

Case Report: A Rare Presentation of Carcinoma Endometrium

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ABSTRACT

Normally endometrial carcinoma presents with post-menopausal bleeding in the majority of cases. It rarely presents with haematometra. If it does, it rarely reaches the term pregnant uterus size. This case report is a rare presentation of endometrial carcinoma which was at first diagnosed as a huge ovarian mass later found out to be haematometra intraoperatively. There was a discordant finding between the endometrial invasions with distant metastasis (Local invasion of stage 1A with lung metastasis which should be stage 4B). It is an uncommon combined occurrence but at least we learnt there can be possible different presentation for endometrial cancer. It further proved that almost all of haematometra can turn out to be associated with endometrial carcinoma.

Key words: haematometra, postmenopausal women, endometrial carcinoma

INTRODUCTION

In well-developed countries, cancer of the endometrium is the most common cancer of the female reproductive organs. According to statistics from American Cancer Association, more than 10,000 out of 50,000 women died from this disease in United States. The average chance of a woman being diagnosed with this cancer during her lifetime is about 1 in 37¹.

There are known risk factors causing this oestrogen-dependent tumours like birth control pills, or tamoxifen; the number of menstrual cycles (over a lifetime), pregnancy, obesity, certain ovarian tumours, and polycystic ovarian syndrome and use of an intrauterine device.

If history is looked through, demographic data such as old age, nulliparity and others like past medical history of hypertension, diabetes and dyslipidaemia, family history (having close relatives with endometrial or colorectal cancer), history of having been diagnosed with breast or ovarian cancer, endometrial hyperplasia in the past and the treatment with radiation therapy to the pelvis to treat another

cancer may be associated with this cancer¹. Most present with post-menopausal bleeding and pelvic pain or mass. It rarely presents with haematometra.

Haematometra is a medical condition commonly found in pre-pubertal or pubertal girls presented mostly with an imperforate hymen or non-communicating müllerian duct. It is usually associated with haematocolpos and the girl normally presents with an acute abdomen may or may not be associated with palpable abdominal mass. If it does, it rarely reaches to the size as large as 28 weeks pregnancy size². (According to our research, the diagnosis of haematometra is mostly made by the clinical presentation, clinical findings, as well as an ultrasound examination.)

However, extent of haematometra varies depending on the ages of the patients. As stated by the literature, haematocolpos and haematometra can occur even in infancy. After menopause, the presentation of haematometra is significantly associated with carcinoma of the cervix³ and endometrium. John W. Brickenridge et al (1982)⁴ concluded that those who presented with haematometra should be investigated thoroughly to rule out the malignancy as it could harbour the disease.

Haematometra is a condition caused by an obstruction or stenosis of the lower part of female genital tract, which results in an accumulation of blood in the endometrial cavity. The common causes are congenital malformations like imperforate hymen, cervical stenosis from surgery like Manchester's operation⁵ or cone surgery and malignant conditions like Ca cervix³ or Ca endometrium. The cases reported by John W. Brickenridge et al (1982)⁴ mentioned that postmenopausal uterine fluid collection seen in an ultrasound suggested carcinoma involving the endometrium in 94% of cases. Hsu SM et al (1993)³ noted that 26% of women with cervical cancer had haematometra on CT scans. He also noted that hematometra was found to have a statistically high relationship with high cancer staging and uterine invasion. The Chi-square values were 14.8 ($P < 0.005$) in high cancer staging, and 19.8 in uterine invasion.

The following was a case of Ca endometrium presented to our hospital (Sarawak General Hospital) that was initially identified as a huge ovarian mass but later found out to be a large haematometra during an operation. A similar case report was noted by Salakos et al (2007)⁶ in which the woman presented with a large cystic peritoneal tumour. Some researchers⁷ indicated that haematometra in postmenopausal women as being an unusual presentation and a trans-vaginal ultrasound would be a more preferable investigation to reach the correct diagnosis.

PRESENTATION OF THE CASE

The patient was a 65-year-old, Para 3 woman with known medical history for diabetes, hypertension with dyslipidaemia under oncology department follow-up for pre-operative diagnosis of advanced ovarian carcinoma with lung metastasis. She was referred to our hospital for the further management by gynaecologist in July, 2015. At that time, she had completed the 4th cycle of neo- adjuvant chemotherapy with carboplatin and weekly Taxol.

