

Vas Deferens Calculus: A Case Report



Medical Science

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ABSTRACT

Vas Deferens (Ductus Deferens) is part of the male, which transport sperm from the epididymis to the ejaculatory ducts, in anticipation of ejaculation. Vas Deferens Calculi are an extremely rare entity, hence it is difficult to establish a preoperative diagnosis. Here we discuss a vas deferens calculus that was misinterpreted for a ureteric calculus and was diagnosed post-operatively on CT scan, after intra-op findings were confirmed, which showed no evidence of calculus.

Introduction:-

Vas Deferens is a part of spermatic cord, which transports sperms from the epididymis to the ejaculatory ducts, in anticipation of ejaculation. Vas deferens calculus is a rare condition with no specific clinical symptoms.

Exact etiology of these calculi is unknown. Considering the rare incidence; a high index of clinical suspicion is needed to come to this diagnosis. The asymptomatic nature of these calculi makes diagnosis even more difficult.

Following is a case of Vas Deferens Calculus

Case report:-

A 40 yr old male patient, a known case of Diabetes Mellitus, came with chief complaints of burning micturition since 30 days associated with dysuria. No history of hematuria, pain, fever, vomiting or any other bowel complaints. Patient is an operated case of right renal calculi 4 years ago, details of which were not available; operated for open appendectomy 2 years ago. Patient is fertile and has 3 children.

On Examination:

General condition of the patient was unremarkable. On systemic examination per abdomen of the patient was soft, non-tender with good peristalsis.

Investigations:

Intravenous Urogram-

Minimal hydronephrosis on right side with loss of calyceal cupping. Both ureters are normal in course and calibre. A calculus is seen in the distalmost region of right ureter at UV Junction region.

Impression:

Minimally obstructive right uretero-vesical junction calculus.



Intravenous Urogram showing hydronephrosis and hydroureter on the right side

Urine routine within normal limits, urine culture- no growth.

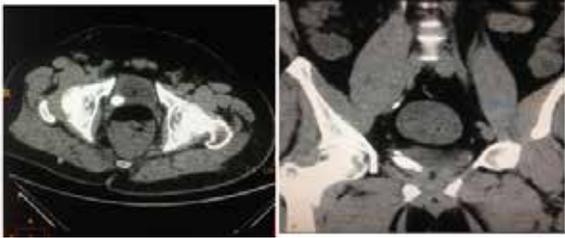
Procedure:

Right Uretero-rensoscopy with right DJ stenting was done; there was no evidence of calculus in right ureter; on cystoscopy-buldge in bladder wall at the level of right UV Junction probably due to mass (? calcified lymph node) pressing from outside over the bladder.



Post-operatively patient was taken in for a CT scan which showed 32.2x13.2 mm extravascular oval radiodensity posteroinferior to the right uretero-vesical junction displacing the UV junction antero-superiorly, likely to represent a calculus in right vas deferens. Subtle calcification is calcification seen in the bladder wall on left.

An MRI was done for academic purposes.



CT images showing calculus in right Vas Deferens



MRI images showing calculus in right Vas Deferens

Discussion:

Vas deferens calculi are rare conditions. Cysts and calculi of vas deferens are most commonly seen in terminal ampullary portion. Ampullary cysts and calculi frequently produce dilatation of proximal vas deferens as well as obstruction of ipsilateral seminal vesicle. Pathogenesis of such diffuse distal ductal fibrosis or calcification is unknown.

Vas deferens abnormalities that can be identified on TRUS in infertile patients, representing occlusion of vas deferens by fibrosis or calcification, obstructing cysts of vas deferens, vas deferens calculus

Clinical presentation discussion - Vas deferens calculus is a condition with non-specific urinary symptoms

Surgical Management - Excision of a segment of Vas Deferens

Conclusion:-

Though an extremely rare entity; a differential diagnosis of calculi should always be kept in mind and pre-operative diagnosis through CT scan TRUS should be done, when a patient comes with non-specific urinary symptoms.

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