



CASE REPORT: A SUCCESSFULLY TREATED CASE OF A DJ STENT MIGRATING OUTSIDE THE URETER AND GETTING FIBROSED IN THE RETROPERITONEUM .

KEYWORDS

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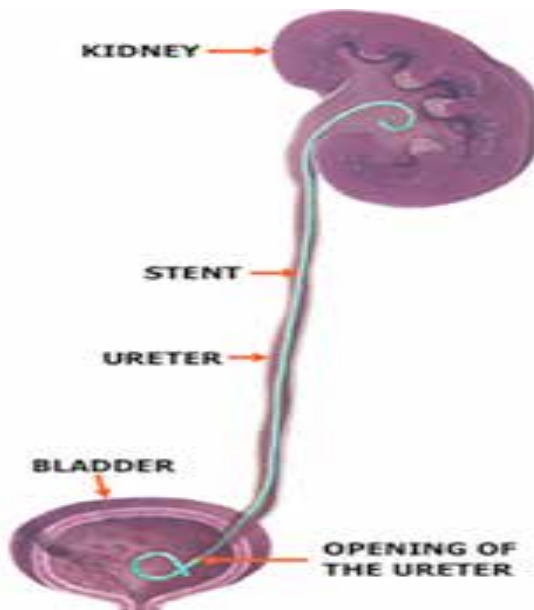
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ABSTRACT This is a case of lower third of the dj stent perforating the ureter and not causing a peritonitis . There was no leaking of urine from the perforation site to the peritoneum causing peritonitis. Only complication seen was the pain in the flanks.

Introduction

The cause of placement is generally to relieve ureteric obstruction, to promote ureteral healing or as a prophylaxis against possible complications. The most common indication of double J-stent treatment is renal or ureteric calculi to relieve ureteric obstruction and hydronephrosis, reducing pain, potentially limiting infection and facilitating the spontaneous passage of calculi (1,2). Other indications include relief of obstruction caused by malignancies or other extrinsic causes such as retroperitoneal fibrosis. Most of the double J-stents are placed endoscopically from a retrograde approach

The most common complication of ureteric double J-stents is "stent syndrome" including irritative voiding symptoms, flank pain, suprapubic discomfort and occasional hematuria. The lower urinary tract symptoms such as the irritative symptoms are probably due to irritation of the double J-stent in the bladder, and the upper urinary symptoms such as flank pain is probably caused by vesico-ureteric reflux(1). Migration of double J-stents, stent encrustation, urinary tract infections, hematuria, forgotten stents, bladder erosions and misplaced stents are other complications that have been reported (2). The encrustation of double J-stents can lead to blockage , pain and sepsis



History:

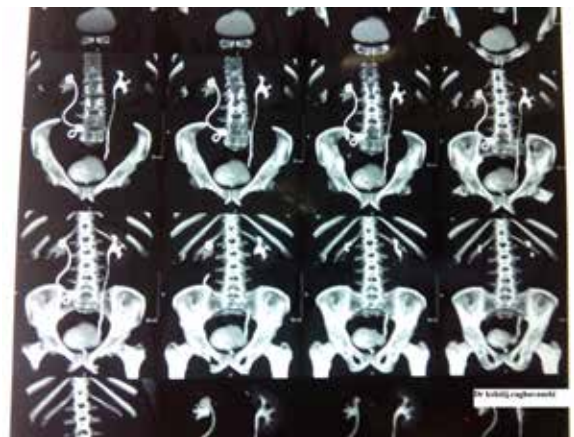
Gustav Simon described the first case of ureteral sondage during open cystostomy in the 1900s, and Yoaquin Albarann created the first ureteral stent in 1900. In the course of time, ureteral stents were improved to provide good urine drainage from the kidney with as few complications as possible . In 1974 the first commercial internal ureteral stent was made and described by Gibbons . The important problem of stent migration was solved in 1978 when double-J (DJ) stents were made. The tips of these stents are J-shaped and urologists place them endoscopically over the guide wire.

Case history :

A 43 years old male patient was referred to our hospital from a urologist with history of an attempt of removal of a DJ stent which did not prove successful .

