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Ascites as initial presentation of endometrial carcinoma : a case report

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ABSTRACT

Endometrial carcinoma is a very common gynaecological malignancy. However, ascites as an initial presentation of this malignancy is quite rare and may confuse clinicians. We here present the case of a 51 year old female having massive ascites as initial manifestation of endometrial adenocarcinoma. The ascitic fluid was positive for malignant cells. In CT scan, the uterine mass showed calcification. Similar other presentations of endometrial carcinoma and other relevant literature has been discussed at length.

INTRODUCTION

Endometrial carcinoma is a common postmenopausal malignancy [1]. Overall, it is the most common gynaecological malignancy in the world and is more common in northern America and Europe compared to Asia [2]. The advantage of this malignancy is that it frequently presents with early vaginal bleeding and hence, is diagnosed at an early stage [1]. If treated according to protocol, the survival rate for this malignancy is quite high [3]. However, sometimes, this malignancy may have atypical presentations and this may delay the diagnosis. Ascites, which we present here, is a very rare initial presentation of endometrial carcinoma.

THE CASE REPORT

A 51 year old multiparous woman presented with gradually progressive painless swelling of abdomen for five months. Also, she complained of scanty painless vaginal bleeding over the last two months. She had had her menopause at the age of 42 years and did not have any gynaecological problems since. On further questioning, she also admitted to having early satiety and occasional urinary urge incontinence in the last three months. On examination, the woman was markedly emaciated. There was mild pallor but no lymphadenopathy. The abdomen was massively distended with fluid thrill positive. No organomegaly could be palpated per-abdomen. But per-vaginally and by bimanual examination, a bulky, mobile uterus was palpated. The rest of the physical examination was normal.

Laboratory examinations revealed hemoglobin of 7.2 gm/dl, total leukocyte count of 9000/µL (N: 70%, lymphocyte: 25%) and platelet count of 1.6 lakh/ µL. ESR was 78 mm in the 1st hour. Blood urea was 51 mg/dl (N: 20-40) and creatinine was 1.4 mg/dl (N: 0.60.9). Liver function test and routine urine examination were normal. Ultrasonography of abdomen revealed massive ascites with an ill-defined mass arising from pelvis. There was no intraabdominal lymphadenopathy and no abnormal acoustic shadow in any major organ. Chest X ray was normal.

Ascitic fluid study showed a cell count of 560/cmm with 30% lymphocytes and 30% mesothelial cells. Albumin level of ascitic fluid was 2.8 g/dl with SAAG of 0.6. Papanicolaou stain of the centrifuged sample of ascitic fluid showed clusters of cells with acini formation. The cells were of different sizes with hyperchromatic nuclei and atypical nucleoli. The pathological

diagnosis was metastatic adenocarcinoma causing ascites (figure 1). A contrast enhanced CT scan of whole abdomen was done which revealed (figure 2) a heterogeneous mass arising from the uterus with internal calcification. The adnexa was normal. The mass was seen partially encasing pelvic neurovascular structures. In view of this CT scan picture, a per-vaginal endometrial biopsy was done, which revealed high grade adenocarcinoma.

On being explained the disease and the prognosis, the patient decided against further therapy and was shifted to the palliative care team.

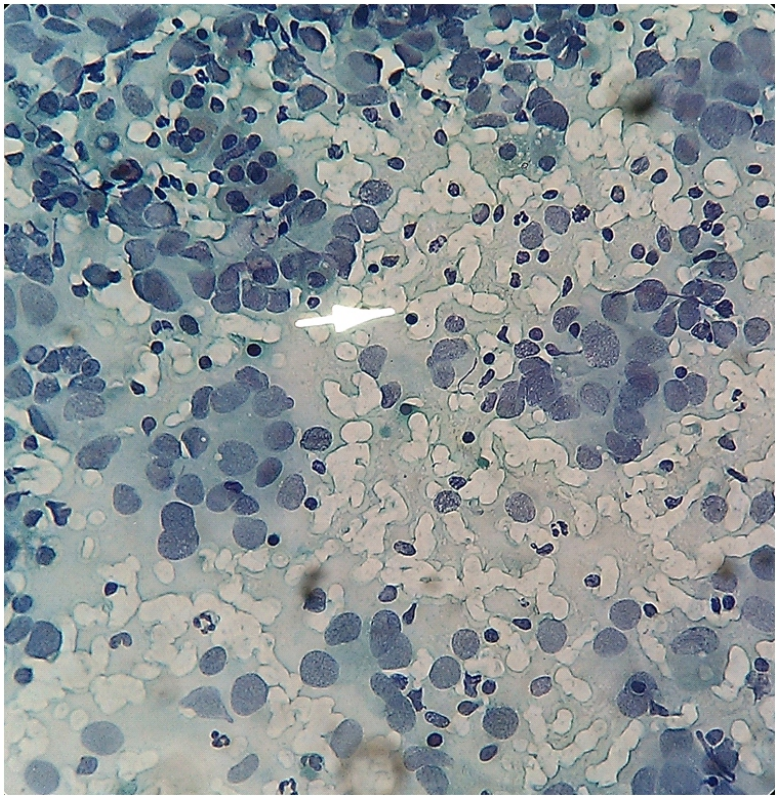

Fig 1. : Papanicolaou stain of ascitic fluid (centrifuged) showing adenocarcinoma.

