UNUSUAL MIMIC OF BLADDER CANCER on MP prostate MRI

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Case report

63 year old male with elevated PSA of 12.7 ng/ml

Most recent biopsy showed Gleason score $4+5 = 9$

Pt has a past history of gastric bypass and renal transplant

Referring team requested a non contrast MRI of the prostate
PROSTATE MRI: Interpreted as PIRADS 5 lesion measuring 15 x 11 mm in the left posterior peripheral zone. No extracapsular extension, seminal vesicle involvement or enlarged pelvic nodes
Oval T1 hyperintense lesion projecting into the right bladder lumen with a cobra head appearance. Further evaluation revealed presence of multiple tiny hyperintense and low signal foci in the lumen compatible. Cystoscopy revealed a right sided ureterocele filled with numerous small calculi, mimicker of bladder mass.
Ureterocele at the right ureterovesical junction with numerous stones within the ureterocele
Description

Urethoecele refers to a herniation of the ureter as a result of weakness of the wall of the ureter resulting in ballooning of the terminal ureter into the bladder. Most urethoeceles are congenital, usually associated with the ectopic insertion of the ureter.

Recurrent urinary tract infection, dysuria, hematuria, calculus formation or symptoms associated with secondary hydronephrosis are the chief symptoms.

Most urethoeceles are associated with duplication of the collecting system.
Types of Ureterocle

- **Intravesical**: occur at the normal vesicoureteric junction position
- **Extravesical**: occur ectopically low and medial, near bladder neck/urethra
Radiographic findings

Round or oval contrast filling defect (Cobra head sign) or radiolucent halo effect at or adjacent to the ureteric orifice which may be distended, collapsed or everted

The lumen may contain multiple stones in some cases as in this case

Can cause bladder outlet obstruction especially with benign prostatic hyperplasia

Always evaluate the kidneys when you see the ureterocele, since there is an association with a duplicated collecting system.
References


Thank you!