

GIANT URETERAL STONE

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Abstract

The concretions which exceed 5 cm in size are termed giant ureteric calculi. We are reporting a young male who presented with left flank pain radiating to groin associated with frequency, urgency and dysuria. Investigations revealed left giant ureteric stone of 8 × 3 cm size and 71 grams in weight with gross left hydronephrosis and poorly functioning left unit. Left ureterolithotomy was performed. An IVU done 3 Weeks after intervention showed improved functions in left renal unit.

Keywords: Giant ureteric stone, Giant hydronephrosis, Uretrolithotomy.

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Introduction

The life time risk of developing ureteric calculus is about 5% and they are usually small.^{1,10} The concretions which exceed 5 cm in size are termed giant ureteric calculi² and are very rare. The ureteral stones are very small and about 50% of them are less than 5 mm in diameter.³ Urolithiasis may uncover the primary obstructive megaureter.¹¹ We are reporting a 25 year young male who presented with a left giant ureteric stone for its rarity and unusual presentation.

Case Report

A 25 years adult male admitted in the department of surgery unit – I, Peoples Medical College Hospital Nawabshah Sind Pakistan with the presenting complaints of colicky pain in the left loin radiating to the groin, dysuria, frequency and urgency. He was labor by occupation, 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 9 years and radiological stone detection since 7 years. The general examination revealed low grade pyrexia and healthy look. The abdomen was un-remarkable. His 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. The plain radiograph and excretory urogram showed giant uretric stone in the lower 1/3 of left ureter (Fig. 1), giant left hydronephrosis and hydroureter. The ultrasound abdomen revealed server left hydroneph-

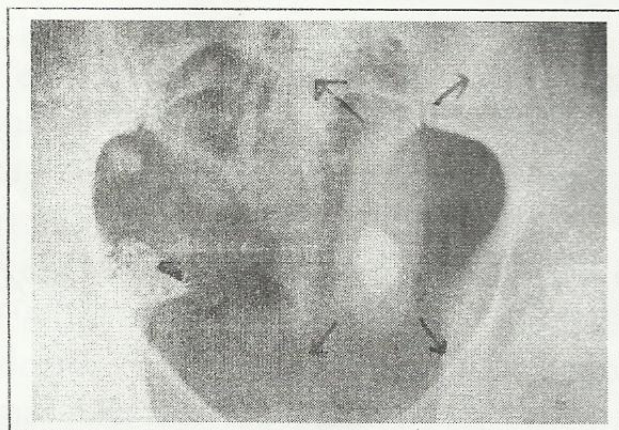


Fig-I

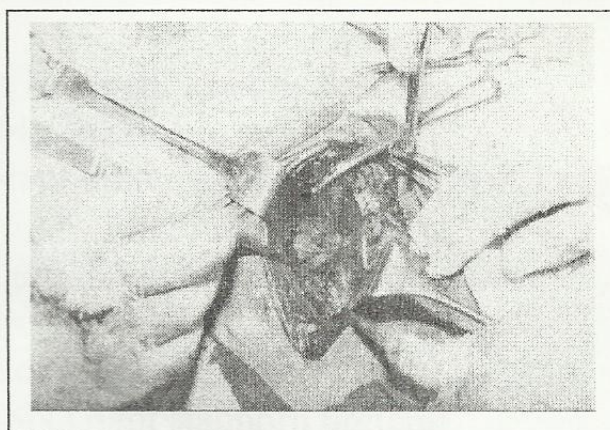


Fig.II

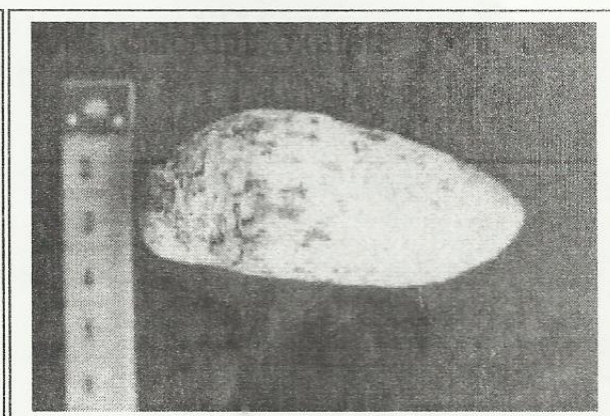
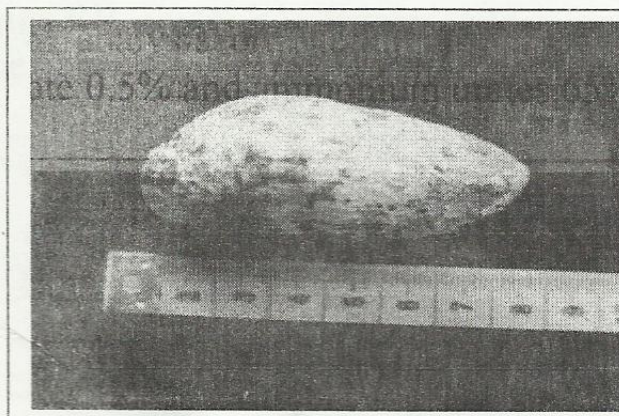


Fig-III

rosis and 8 × 3 cm stone in left lower ureter. The underlying anatomic and metabolic abnormalities were not detected.

After complete medical evaluation left ureterolithotomy performed (Fig. 2) under general anesthesia. On exploration ureter was exceedingly thickened and hugely dilated. Uretrotomy incision closed in single layer with open drainage. His post operative period was uneventful. An intravenous urogram 3 weeks after operation showed. Regression of hydronephrosis and hydroureter. The morphology of stone was oval shape, 8 × 3 cm size (Fig. 3) hard, grayish brown color and 71 grams weight. The chemical analysis on Merkognostic kit revealed calcium oxalate 35%, calcium phosphate 0.5% and ammonium urates 65%.

Discussion

Giant ureteric calculi are defined as more than 5 cm in

size in greatest diameter and weighing 50 gms in weight.⁴ The giant ureteric calculus is extremely rare entity.⁵ The largest calculus is reported by Mayers⁶ measuring 11 × 5.5 cm, weighted 286 gms, Taylor⁷ reported a giant ureteric stone of 21.5 cm size, and Ananthakirshnan reported a giant stone of 12 cm in length. The common clinical presentation is colicky loin to groin pain due to obstructive uropathy associated with frequency urgency and dysuria. Hemal A.K⁸ presented a case report of a young female with giant ureteric calculus and history of right flank pain, urinary tract infection and ipsilateral non functioning renal unit and nephroureterectomy was performed. Sabins RB⁹ presented a case report of giant ureteric stone with left flank pain, high grade fever, left pyonephrosis with left renal stone and nephroureterectomy performed. Sarikaya S, Jeong YB, Demirtas A, reported 11.5 cm, 6.2 and 6 × 4 cm respectively in their case reports.¹²⁻¹⁴ The presenting feature in this case report was colicky loin to gro-

in pain and gross derangement (hydronephrosis) of left renal unit due to obstructive uropathy at vesico-ureteric junction which required surgical correction.

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