

Case report: Bilateral upper urinary tract tumor causing obstructive anuria

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Abstract

Bilateral upper urinary tract tumors refer to the presence of cancerous growths in both kidneys or ureters. This condition is relatively rare, and diagnosis typically involves imaging tests such as CT scans or MRIs. Treatment options may include surgery, radiation therapy, chemotherapy, or a combination of these approaches, depending on the stage and location of the tumors. Prognosis varies depending on several factors, including the type of tumor, the patient's overall health, and the extent of the disease at the time of diagnosis. Early detection and treatment are essential for improving outcomes in patients with bilateral upper urinary tract tumors.

1. Introduction

Bilateral upper tract cancer (UTUC) is a rare and challenging urological malignancy characterized by the presence of tumors in both ureters or renal pelvis. The diagnosis and management of bilateral UTUC require a multidisciplinary approach due to the complexity of the disease and its potential for recurrence and progression. In this article, we present a case report of a patient with bilateral UTUC and review the current literature on its diagnosis and treatment.

2. Case presentation

The patient was 62 years old, a chronic smoker, with a history of macroscopic hematuria 6 months ago with lumbar pain on both sides, who presented to the emergency room with anuria for 48 hours. The clinical examination on admission showed a GCS of 15 without hemodynamic instability, no hematuria, and slight tenderness in the left lumbar region.

The blood test showed a renal insufficiency with a creatinine clearance of 19ml/min.

The abdomino-pelvic scan showed a huge dilatation of the right ureteropyelocaliculus with a laminated kidney upstream of a mass of the plevian ureter, and a mass in the left renal pelvis with small inferior calciferous stones (figure 1,2;3) ; the patient benefited from an emergency bilateral JJ elevation (note that during the urethrocystoscopy, no suspicious lesion was found) The patient was able to recover a good renal function with a creatinine clearance of 89 ml/min which allowed to do a CT urography and a thoracic CT as an extension assessment which confirmed a tumor of the right pelvic ureter and a tumor of the left renal pelvis without distant metastases (figure 4) .

The file was presented in a multidisciplinary consultation meeting which validated a bilateral nephro ureterectomy with a total cystoprostatectomy and connecting the patient to hemodialysis, unfortunately the patient refused any treatment

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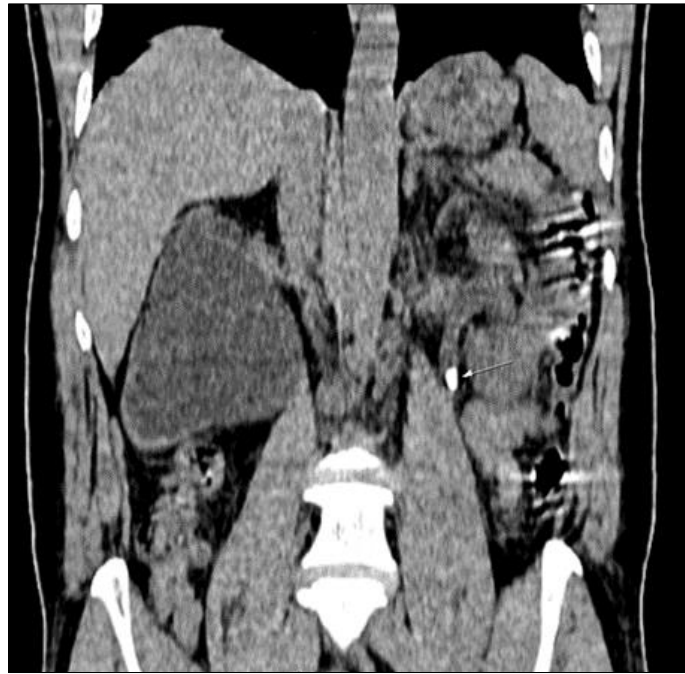


Figure 1 CT: left JPU lithiasis (CHU HASSAN II FES)



Figure 2 CT: left kidney stone, right UHN upstream of a mass of the pelvic ureter. (CHU HASSAN II FES)



Figure 3 Right UHN upstream of a mass of the pelvic ureter (CHU HASSAN II FES)

