

Spontaneous Perirenal Urinoma as a Complication of Cervical Neoplasm: A Case Report

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Abstract: Background: Urinomas are uriniferous fluid collections usually found in the retroperitoneum most often secondary to urinary tract obstruction due to various causes. Results: In this case, USG (Ultrasonography) and CECT (Contrast enhanced computed tomography) abdomen and pelvis were consistent with perirenal urinoma likely secondary to cervical neoplasm found incidentally and confirmed later by cytology. Conclusion: Formation of spontaneous urinoma secondary to a tumour is very rare. USG and CECT are the key modalities for diagnosis.

Keywords: USG, CECT, urinoma, neoplasm

1. Introduction

Urinomas are uriniferous fluid collections usually found in the retroperitoneum most commonly in the perirenal space, as a consequence of urinary tract leakage caused by urinary obstruction, trauma, or post-instrumentation. Urinomas are most often due to urinary obstruction secondary to [1,2]:

- 1) Calculus
- 2) Pelvi-ureteric junction obstruction
- 3) Retroperitoneal fibrosis
- 4) Retroperitoneal neoplasms
- 5) Renal pelvis, ureteric, or bladder neoplasms
- 6) Conditions causing bladder outlet obstruction
- 7) Renal trauma or bladder rupture
- 8) Ureteric injury, uretero-ileal anastomotic leak
- 9) Diagnostic instrumentation, e.g. ureteroscopy

2. Aim and Objective

To describe the imaging features of a rare case of spontaneous perirenal urinoma secondary to obstruction by cervical neoplasm on USG and CECT abdomen and pelvis.

3. Clinical History and Examination Findings

A 65-year-old female comes with complaints of pain abdomen in the last 20 days and vomiting for 1 day.

No history of fever and loose stools.

Patient is a known hypertensive since 3 years on Tab. Amlodipine 5mg OD. No other comorbidities were identified.

Past history of laparoscopic tubectomy done 30 years ago.

Attained menopause 20 years ago with an obstetric score of P5-L3-D2.

Per abdomen examination showed tenderness in right lumbar region.

4. Materials and Methods

Patient was subjected to USG abdomen and pelvis followed by CECT abdomen and pelvis with delayed/ excretory phase at 10 mins post iodinated contrast injection.

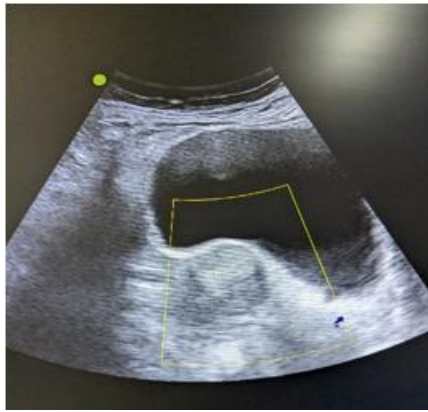
5. Imaging Findings



USG showed a well-defined anechoic collection with few internal echoes within just inferior to lower pole of right kidney.



Right kidney appeared bulky in size with mild subcapsular collection and mild hydronephrosis- likely pyelonephritis



USG pelvis showed an ill-defined heterogenous hyperechoic mass lesion involving uterine cervix not taking internal vascularity- likely neoplastic etiology.



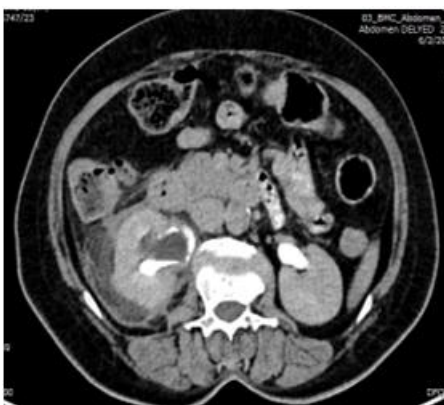
The collection showed mild peripheral enhancement on post contrast study and was noted encasing the right proximal and mid ureter and communicating with perinephric collection above