The presenting symptom before chemotherapy was gradual increase in abdominal distension for 2 years with progressive loss of appetite. There were no other gastro-intestinal symptoms and no remarkable weight loss. There was no history of abnormal discharge per vagina, no post-coital bleeding and postmenopausal bleeding. She attained her menarche at 13 years and delivered three children by spontaneous uncomplicated vaginal delivery. She had her menopause at the age of 50 and never experienced contraception or done a Pap smear. No relevant family history of any gynaecological cancers, using of ovulating induction drugs or hormone replacement therapy was noted in her past history.

During examination, patient was average height and weight, comfortable and the abdomen was grossly distended with a huge term-sized abdominal mass (26x 22x30 cm). She was not cachexic. The diagnosis at that time was advanced ovarian carcinoma and lung metastasis. There was no ascites and no cervical lymph node enlargement during examination.

Infection screen, tumour markers as well as other routine examinations were ordered to prepare for surgery.

CA 125 was in decreasing trend since from the beginning of its diagnosis:

68.94(24/02/2015)

43.69(15/06/2015)

30.4 (20/07/2015)

Trans-abdominal scan was repeated in SGH and cystic mass with benign appearance was found.

Previous CT thorax, Abdomen and Pelvis taken in January, 2015 was noted as follows:

Investigation	Result
CT Abdomen and Pelvis	A large well-defined intra-peritoneal cystic mass 22.4x25x 28.4cm with septation and solid component; Normal uterus and ovaries are not visualised. No free fluid or no obvious abdominal or pelvic lymph nodes.
CT Thorax	A large mass in the apico-posterior segment of the left upper lobe measuring 5.5x4.1x5.6 cm. Smaller lung nodules are seen at the posterior segment of left upper lobe and lateral segment of the left lower lobe. No pleural effusion.
Plain CT-guided lung biopsy(Left)	Moderately differentiated adenocarcinoma

Impression at that time was primary lung cancer with large cystic abdomino-pelvic mass likely ovarian origin. The other differential diagnosis was of a primary ovarian carcinoma with lung metastasis which is the more likely of the two.

And she was given neo-adjuvant chemotherapy.

We repeated the CT scan just before undergoing the surgery: (June, 2015)

Investigation	Result
CT Thorax	6 nodules (largest 0.9 x2.3 cm) (compared to previous CT Largest – 5.5x 4.1x5.6 cm) but no pleural effusion
CT Abdomen	-well defined non-enhancing S7 hypo dense lesions likely liver cyst <0.5 cm - A large well-defined oval cystic lesion occupying almost entire abdomino-pelvic region 22x26x30cm, No ascites. (Not mention about uterus)
Bone	Extensive degenerative changes of the spine with numerous osteophytes, especially at the lumber region.

The repeated CT thorax showed a reduction in the size of the dominant nodule noted in the previous CT scan but the abdominal CT scan was basically similar to the earlier one. A decision was made to proceed with surgery.

Staging laparotomy with peritoneal cytology was done as planned on 30th July 2015. Intra-operatively, there was a huge haematometra. The uterus was noted to be grossly distended and deformed (Figure 1).

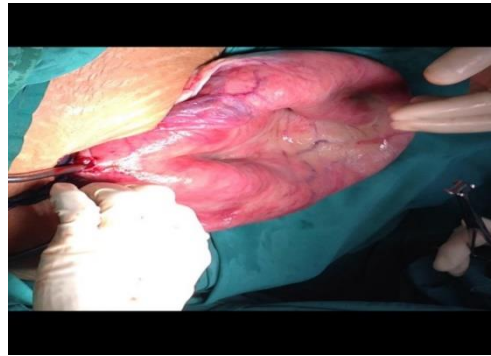


Figure 1: After opening the abdomen, we found out term-sized uterus with haematometra. Suction was done.

It contained about 10L of serosanguinous fluid (Figure 2).



Figure 2: 10 L of haematometra fluid in the suction bottles.

After suction the remaining uterus looked very flabby and soft (Figure 3).



Figure 3: After sucking out 10 L of haemosanguinous fluid, still flabby and enlarged uterus was seen.

The uterus with the ovaries weighed 1000 gm. Serosa was smooth. Both ovaries measured 40x20x5 mm and 35x25x7mm each. No signs of malignancy in both ovaries. No obvious cervical stenosis seen. On cut section, there was no solid tumour seen but noted friable endometrial tissue (Figure 4).