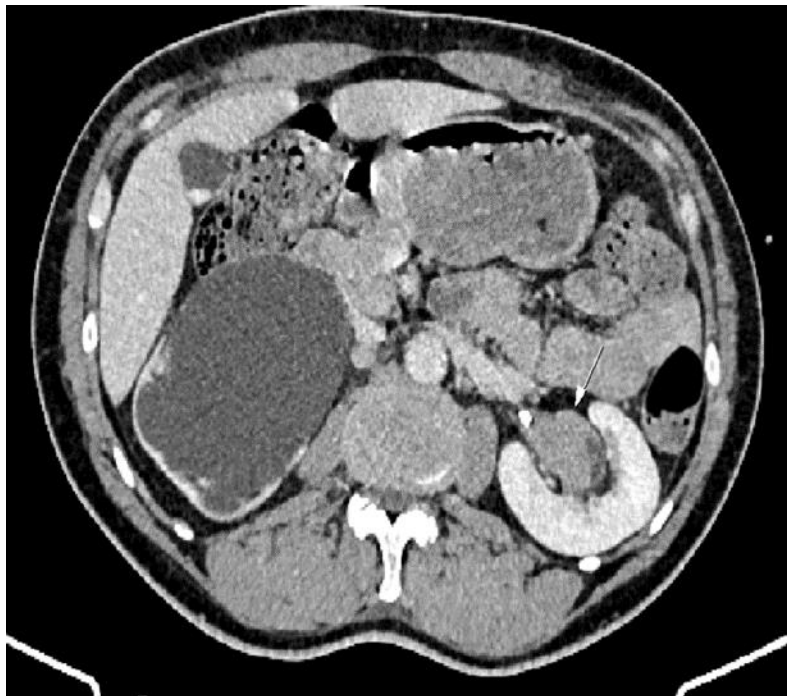


Figure 4 CT: tumor of the left renal pelvis (CHU HASSAN II FES)

3. Discussion

Upper tract urinary cancer (UTUC) is a rare but serious malignancy that arises in the renal pelvis or ureter, which are the structures that connect the kidneys to the bladder. UTUC accounts for only 5-10% of all urothelial cancers, and bilateral involvement is even less common, occurring in less than 5% of cases (1). Despite its rarity, UTUC can be a difficult diagnosis to make and manage due to its location and potential for rapid progression.

Risk factors for UTUC include tobacco use, occupational exposure to chemicals, and chronic kidney disease (2). UTUC can also occur as part of hereditary cancer syndromes such as Lynch syndrome and hereditary non-polyposis colorectal cancer (3). Symptoms of UTUC include blood in the urine, flank pain, and abdominal mass, although these may be absent in early stages of the disease (4).

The diagnosis of UTUC requires a combination of radiographic imaging, endoscopy, and biopsy. Computed tomography (CT) urography is the preferred imaging modality for evaluation of the upper urinary tract, as it can provide detailed information about the location and extent of the tumor (5). Ureteroscopy and retrograde pyelography are often used to visualize the tumor and obtain tissue samples for pathology. If a biopsy is inconclusive, a diagnostic ureteroscopy can be performed to obtain larger tissue samples for further analysis (6).

Treatment options for UTUC depend on the stage and extent of the disease, as well as the patient's overall health and goals of care. For localized disease, surgical resection is the mainstay of treatment. In patients with bilateral UTUC, nephron-sparing surgery may be considered to preserve renal function (7). The foremost trouble after detecting bilateral UUTUC is surgical Management: should surgery be completed on both facets on the same Time or be deferred? Are we going to opt for a thorough or conservative Method? In a Swedish collection[4] of 936 sufferers handled over 28 Years, 15 sufferers had bilateral synchronous higher tract tumors. 4 Of them had bilateral surgical operation at the equal day, and 7 others had surgery with a median c program language period of 55 days (34-240 days). According To the authors, two-step surgical treatment seems to be an appropriate protocol And there has been no proof of significant tumor increase throughout the Interval.(8) In more advanced cases, systemic chemotherapy or radiation therapy may be used in combination with surgery. The role of immunotherapy in UTUC is still being studied, but early results have shown promise (9).

The prognosis for UTUC is generally poor, with a 5-year survival rate of approximately 50% (10). Bilateral involvement and the presence of lymph node metastases are negative prognostic factors (11). However, early diagnosis and aggressive treatment can improve outcomes.

4. Conclusion

Bilateral upper tract urinary cancer is a rare but challenging diagnosis that requires a multidisciplinary approach to management. Awareness of risk factors and early recognition of symptoms are key to achieving favorable outcomes. Further research is needed to develop more effective treatments for this aggressive malignancy.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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