Adrenocortical Carcinoma Presenting with Vaginal Metastasis

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ABSTRACT

Published on 28th September 2015

Adrenocortical carcinoma is an aggressive malignancy which is metastatic at the time of presentation in over one third of the cases. Common sites of metastasis are lung, liver, peritoneum, skin, bone, brain and rarely heart. Only one case of vaginal metastasis from adrenocortical carcinoma is reported in literature. We are reporting a rare functioning metastatic adrenocortical carcinoma with vaginal deposit.

A 29 year old lady presented with menorrhagia, hypertension, and hirsuitism. She was found to have right sided abdominal mass and endocrinological evaluation showed functioning tumour. CT scan revealed adrenal tumour with hepatic and pulmonary metastasis.Clinical examination revealed an anterior vaginal wall nodule apart from previous findings. Biopsy of the same was metastatic disease from adrenocortical carcinoma. She was treated with chemotherapy using cisplatin and etoposide and expired two months later with progressive disease.

Clinical examination for metastatic disease may yield easily accessible site for biopsy. Per vaginal examination may be done for patients with metastatic adrenocortical carcinoma to exclude presence of metastatic disease and may be an easy site for biopsy.

Keywords: Adrenocortical carcinoma, vagina, metastasis

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INTRODUCTION

Adrenocortical carcinoma is an aggressive malignant neoplasm and many patients present with metastatic disease. Sixty eight to seventy percent has disease not amenable for curative resection. Twenty to seventy two percent of tumours are hormonally active. Thirty to forty three percent has metastasis at presentation. Common sites of metastasis are lung, liver, bone, peritoneum, and brain. We report a case of functioning adrenocortical carcinoma presenting with metastatic vaginal nodule. To our knowledge this is the second reported case of adrenocortical carcinoma presenting with vaginal metastasis.[1]

CASE PRESENTATION

29- year-old lady was evaluated in Urology department in the nearby university hospital for right-sided abdominal pain of three months duration. Abdominal pain was constant, dull and progressive. She had significant loss of appetite and weight loss. She denied haematuria, malena and altered bowel habits. She had menorrhagia for few months. She was found to be hypertensive four weeks prior to presentation and was on ACE inhibitors. There was no past medical or obstetrics history of note.

On examination she had a Karnofsky Performance status of 70. Pulse rate was 88/minute and B.P.170/90 mm of Hg. She had extensive acne and hirsuitism. There was no significant lymphadenopathy. Chest was normal. Abdomen was distended with a 15-cm right-sided abdominal mass, which moved little with respiration. There was no evidence of free fluid. Investigations revealed haemoglobin of 9.6 gm%, WBC

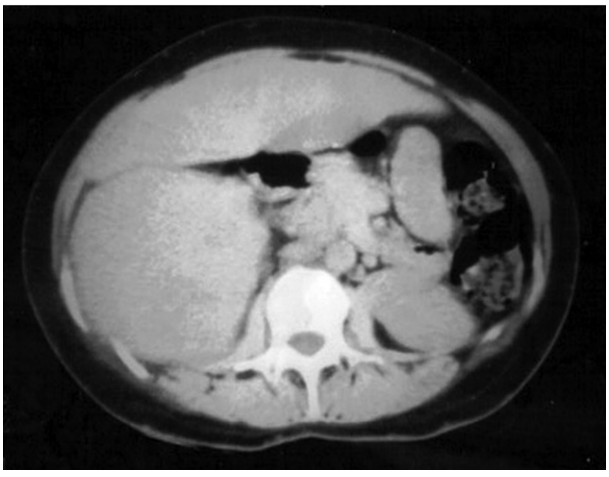

Figure1. **CT scan of Abdomen showing large right adrenal mass**

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of 8.9x10^9 per cubic mm and ESR of 40 mm/1 hour. Urine dipstick was normal. Urea and electrolytes were normal. Liver function tests showed raised alkaline phosphatase of 330 units/L. Beta HCG was normal. Twenty-four hour urine VMA was 1.5 (normal) Serum Cortisol estimation showed 20 microgram at 6 am and 30 microgram afternoon (normal value). Chest X-ray showed bilateral multiple lung metastases. CT scan revealed a 15 x 14-cm heterogeneous mass occupying right side of upper abdomen. The lesion also showed areas of necrosis. The mass was sharply demarcated from liver and kidney was displaced infero-medially (figure 1). Liver and lung showed multiple metastases.

She was referred to Regional Cancer Centre with provisional diagnosis of metastatic functioning adrenal carcinoma. Clinical examination confirmed the above findings. Per vaginal examination showed a 2x1 cm lobulated vaginal nodule over the anterior vaginal wall. Uterus and adnexa were normal. Biopsy of vaginal nodule confirmed metastatic disease (figure 2).

She was treated with chemotherapy employing Cisplatin and etoposide . After 2 cycles, she had progression of disease and expired.

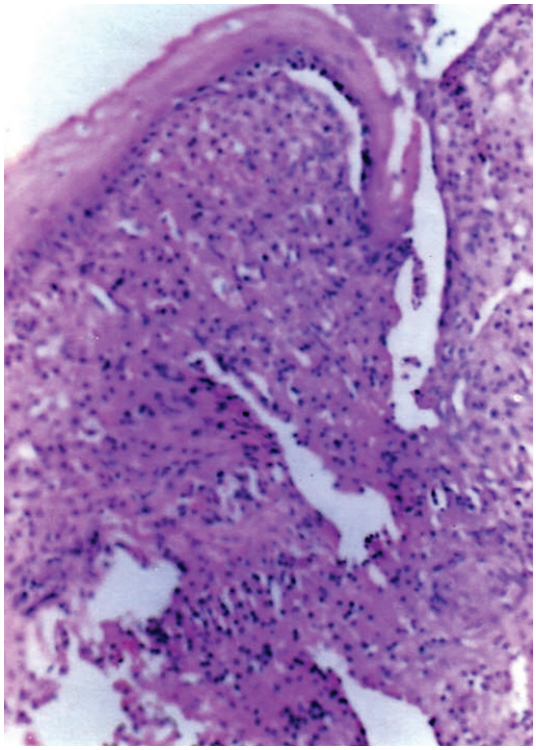

Figure 2. **Histopathological appearance of biopsy of vaginal nodule. Metatstatic carcinoma and vaginal epithelium are seen**

DISCUSSION

Adrenocortical carcinoma has high metastatic potential and metastasis have been reported in lung, liver, bone, skin, central nervous system, peritoneum, abdominal wall,tongue and heart.[2-7] We are reporting a case of vaginal metastasis, which is not reported in literature except once. Vaginal metastasis have been reported in choriocarcinoma, endometrial adenocarcinoma, renal cell carcinoma, colon cancer, and bladder cancer. The clinical significance is ease of examination and accessibility for biopsy of this site for histological confirmation.

The response to systemic treatment for metastatic adrenocortical carcinoma is unimpressive and short lived.The agents commonly used are cisplatin, etoposide, OPDDD etc.We would recommend per vaginal examination for patients with adrenocortical carcinoma to exclude metastasis.

END NOTE

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Conflict of Interest: None declared

Cite this article as:

James FV, Mathews A. Adrenocortical Carcinoma Presenting with Vaginal Metastasis. Kerala Medical Journal. 2015 Sep 10;8(3):25–6.

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