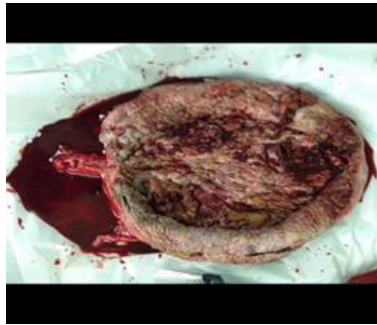


Figure 4: Cut-section of uterus after suction was done.

The operation is uneventful and no enlarged lymph nodes seen or palpated intra-operatively.

Diagnosis was confirmed by histopathological examination result showing serous adenocarcinoma with no evidence of malignancy in the cervix. The malignant cells confined within the endometrial lining and are seen invading less than half of the myometrium.

Peritoneal cytology result was negative for malignancy.

Therefore, final stage for this case was Carcinoma endometrium stage 1A from histopathological result but with the evidence of distant metastasis to the lung – final diagnosis for this patient is Ca Endometrium stage 4 B.

She was referred back to Oncologist after discharge. They planned to continue her post-operative chemotherapy for another six cycles. Now she was under chemotherapy.

DISCUSSION

The aim of this case report is to highlight the unusual presentation of Ca endometrium in postmenopausal women as well as to share our experience with a very huge haematometra which turned out to be serous adenocarcinoma endometrium stage 1A.

The weakness of this case report was that we could not make the correct diagnosis of carcinoma endometrium before the surgery. However, we assumed it was acceptable as most cases of haematometra in the literature presented with postmenopausal bleeding, pain, abnormal vaginal discharge and metastatic features. These cases presented rarely with huge cystic mass in nature. Here, as far as we were concerned, she only had slight discomfort from progressive abdominal distension. Although she claimed loss of appetite, she admitted there was no remarkable weight loss. We are sure

the readers may surprise the fact that she was assumed asymptomatic throughout⁷. Even though we performed trans-abdominal scan, the mass was too big to assess correctly the origin of the mass. As attending clinician thought it was a huge ovarian cyst it was fair enough he or she would not consider proceeding to trans-vaginal approach. Some more, everybody knew that ultrasound is not able to depict the entire view of pelvis and abdomen.

CT report mentioned no visualisation of normal uterus and ovaries in first report in January, 2015. We assumed it was agreeable as the resolution of the CT scan will be variable to make the obscure anatomical plane and nobody thinks of possibility of haematometra from the start by this report. If we could have more experience we can get the proper diagnosis since that time.

The previous lungs biopsy result of moderately differentiated adenocarcinoma may have originated from the carcinoma endometrium. However, some may argue that it did not correspond to the HPE report as the primary endometrial tumour is only stage 1A. As for stage 1 Ca endometrium, it is very rare to get distant metastasis. During the literature search, there are some cases of Ca endometrium stage 1 resulting in bone metastasis but for lung metastasis, it took longer to present and sometimes it occurred years after initial treatment³.

To the best of our knowledge, the pattern of spread is partially dependent on the degree of cellular differentiation. In patients with poorly differentiated tumours, myometrial invasion occurs much more frequently. Myometrial invasion is corresponded to lymph node involvement in most of the cases, but for distant metastases, it is often independent of the degree of differentiation. When distant metastasis occurs, it most commonly occurs in the following order: Lungs, Inguinal and supraclavicular nodes, Liver, Bones, Brain and Vagina⁸.

Therefore, we concluded that it was a case of Ca Endometrium stage 1A in local invasion with lung metastasis (likely stage 4B).

One pitfall in this report was that we simply forgot to send the intra-cystic serosanguinous fluid for histopathological examination during the surgery⁹. One can easily noticed CA 125 was in decreasing trends, but, CA 125 only increases in 50% of the epithelial tumours and it did not necessarily point out malignant ovarian tumour.

However, we justified that the management of the case as well as the outcome and prognosis will not be affected because of failure to get the correct diagnosis from the beginning. In the future, haematometra should be considered as one rare but possible differential diagnosis for huge cystic abdomino-pelvic mass^{2, 6}. Anyway, we concluded that in every malignant case, if possible, we need to find out the origin and provide appropriate early treatment to lead to a good prognosis for the patient. Finally, this case also proved that almost every haematometra that occurs in post-menopausal women has a high possibility to turn out to be carcinoma endometrium⁴.

List of Abbreviations:

CA	Cancer
CA 125	Tumour marker
CT	Computed Tomography

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CONFLICT OF INTEREST

The authors declare that they have no competing interests.

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