



## LONGEST DURATION FORGOTTEN DJ STENT-PRESENTING WITH RENAL FAILURE.

### Urology

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### ABSTRACT

A forgotten double J stent may lead to a variety of complications and their frequency increases when stents are left in place and forgotten for long periods of time. We present a case of twenty-nine years old young male who underwent bilateral ureteric reimplantation and open cystolithotomy at the age of four years for bilateral primary obstructive megaureter with a large vesical calculus and presented after twenty-five years with renal failure. His parents belonged to a low socio economic strata with a low education level. A combination of ureteroscopy, percutaneous nephrostomy, open surgery and percutaneous cystolithotripsy were used to remove the stent. The main cause of a forgotten stent is lack of communication on part of the treating doctor or lack of knowledge on part of the patient. So, its presence should be emphasised and a system should be maintained to send reminder to patient for indwelling stent.

### KEYWORDS:

Cystolithotripsy, primary obstructive megaureter, reimplantation, Stent, Ureteroscopy.

### INTRODUCTION

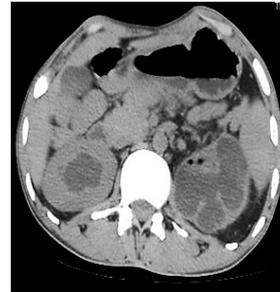
Double J stent was first used in 1967.<sup>1</sup> It provides a convenient way of drainage of upper urinary tract. Ureteral stents play a major role in drainage of urinary tract and are commonly used in day to day practice of urology.<sup>1</sup> Also, a forgotten double J stent may lead to a variety of complications and their frequency increases when stents are left in place and forgotten for long periods of time.<sup>1</sup> Here we present a case of twenty-nine years old young male who underwent bilateral ureteric reimplantation and open cystolithotomy at the age of four years for bilateral primary obstructive megaureter with a large vesical calculus and presented after twenty five years in renal failure.

### CASE REPORT

Twenty-nine years old male patient who presented to urology outpatient clinic with complaints of generalized body ache and weight loss for last two months, left scrotal pain and swelling for last one day. On examination patient had left epididymorchitis, lower abdominal transvers scar. In his history, it was learned that he underwent some surgery at the age of four years for which no records were available and parents were not able to elaborate the details. On evaluation, patient was found to have deranged renal functions. Sonography revealed bilateral gross hydronephrosis with internal echoes with double J stent seen in bladder, proximal tip not seen in renal pelvis (x ray image shown in fig 1). Non-contrast CT showed right gross hydronephrosis with double J stent coil in bilateral mid ureter and left pyonephrosis as shown in fig 2 and 3. Patient was taken up for bilateral PCN insertion. Initially left PCN drained pus and after 3 days PCN start draining urine. At that point of time patient was taken up for bilateral ureteroscopy and DJ stent removal.



**FIG 1: X ray showing b/l forgotten Encrusted dj stents**



**FIG 2: NCCT showing b/l gross HDN.**



**FIG 3 NCCT SHOWING ENCRUSTATIONS IN URETER**

Left DJ stent could be removed but right stent broke and lower half was retrieved to bladder but could not be retrieved completely. The upper half of stent was not retrievable as ureteroscope was not negotiable above mid ureter due to torque as orifice was reimplanted in the dome. After renal function improved patient was taken up for surgery and finally right ureterolithotomy and percutaneous cystolithotripsy was done to remove the stent. Patient was discharge in a stable condition and with normal renal function.

### DISCUSSION

The DJ stent is an important armamentarium as far as an urologist is concerned. However, many patients may complaint of stent syndrome comprising of flank pain and irritative voiding lower tract symptoms, hematuria, frequency, dysuria, and suprapubic pain occasionally. But the most feared complications can occur when the stent is forgotten. DJ stent can be forgotten if the patient or its attendants in case of minor

patients are not counselled properly about its presence and need of removal to prevent complications.

The DJ stent is a bi-edged sword both for urologist as well as the patient. It should be used only when justified. Its presence should be informed to patient as well as attendants and the need for its removal should always be emphasised. A forgotten DJ stent can lead to several complications. Also these complications increase in proportion to duration of stent. Kawahara et al, have observed that 26.8% stents got encrusted in less than 6 weeks indwelling time. The rate further increases to 56.9% at 6-12 weeks and 75.9% at more than 12 weeks' time.<sup>2</sup> Bultitude et al found that cystoscopic removal of stent becomes difficult in 42.8% of cases after an indwelling time of 4 months. Forgotten stents are difficult to remove usually requiring multiple procedures with sandwich therapy and multiple sessions.<sup>3</sup> In our case ureteroscopy, PCN insertion, percutaneous cystolithotripsy, and finally open surgery all were needed to make patient stent free. These all procedures add to morbidity as well as economic burden to the patient. As it is well known that prevention is better than cure, so it should be prevented as far as possible. Various authors have suggested different strategies to achieve this goal. Computerised DJ stent registry has been emphasised by many authors<sup>1, 4</sup>. Lynch M F et al have suggested electronic stent register and stent extraction reminder for stent removal to decrease incidence of forgotten stents and morbidity associated with them.<sup>5</sup>

To conclude, forgotten or retained DJ stent is a serious complication and can lead to deleterious effects such as renal failure. This is a real preventable problem. The main cause of a forgotten stent is lack of communication on part of treating doctor or lack of knowledge on part of patient. So, its presence should be emphasised and a system should be maintained to send reminder to patient for indwelling stent.

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**CONFLICTS OF INTEREST** None.

#### REFERENCES

1. Patil SM et al. Forgotten DJ stent – a source of morbidity: is stent registry a need of the hour? International Journal of Recent Scientific Research. 2015. Vol. 6, 2674-2676.
2. Kawahara T, Ito H, Terao H, Yoshida M, Matsuzaki J. Ureteral stent encrustation, incrustation, and coloring: morbidity related to indwelling times. J Endourol. 2012; 26(2):178-82.
3. Bultitude MF, Tiptaft RC, Glass JM, Dasgupta P. Management of encrusted ureteral stents impacted in upper tract. Urology. 2003; 62(4):622-6.
4. McCahy PJ and Ramsden PD: A computerised ureteric stent retrieval system. Br J Urol 1996;77(1):147-8.
5. Lynch MF, Ghani KR, Frost I, Anson KM. Preventing the forgotten ureteric stent: results from the implementation of an electronic stent register. BJU Int. 2007;99(2):245-6.