



GIANT URETERAL CALCULUS: CASE REPORT

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ABSTRACT

Giant ureteral calculus is a rare disease. It remains one of the few special situations where classical treatment of ureterolithotomy is done. We present a case of a 33-year-old female who presented with left flank pain radiating to groin. Investigations revealed two giant ureteral stones measuring 8 cm and 2cm. She was submitted to open surgery. There were no postoperative complications and the patient was discharged from hospital after 4 days. An IVU done 6 months after intervention showed adequate drainage of contrast in bilateral kidneys. This technical procedure could be performed by means of laparoscopy and be even less aggressive.

KEYWORDS : Giant ureteric stone, Ureterolithotomy, 8cm ureteric stone.

INTRODUCTION

The life time risk of developing ureteric calculus is about 5% and they are usually small in size.[1],Wastenberg ,2002 ; [2] Gali ,2010} Depending on their size, they may pass spontaneously. However, stones larger than 1 cm in diameter and more than 0.1 g are less likely to pass spontaneously. Stones larger than 5 cm or 20 gm are called as giant ureteral stones. Etiology of them is mostly an impacted calculus which continue to increase in its longitudinal diameter silently or patients ignore there symptoms, lack of education or poverty.

We report a case of left giant ureteric calculi of 8 cm and 2 cm in length and 40 g in weight stones for its rarity. Which were removed in timely manner with least morbid procedure.

CASE REPORT

A 30-year-old lady presented in urology OPD of S.P. Medical College Bikaner with complaints of episodic pain in the left lumbar region radiating to the groin since 4 months. She was a home maker by occupation, non-smoker, illiterate and belonging to no affluent group. No history of lithogenic foods, stone provoking drugs and spontaneous stone passage in urine. The past history revealed the recurrent attacks of stone colic since 3 years. Previously she was treated with analgesics and the symptoms subsided. The general examination revealed low grade pyrexia and healthy look. The abdomen was un-remarkable. Her Hb % was 14 gram %, blood urea was 23 mg %, blood sugar was 110mg% and urine had traces of albumin, few pus cells and sterile on culture.

On evaluation she was found to have large calculus in the left lower ureteron USG-KUB. An X-ray of the kidney-ureter-bladder region showed two calculus. One long slender calculus and another small round one in the left lower 1/3rd ureter [Figure 1]. Her renal function was normal. Intravenous urography revealed good excretion of contrast from bilateral kidneys with moderate proximal hydroureteronephrosis on left side. There was no evidence of underlying metabolic or anatomical abnormalities.



Figure 1

X-ray of the kidney-ureter-bladder region showed two calculus



[figure 2]

Intravenous urography showed excreting bilateral kidneys.

After complete medical evaluation, She underwent left ureterolithotomy under spinal anesthesia. On exploration lower ureter was thickened and hugely dilated, both ureteric calculi were removed. Larger one of 8 cm in longitudinal and 2 cm in transverse length and smaller one of 2 cm in longitudinal and 1 cm in transverse length. [figure-3] The stones weighed 40 g. Uretrotomy incision closed in single layer. Post-operatively she recovered well and discharged and she remained well in follow-up.

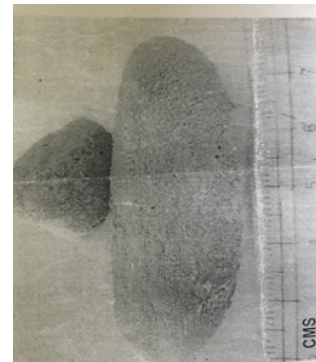
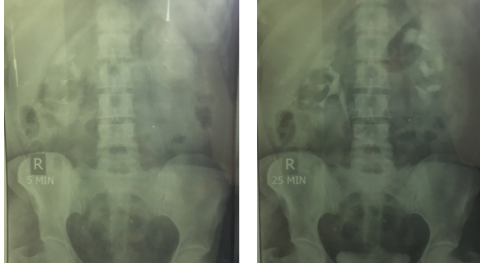


figure 3

Large ureteral calculus approx. 8 cm length

Her Intravenous urography after 6 months showed excreting bilateral kidneys with no radio-opaque shadow.[figure 4]

**figure 4**

6 months post-op IVU

DISCUSSION

Ureteric stones which exceed 5 cm in size are termed giant ureteric calculi and are rare.[3{ Hemal ,2003},4{ Lee ,2000}] . In world the largest calculus so far reported was by Mayer, which measured 11 cm × 5.5 cm × 5 cm and weighted 286 g while the longest stone reported was by Taylor,[5 {Taylor,1934}] which was 21.5 cm in length. The common clinical presentation is colicky loin to groin pain due to obstructive uropathy associated with frequency, urgency and dysuria. In none of the reported cases patient had any metabolic or anatomical abnormality. Most of the patients had minimal pain episodes, which were ignored for a significant time period. Giant ureteral stone can be treated by ureterolithotomy open/ laparoscopic/robotic with approach can be retroperitoneal or transperitoneal, ureteroscopic removal had been tried in few cases, Extracorporeal shock wave lithotripsy was done in one case of upper ureteric giant calculus.

CONCLUSION

Giant ureteric calculus is defined size more then 5 cm or weight more then 20gm.

No specific etiology could be identified other than patients ignoring symptoms or asymptomatic stones.

Treatment is best approached with ureterolithotomy with trend towards minimal access surgery.

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