

A Case Report of Giant Vesical Calculus

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Abstract: A giant vesical calculus is a contemporary urological finding. Vesicle stones comprise 5% of urinary tract stone. They occur in the presence of bladder neck obstruction, infections and foreign body. They are common in male. Giant vesical calculus is a rare but potentially life threatening condition that can lead to symptoms that importantly impairs life quality of the affected individual. They usually need open cystolithotomy to remove. This is a case report of one such case. Here we discuss about the presentation, underlying pathology, procedure done to remove the stone.

Keywords: Giant vesical calculus, Open cystolithotomy, Urinary tract infection, Bladder neck obstruction, Foreign body, Xray-KUB

1. Introduction

A giant vesical calculus is a contemporary urological finding. Bladder stones comprise 5% of urinary tract stone. They occur in the presence of bladder neck obstruction, infections and foreign body. They are common in male. They are usually removed by open cystolithotomy.

2. Case Report

Clinical presentation

A 60 years old male presented with complaints of lower abdominal pain, hematuria, strangury and urinary retention for past 2 months. Initial evaluation with X ray KUB revealed a large vesical stone. Further evaluation revealed benign prostatic hypertrophy with urinary tract infection.

Procedure

Open cystolithotomy is done. Calculus removed in toto. Bladder closed in two layers. The stone measures 9cm X7cmX6cm weighing 317 grams. The biochemical analysis of the stone revealed that the stone is composed of calcium oxalate predominantly and trace amount of calcium phosphate, calcium carbonate.