On detailed history the patient narrated that he went to a general practitioner with a complain of pain in abdomen since 1 month 6 weeks back ,he was adviced a USG abdomen and pelvis which revealed a moderate hydronephrosis with partial hydroureter on right side after which he was planned for nephrostomy with DJ stenting on right side .

He underwent the procedure following which he told that he might have tuberculosis of the urogenital system as there was stricture in the ureter .



He was told to undergo a set of investigations which were negative. So he was told to take the stent out after 2 months of time

After 3 weeks of time the patients symptoms reduced after

another 3 weeks he went for the DJ stent removal , the attempt failed . He again went through a set of radiological examination to have a suspicion of DJ stent outside the ureter.

He was advised CT KUB which revealed the perforation and migration of the DJ stent partially outside the ureter without the formation of uroma and dense fibrosis around the part of DJ stent outside the ureter

After this he was referred to a urologist who tried removal by opening retroperitoneally but failed and then referred to us

Discussion:

Double-J stenting of the kidney for different reasons is a very important part of daily urological practice⁵. Ideal stent characteristics are easy insertion, completely internal placement, resistance to migration, easy removing, radiopacity, biological inertion, chemical stability, resistance to encrustations, non-refluxing, excellent flow characteristics and reasonable price⁶. Unfortunately, a stent with these characteristics does not exist in spite of many improvements in stent composition and design^{5,7,8}. Up to 80% of patients with ureteral stents have a wide range of urinary tract symptoms immediately after placement, measured by validated questionnaires⁹. However, indwelling ureteral stents can cause more serious complications in time, such as fragmentation, migration and incrustation^{10,11}. Indwelling time increases prevalence and consequences of all complications. Serious complications, even death, may happen as a result of cases of forgotten stents that stay longer than initially planned or more than six months¹². The most uncommon complication of ureteral stenting is erosion of the ureteral wall and fistulisation into adjacent structures.-arterial vessels or bowels¹³. The perforation of DJ stent into the peritoneum is an extremely rare, but possible complication.



Treatment :

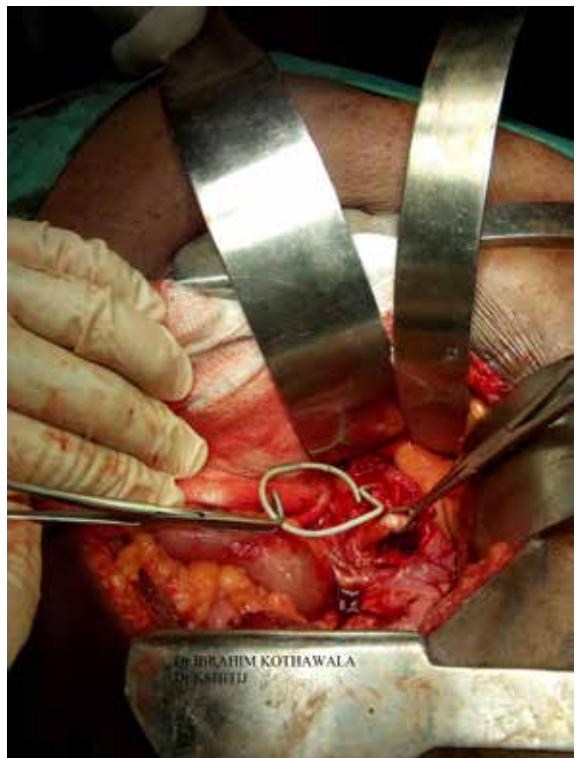
A proper review of reports and scan was done and a retroperitoneal approach was decided which was more posterior and exposed the whole part of DJ stent outside the ureter.

Before taking an incision a repeat trial was given with cystoscopy but the attempt was futile and procedure was



abandoned so as to prevent the breaking of the stent.

The retroperitoneal approach was taken and on separating the structures it was found that the lower 1/3 part of the DJ stent had migrated outside the ureter with dense strictures around the migrated part of the stent.



Conclusion :

Here we would like to highlight that the placement of the DJ stent is a procedure which should not be taken lightly as the complications of its can be life threatening. The unique feature of this case is that even on migration of the stent outside the ureter there was no formation of uroma at the site or peritonitis .

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