Forgotten DJ Stent – A Case Report

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Abstract
Though Ureteral stents play a very salient role in open and endo-urological procedures these days, the potential complications related to their use should not be ignored. In this article, we report a case of forgotten DJ stent, who presented to us as a case of UTI. The relevant literature has been reviewed and the management has been discussed in brief.

Keywords: Ureteral Stent, Forgotten DJ stent.

Case Report
56/M, presented with complaints of lower abdominal pain, more at the end of micturition for 2 weeks. He also had complaints of burning micturition and increased frequency of micturition for 2 weeks. There was no history of hematuria/pyuria/fever. The patient had no significant past medical history. But, he gave us a history of having endo surgical intervention done 3 years back, but no details were available with him.

On examination, the abdomen was soft, and suprapubic tenderness was present. External genitalia examination was normal. Urinalysis showed 3-5 pus cells, no RBCs, No casts. X-Ray KUB was done as part of the routine investigations, which showed coiled DJ stent in the urinary bladder. USG abdomen and pelvis showed retained stents in the urinary bladder.

Hence, patient underwent cystoscopy under spinal anesthesia and the coiled DJ stents were removed in toto. On examination, the stents had encrustations.
The post-op period was uneventful, and the patient was discharged at day 2.

Discussion
Finney et al introduced the use of Double-J stents for urological conditions.(1) Since then, DJ stents play a major role in open and endosurgical interventions. DJ stents are usually placed short term (4-12 weeks), following endosurgical intervention, most commonly after Ureteroscopic Lithotripsy (URSL). Though they are widely used, their complications should not be ignored.

According to a study conducted by Ringel et al in 2000, 32% of patients had their ureteral stents removed sooner than planned due to complications attributable to the stent. The complications associated with stents are i) UTI, ii) Migration, iii) Forgotten stents, iv) Encrustation.

Retention of DJ stents occurs when they migrate or they are forgotten. In a study conducted by Monga et al of 31 patients of the retained DJ stents, 71% were forgotten while 29% were due to migration, 68% of the forgotten stents underwent encrustations.(2) The most common encrustations were Calcium oxalate, specifically monohydrate.(3)

A non-encrusted forgotten DJ stent can be removed endoscopically, but encrustations pose a problem for such removal. Removal of a forgotten stent is based on the degree of encrustation, and proximal coiling of the stent, which can be accurately assessed by CT. If there are no encrustations, the coil can be removed with endourologically. If gross encrustations are present, multimodal approaches involving SWL (Shock Wave Lithotripsy) or PCNL (Percutaneous Nephrolithostomy) may be required.(4) When all the above modalities fail, open surgery and removal of stent needs to be done.

Management of such complications is tedious. To avoid such situations, proper patient education about the stents, time of removal is necessary. Maintenance of stent registry plays an important role in avoiding forgotten stents

Conclusion
Ureteral stents are an important part of urological interventions. Hence to avoid complications from the stents, the patient should be adequately educated about the timely removal of stents, and maintenance of stent registry should be emphasized in urological practice.

References