

CASE REPORT

METASTATIC RENAL CELL CARCINOMA IN ENDOMETRIAL CAVITY: A RARE CASE REPORT

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ABSTRACT: Renal cell carcinoma (RCC) has unpredictable and diverse behaviour. The classic triad of hematuria, loin pain and abdominal mass is uncommon at time of presentation. About 30%-50% of patients are found to have metastases at the time of diagnosis. Bones, lungs, liver and brain are the frequent sites of metastases. RCC with metastasis to the endometrial cavity is rarest manifestation, as seen in our patient. Patient was a 40 year old female, G3P1, known case of renal cell carcinoma, presenting in emergency with bleeding per vaginum. She had no other co-morbidity. Endometrial curettage was done and specimen sent for histopathological examination, which revealed metastasis from clear cell type of renal cell carcinoma in endometrial cavity and was confirmed on IHC.

KEYWORDS: Endometrial cavity, Metastasis, Renal cell carcinoma

INTRODUCTION: Renal cell carcinoma (RCC) has unpredictable and diverse behaviour. The incidence of RCC over last 20 years has progressively increased due to widespread use of modern imaging.¹ About 30%-50% of patients are found to have metastases at diagnosis. While bone, lymph nodes, lungs and brain constitute expected 'homing' sites, metastasis may turn up at the unusual locations (skin, testis, maxillary antrum and tongue).²⁻⁴ Uterus is a rare site of metastasis, because of dense stroma and less vascularity.

Metastatic RCC to endometrial cavity of uterus is extremely rare and usually associated with left sided RCC; only four case reports have been published so far, that too in cervix uteri.⁵⁻⁸ There is one report in the literature of metastatic oncocytic papillary RCC to the endometrium in an 89-year-old woman, who presented with vaginal bleeding.⁹ The exact mechanism is not known; however retrograde venous flow of tumor cells from left renal vein to the left ovarian vein and cervical and vaginal venous plexus explains the spread of left sided RCC to uterus.

CASE REPORT: A 40 year female, G3P1, presented in emergency with complaint of vaginal bleeding since 1 day. She was known case of renal cell carcinoma and had history of inability to conceive past 17 years. On examination the patient was conscious, oriented, her vital parameters were normal, no lymph nodes were palpable. On general and systemic examination, no abnormality was detected. Investigations in form of CT scan were done highlighting growth in endometrial cavity (Figure1) Dilatation and curettage was done and endometrial and cervical curettings were sent for histopathological examination.

Endometrial biopsy received in the form of multiple grey white soft pieces together measuring 0.8cm x 0.5cm x 0.3cm. Microscopically, sections examined from endometrial curettings revealed presence of tumour arranged in sheets. The individual tumour cells were round to oval, having central nucleus with prominent nuclei in some and clear cytoplasm. Also included in the biopsy was endocervical tissue which was free from tumour. (Figure 2 & 3).

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DISCUSSION: RCC represents a potentially lethal cancer that is associated with aggressive behaviour and has a propensity for metastatic spread. The patterns of metastases from RCCs are not yet defined with accuracy and, as a result, RCC has been associated with rare metastatic sites and occasionally atypical presenting symptoms from disseminated disease and distant metastatic sites. Relatively few case reports of primary extra-pelvic carcinomas with metastasis to uterus have been published. The most frequent primary carcinomas metastasizing to uterus and cervix are the breast, stomach, ovarian and colorectal cancers.¹⁰

Renal Cell carcinoma (RCC) may remain clinically occult for the most of its course and the tumour in the kidney may progress unnoticed to a large mass until metastases appear. About two third of cases of RCC metastasize to lungs, liver and bones. Only less than 0.5% cases metastasize to female genital system.¹¹

The present review has focused on rare incidence of metastatic spread of RCC to endometrial cavity of uterus, which is an extremely rare site for metastasis. This fact further highlights the significance of case reporting, especially in oncology where clinical trials or even large case series are not always available; as Dib et al. have very elegantly pointed out.¹² The contribution of case reporting should not be underestimated since many of our classical clinical teachings have originated from the observation of isolated "case reports".

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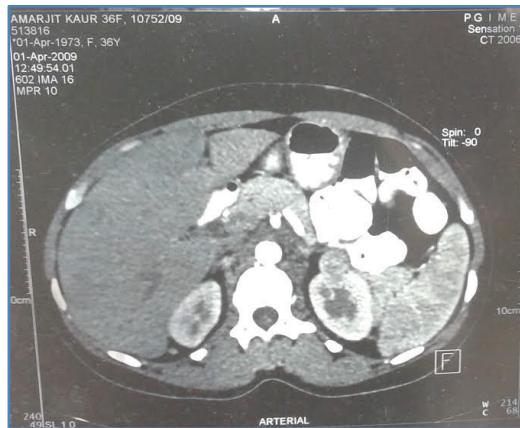


Figure 1: CT Scan

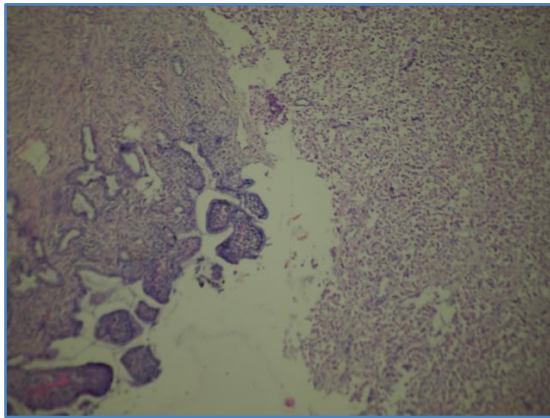


Figure 2

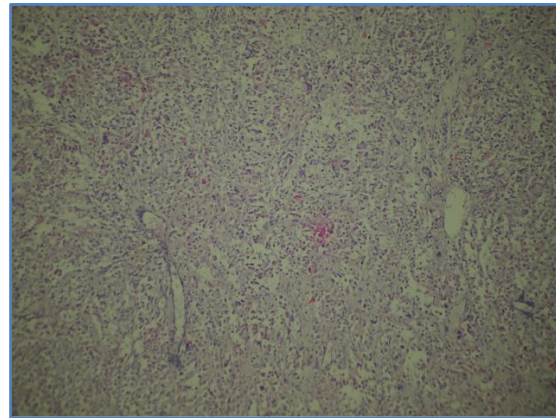


Figure 3

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