



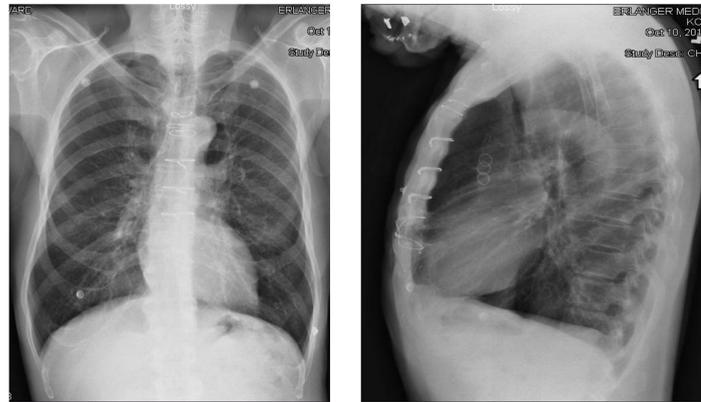
# Synchronous Triple Genitourinary Tumors

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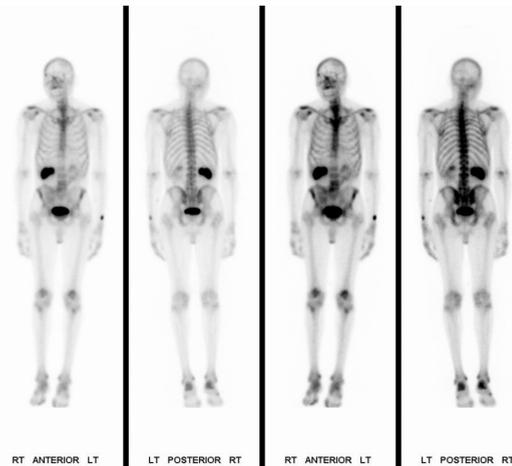
## HISTORY

-A 75 year old African American male and retired nylon factory worker, with a history of coronary artery disease, hypertension, hyperlipidemia, and COPD, presents with painless hematuria, urinary frequency and urgency, and progressive one-year weight loss.

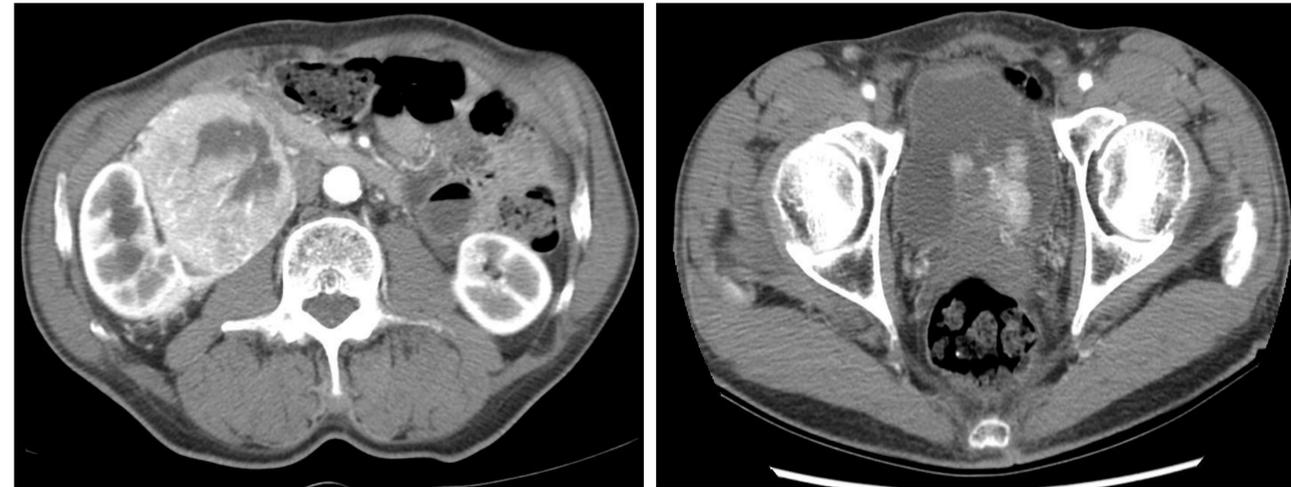
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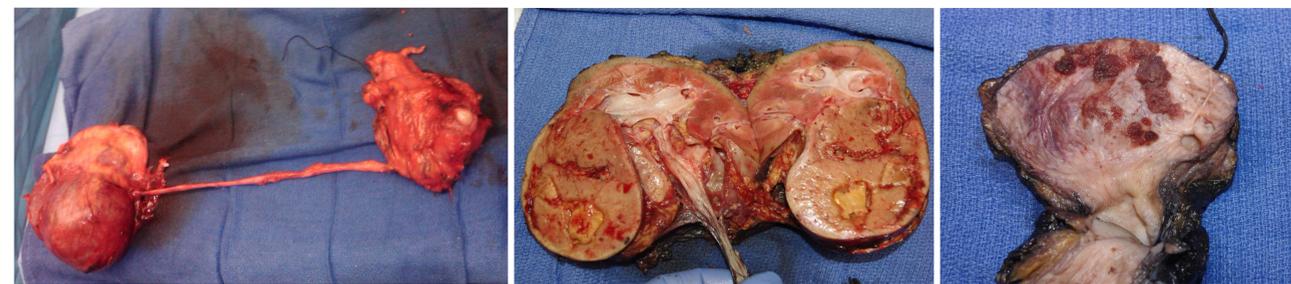
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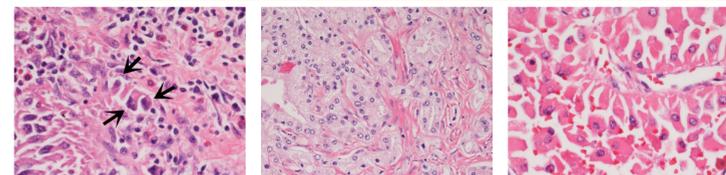


## OPERATIVE COURSE



-Open radical right nephroureterectomy and cystoprostatectomy with ileal loop urinary diversion and total retroperitoneal and pelvic lymphadenectomy.

## PATHOLOGY



-Papillary Renal Cell Carcinoma, Type II, Fuhrman grade III, pT2N0  
-Papillary Urothelial Carcinoma, multifocal, high grade with focal lamina propria invasion and negative margins, pT1N0  
-Prostatic Adenocarcinoma, Gleason 4+3=7, 5% of gland, pT2cN0

## DISCUSSION

- Three histologically distinct malignancies appeared simultaneously.
- The urogenital system exhibits an increased risk for separate primary malignancies. 10.3% of patients with genitourinary cancers have multiple primary tumors. The risk of bladder carcinoma is 18 times greater in patients with prostate carcinoma, and the risk of prostate carcinoma is 19 times greater in patients with bladder carcinoma.
- Synchronous triple genitourinary cancer of the kidney, bladder, and prostate is a very rare condition, with sixteen cases reported worldwide.
- Etiologies may include smoking, advancing age, genetic and environmental factors, occupational exposures, and atomic bomb radiation.
- A common carcinogenic model may involve mutations of tumor suppressor genes p53 and RB or prostate-specific membrane antigen (PSMA).
- This is the fifth clinical case reported in which complete surgical resection was performed in a single surgical session.

## ACKNOWLEDGEMENTS

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