

CONCOMITANT MANAGEMENT OF BILATERAL OBSTRUCTIVE UROPATHY : A CASE REPORT

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ABSTRACT

A 13 years old female patient presented in our emergency department with chief complains of on & off fever for since 1 week and pain in right lumbar region and vomiting for 1 day. Patient had also complain of difficulty in micturition. Initially abdominal ultrasound was done which is suggestive of approx. 18x12 cm² sized multiloculated cystic lesion in right kidney with internal echoes with marked thinning of renal parenchyma p/o pyonephrosis and 19mm calculus in left renal pelvis and 9mm & 5 mm calculi in lower calyx. Initial investigation suggest altered renal function test with uremia. Initially, percutaneous nephrostomy was done on right side to relieve obstruction. After normalizing renal function, ct-kub done which is suggestive of large collection with surrounding fat stranding at right pelvi-ureteric junction with no passage of contrast in right ureter and there was partially obstructing renal calculus in left kidney. Then, patient undergone left pyelolithotomy. After few days, nephrostomogram was done through right nephrostomy tube which is suggestive of complete PUJ stricture. So, right side pyeloplasty was done. Patient was discharged satisfactorily with removal of both D-J stents few weeks later.

KEYWORDS : Pelviureteric Obstruction, Dilated Obstructive Uropathy, Bilateral Hydronephrosis, Uremia

Chronic Obstructive Uropathy is a condition characterized by slowly developing obstruction in the urinary tract, eventually resulting in an obstruction to the flow of urine. The obstruction can occur in one urinary tract or may involve both tracts simultaneously. The priority is prompt decompression of urinary system to prevent further damage to kidney. Definitive management can be performed thereafter.

Case Report

A 13 years old female patient presented in our emergency department with chief complains of on & off fever for since 1 week and pain in right lumbar region and vomiting for 1 day. Patient had also complain of difficulty in micturition. Abdominal ultrasound and plain radiograph of abdomen in standing position was done to rule out intraperitoneal pathology. Ultrasound was suggestive of approx. 18x12 cm² sized multiloculated cystic lesion in right kidney with internal echoes with marked thinning of renal parenchyma p/o pyonephrosis and 19mm calculus in left renal pelvis and 9mm & 5 mm calculi in lower calyx. Initial investigation suggestive of hemoglobin 9.1gm%, total Leucocyte 9200/cmm, serum creatinine 1.9mg%, blood urea 62mg/dl, serum electrolyte(Na⁺-140,k⁺-5.7). Emergency percutaneous nephrostomy tube was kept in right kidney from which 1200 cc frank pus was drained stat and sent for culture sensitivity which suggest no growth of organisms. Thereafter, daily 500 cc clear urine drained

daily. In between renal function check every alternate day which is decreased gradually. Once serum creatinine becomes normal, CT KUB was done which suggest peripherally enhancing ill-defined large collection with surrounding fat stranding is seen in perirenal space and extending into the right anterior and posterior pararenal space and right subhepatic region. On delayed images, excretion is seen into the distorted right renal calyceal system with no excretion into right ureter. Appro. 11.4x18.5x18 mm partially obstructing calculus is seen in the left renal pelvis. Patient was operated for left pyelolithotomy with D-J stent placement with right PCN in situ. After 5 days postoperatively patient had dressing soaked with urine at left incision site. X-ray KUB suggestive of incompletely situated D-J stent which was repositioned. After that soakage eventually stops. Wound was healthy and all stitches removed. Meanwhile patient had spontaneous removal of right PCN which was reinserted and 300 cc pus was drained. After that percutaneous nephrostomogram done after injecting 50 cc of 76% uroscan dye, which is suggestive of complete PUJ obstruction likely due to stricture (figure 1). Patient was operated for right pyeloplasty with D-J Stent insertion once urine culture suggestive of sterile urine. Surgery was progressed uneventful. Full stitches removed on 10th day without any morbidity. Patient was discharged. D-J stents were removed on both sides after six weeks.

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Figure 1 : Nephrostomogram of Right Kidney Showing Complete PUJ Obstruction

CONCLUSION

For symptomatic uraemia from obstruction, an antegrade and/or a retrograde decompression must be attempted bilaterally to improve renal salvage with normalization of renal function. Bilateral obstruction is step by step approach and time consuming but final results are very good with no significant morbidity and mortality.

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