52 Forgotten DJ stent for 10 years

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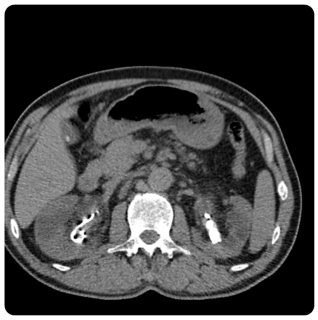
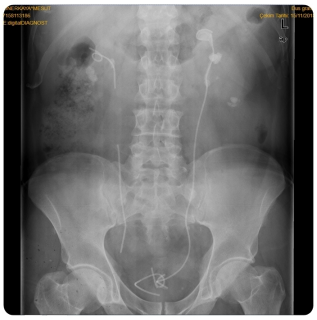
Introduction & Objectives: Ureteral stent is the frequently used devices in urological operations. If the time of removal of ureteral stents increases, the severity of the complications caused by the stent increases. These complications are occlusion, encrustation, breakage, stone formation, urosepsis, renal failure and even death. Herein,we report the approach of the our clinic to a patient with a 10-year indwelling ureteral stent.

Materials & Methods: A 60-year-old male patient was admitted to our urology outpatient department with dysuria. It was learnt, he had undergone bilateral ureteral DJ stent for bilateral ureteral calculi at another hospital 10 years ago. In direct urinary system graphy, a broken proximal and distal part of right DJ was seen (Figure1b). CT revealed retained bilateral ureteral stents with associated heavy encrustations around them (Figure1a). Firstly,we had performed ureterorenoscopy for removing of impacted ureteral stents. To mobilization of encrusted stent, we have used pneumatic lithotripsy (Figure1c-d), broken distal part and middle part of right DJ were extracted with forceps (Figure1f). A new DJ stent replaced to right side (Figure1e). Then patient underwent left PCNL for encrusted proximal part of left side (Figure1g). In another session,patient underwent right PCNL (Figure1h). The patient was discharged after fourth days of operation.

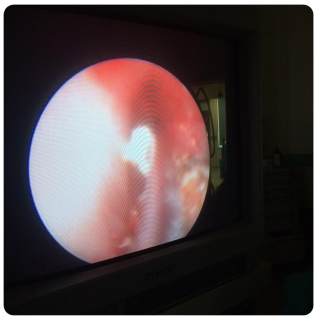
Figure 1: Preoperative,intraoperativ,postoperative radiological views and extracted material

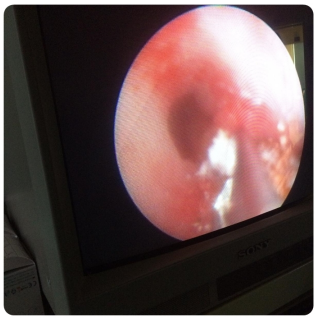


a)Preoperative CT view

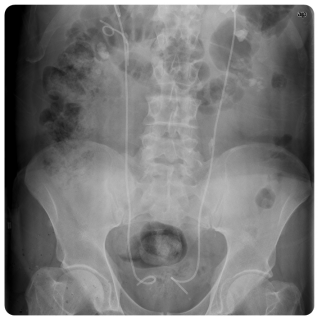


b)Preoperative direct urinary system graphy

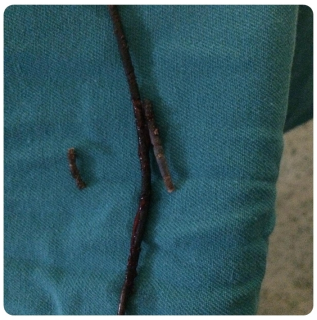




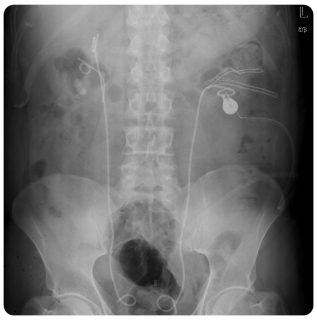
c-d)Ureteroscopic view:Using pneumatic lithotripsy



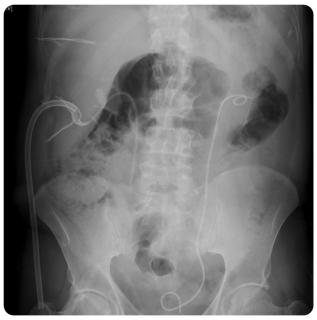
e)DUSG after ureteroscopy



f)Extracted pieces of DJ



g)DUSG after left PCNL



h)DUSG after right PCNL

Results: Encrustation is the most common complication of indwelling DJ stents. The mechanism is obscure. DJ fragmentation occurs in 0.3% to 10% of patients. Loss of renal function, pyonephrotic kidney causing nephrectomy have been declared. To evaluate encrustation, stone formation burden on the stents; non contrast CT can be used. There are some approach ways such as shockwave lithotripsy, ureteroscopy with or without laser, basket extraction, percutaneous nephrolithotomy, open, laparoscopic surgery.

Conclusions: To avoid complications, DJ stents should be registered in the hospital system properly and patients should be informed.