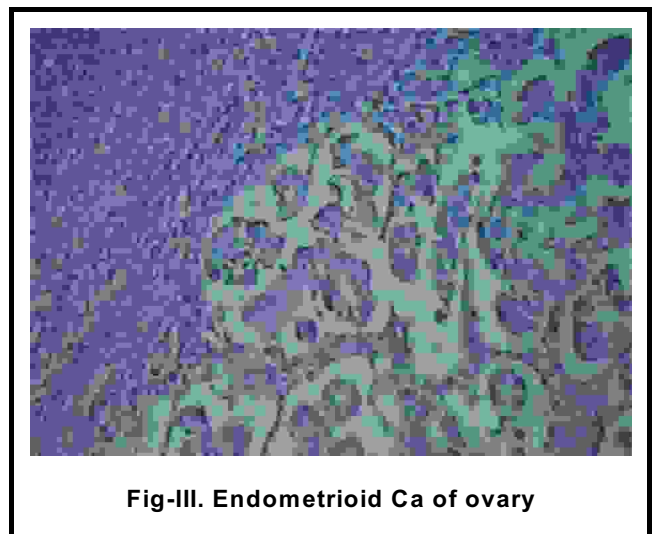


Fig-III. Endometrioid Ca of ovary

The tumour was placed in Grade I according to histopathologic features. The stroma did not show any desmoplasia or collection of foamy histiocytes. The

tumour was seen invading the superficial muscle fibres. The non neoplastic endometrium shows a normal proliferative pattern. Areas of calcification were seen in the myometrium. However no vascular or lymphatic invasion was seen. Section from the cervix showed part of endocervix lined by benign mucus secreting columnar epithelium and a separate focus of tumour cells adjacent to the cervix. Section from the upper end of the endometrial cavity showed no significant pathology. These findings were consistent with endometrioid carcinomas of both ovaries and the uterus. The patient was then referred to the oncology department and was advised to report back in one month.

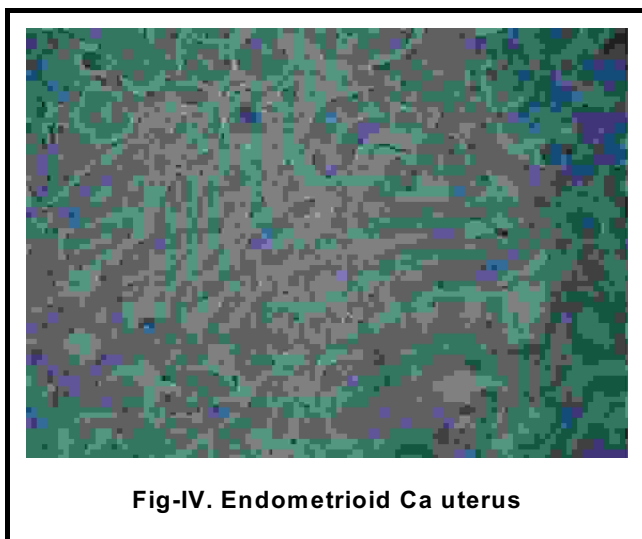


Fig-IV. Endometrioid Ca uterus

DISCUSSION

The coexistence of carcinoma of the endometrium and ovaries occurs in about 10% of women with ovarian carcinoma. It is often unclear whether this represents synchronous primary tumours or metastasis from endometrium to ovary or from ovary to endometrium¹.

Endometrioid carcinomas comprise of 10-25% of all primary ovarian carcinomas². Coexistent endometriosis can be demonstrated in 10-20% of the cases and in some of the cases the tumours can be seen arising from the endometriotic cysts³. Zaino et al reported endometrioid carcinomas in both ovaries and uterus in

86% and coexistent endometriosis in 31%. However in this particular case there was no coexistent endometriosis.

Grossly endometrioid carcinomas may arise as a solid or cystic mass. The contents are usually haemorrhagic rather than serous or mucinous¹. In our case the ovarian masses were mostly solid but cystic areas were also present. The cysts predominantly contained haemorrhagic material but some of the cysts contained mucinous and serous fluid. Visible papillary projections are usually absent or inconspicuous and the same feature was reported in this case and the internal surface of the cysts was smooth.

Some patients with endometrioid carcinoma of the ovary have either endometrial hyperplasia or a synchronous endometrial adenocarcinoma⁴. In this case there was no coexistent hyperplasia however endometrial adenocarcinoma was present.

Most of ovarian endometrioid carcinomas are well differentiated with or without papillary formation¹. In this case it was also well differentiated and no papillary structures were noted. Half of the tumours have foci of squamous metaplasia and some of these were reported in the past as adenoacanthomas⁵. As in uterine adenoacanthomas the keratin produced by these ovarian neoplasms can result in the formation of peritoneal keratin granulomas⁶. No such change was seen in any of the sections examined including the omentum.

In some of the endometrial carcinomas the neoplastic gland are small and tubular simulating pattern of sex cord stromal tumours⁷. No such pattern was noticed in this case. Two cases of endometrioid carcinoma containing yolk sac element have been described⁸. This pattern was however not seen in this case.

Theoretically the phenomenon could result from ;

- a. metastases from endometrial carcinoma into ovary

- b independent primary tumours in ovary and endometrium
- c metastases from ovarian carcinoma to the endometrium

All these events can occur but the third is the least common. A distinction between the first two possibilities is difficult and may be impossible. Ovarian metastases from an endometrial tumour should be favoured in the presence of multiplicity, bilaterality and or very small size of ovarian tumour, involvement of tubal lumen and presence of deep myometrial and or vascular invasion in the uterine tumour⁹. In this case although there were bilateral tumours of the ovary but the ovaries were massively enlarged and no vascular or tubal involvement was seen.

Most neoplasms with an endometrioid appearance in both sites are probably independent neoplasms and their prognosis is excellent. Most of those with histologies other than endometrioid probably represent a single primary tumour with metastases and their prognosis is poor⁹. The features in this particular case favour two independent neoplasms.

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**NEVER REACT ABRUPTLY;
ALWAYS THINK
&
RETHINK**

Shuja Tahir