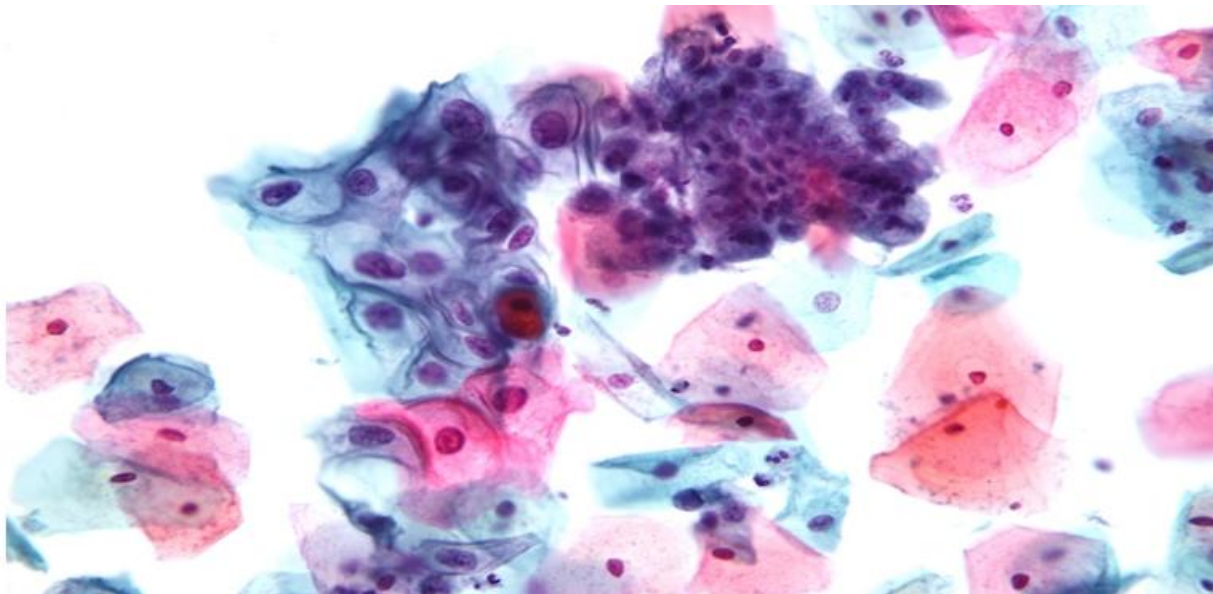
Sagittal NCCT showed a fairly defined hypodense collection inferior to lower pole of right kidney and anterior to right psoas major muscle. Mild upstream hydroureteronephrosis (HUN) was also noted



An ill-defined heterogeneously enhancing mass lesion was noted in uterine cervix encasing right VUJ with suspicious loss of fat plane with urinary bladder causing mild upstream HUN.



Mild dilatation of right pelvicalyceal system and entire extent of right ureter noted with ureteric wall thickening. A focal discontinuity is noted in the wall of proximal ureter with extravasation of contrast into the previously mentioned collection and adjacent perinephric collection on 10 minute delayed/excretory phase

Cytopathology-

Subsequent Pap smear of the patient showed “*atypical squamous cells-cannot exclude high grade squamous intra-epithelial lesion*” (ASC-H).

This confirmed the suspicion of spontaneous perirenal urinoma secondary to cervical neoplasm

6. Discussion & Conclusion

Formation of a urinoma secondary to obstruction by a tumor is very rare^[3].

Imaging by USG and CECT abdomen with delayed/excretory phase forms the mainstay in the diagnosis of urinomas.

Small urinomas are treated conservatively while larger ones are treated by percutaneous drainage along with treatment of the underlying cause of urine leakage.

In our case, the patient underwent percutaneous drainage of the urinoma under USG guidance and was referred to regional cancer care center for further management.

References

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