3. Discussion

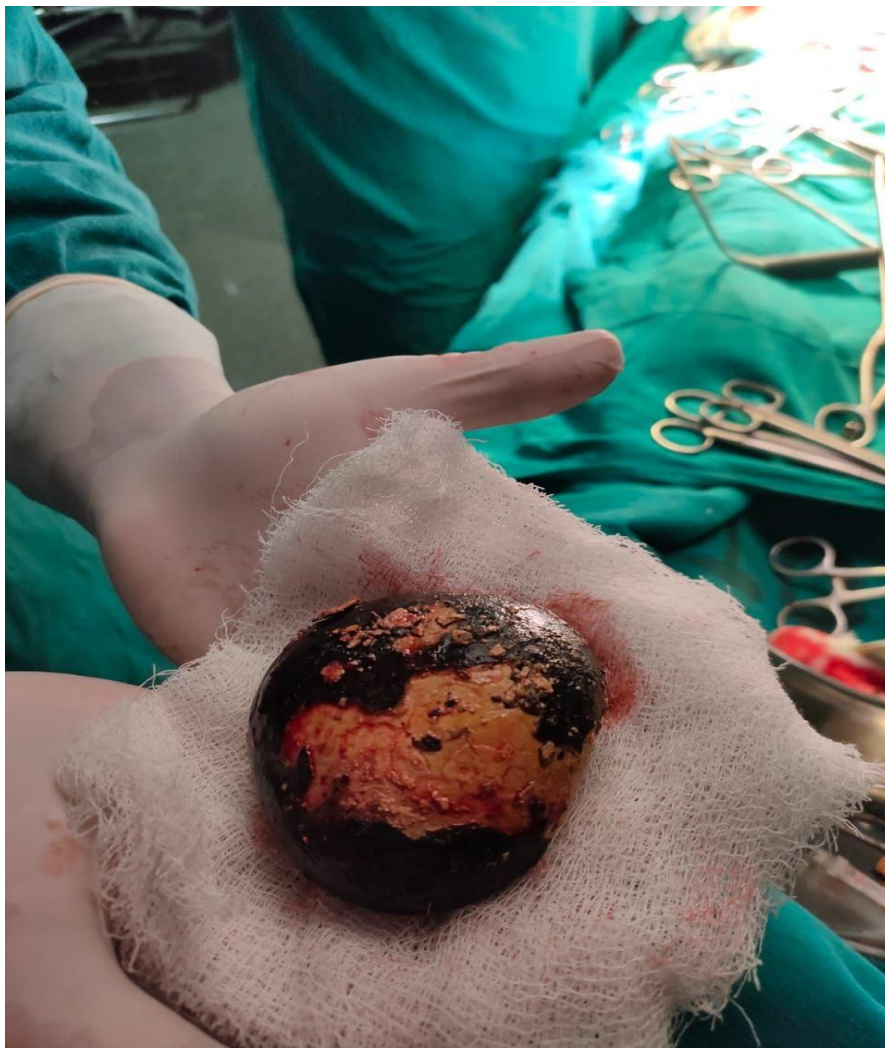
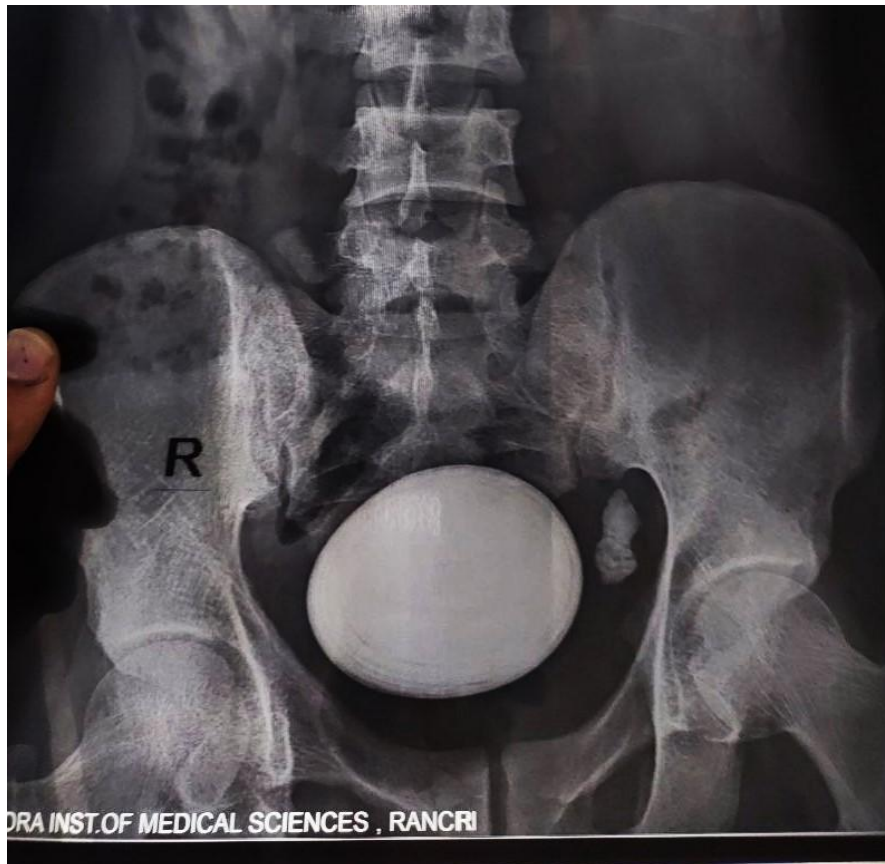
Approximately 10- 15% of the population is affected by urolithiasis. A urinary bladder stone is usually defined as a giant calculus when it weighs >100gms. A giant bladder calculus is particularly a rare condition and its development is usually associated with disorders that promote urostatics. It

often occurs in chronic urinary retention, bladder outlet obstruction, urinary tract infection, prolonged catheterization, foreign body and neurogenic bladder. It is thought that giant vesicle calculus develops from nidus of infected material or from a single ureteric calculus with progressive layer wise deposition of calcified matrix. Most bladder calculi are composed of triple phosphate, calcium carbonate and calcium oxalate. The presenting symptom of giant vesicle calculus range from a complete absence of symptoms to suprapubic pain, dysuria, intermittency, hesitancy, frequency, nocturia and urinary retention. Other common signs include terminal gross hematuria, sudden termination of voiding with some degree of associated pain referred to tip of penis, scrotum, perineum, back or hip. The majority of vesicle calculi are radio opaque and detected by plain radiograph. Other investigations which can show bladder stone are ultrasound, CT scan, MRI and iv urogram. This type of stone can lead to serious health hazards like hydronephrosis and renal failure.

Various surgical modalities are available for vesical calculi which include open surgical removal, extracorporeal fragmentation, cystoscopic crushing followed by extraction of pieces. For giant stones open surgery has been recommended as best modality.

4. Conclusion

Giant vesical calculi is a rare but potentially life threatening condition that can lead to symptoms that importantly impairs the life quality of the affected individual.



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