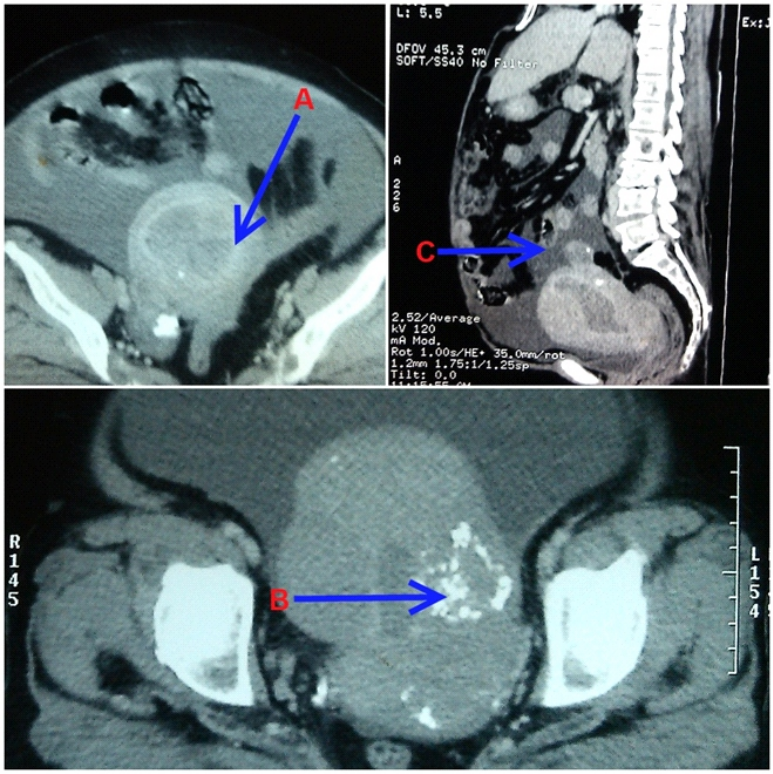

Fig 2. : Figure showing the CECT scan of abdomen of the patient with uterinemass (A), calcification (B) and ascites (C)

DISCUSSION

Endometrial carcinoma is usually an adenocarcinoma (80%) although rarer variants like papillary serous carcinoma or clear cell type are also reported [4]. The low grade hormone sensitive malignancies are more responsive to therapy than the high grade atypical variants [4]. The cancer is usually locally invading. However, sometimes peritoneal spread of the tumour has been reported. The fallopian tubes are thought to be the route of spread of this malignancy to the peritoneum [5].

A case of uterine corpus malignancy with peritoneal spread was reported from Japan [6]. But in that case, the tumour was mainly intramural in the uterus with only minimal ascites. Malignant cells were recovered from the peritoneal fluid only intraoperatively [6]. However, in our case, the patient presented with massive ascites and ascitic fluid Papaniculaou stain was positive. Also, in the previously reported cases of endometrial carcinoma with ascites, the patients were mostly over 80 years of age [5, 6]. But in our case, the patient was middle aged (51 years).

Besides the local spread, endometrial cancer has been reported to metastasize to unusual places like the heart [7], eye [8] and femur [9]. However, like ascites, these distant metastases are very rare. Generally, high grade, poorly differentiated endometrial malignancies are more likely to spread [7]. Generally, such widespread disease in endometrial carcinoma has very poor prognosis. But in some cases, with timely treatment (mainly in the form of chemo-and radiotherapy), significant long term survival has been reported [10].

Very recently, a case of endometrial carcinoma with peritoneal spread was reported from Japan [11]. In this patient, later, a second simultaneous malignancy (gastric carcinoma) was discovered. Hence, this case is a caveat that even if endometrial malignancy is thought to be the aetiology of malignant ascites, a second cancer may be present.

In our patient, the imaging revealed calcification of the uterine mass. Usually, psammomatous calcification is associated with serous gynaecological malignancies [12]. Such calcifications usually represent necrosis of parts of the tumour.

Ascites is more common for recurrent endometrial carcinoma [13]. In cases of widespread endometrial carcinoma with ascites, systemic chemotherapy or salvage cytoreductive surgery may be attempted [13]. Recently, intraperitoneal chemotherapy has also been studied as a viable option for such advanced endometrial malignancy [14].

CONCLUSION

We present this case to sensitize clinicians of all disciplines to this rare presentation of a gynaecological malignancy. Timely interventions can lead to quick diagnosis and treatment along with better chances of survival.

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