

**BLADDER STONE AS A RARE COMPLICATION FOLLOWING PROSTATIC
URETHRAL LIFT (PUL) FOR BENIGN PROSTATIC HYPERPLASIA (BPH)**

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ABSTRACT

Prostatic urethral lift (PUL) is a minimally invasive procedure associated with minimal complications and can be conducted under local anesthesia. Despite its generally low risk profile, there have been reported instances of complications post-PUL. In this context, we present a case involving the development of a bladder stone following PUL. This particular complication, as per existing medical literature, is relatively unique and not extensively documented.

KEYWORDS: Bladder stone, Prostatic urethral lift, Benign prostatic hyperplasia.

INTRODUCTION

Bladder stone formation post prostatic urethral lift (PUL) for benign prostatic hyperplasia (BPH) is a rare but notable complication that warrants attention in clinical practice. While PUL is generally considered a minimally invasive and safe procedure, instances of bladder stones as a complication have been reported in the literature.^[1,2,3]

This unique complication following PUL surgery stands out due to its uncommon occurrence and limited documentation.^[1] Understanding and recognizing this rare complication is crucial for healthcare providers to ensure optimal patient care and outcomes, particularly in the management of BPH-related lower urinary tract symptoms.

CASE PRESENTATION

A 71-Year-Old MALE patient was referred for an assessment of hematuria following a recent prostatic urethral lift (PUL) procedure for benign prostatic hyperplasia (BPH) at Tishreen University Hospital.

He presented with hematuria and mild dysuria that began six weeks post-surgery. Imaging via a CT scan revealed a metallic object with an attached bladder stone in the prostate area.

Subsequent cystoscopy unveiled a 2 cm yellowish stone adhered to the exposed PUL implant at the 7 o'clock position of the bladder neck.

Treatment involved Cystolitholapaxy using a holmium: YAG laser and transurethral excision of the lateral prostate lobe with the exposed implant.

Two months later, during a follow-up examination, the patient reported resolution of symptoms such as hematuria and dysuria, with no further visible exposed foreign bodies evident on subsequent cystoscopy.

DISCUSSION

The prostatic Urethral Lift (PUL) procedure has emerged as a minimally invasive and novel treatment option for individuals with Benign Prostatic Hyperplasia (BPH). The PUL procedure, designed to address Lower Urinary Tract Symptoms (LUTS) secondary to BPH, offers a less invasive alternative to traditional surgical interventions like transurethral resection of the prostate (TURP).^[4]

Clinical evaluations, meta-analyses, and systematic reviews have demonstrated positive outcomes and patient satisfaction with the PUL procedure. Research has shown that individuals undergoing PUL experience reductions in symptom severity, improvement in urinary function, and preservation of sexual function compared to conventional BPH treatments.^[5]

The presence of a bladder stone following a prostatic urethral lift (PUL) procedure for benign prostatic hyperplasia (BPH) raises important considerations in clinical practice, highlighting the need for vigilance in postoperative monitoring and management.

The rarity of this complication underscores the importance of understanding and addressing potential adverse events in patients undergoing PUL for BPH.

The unique nature of bladder stone formation post-PUL surgery emphasizes the importance of continued research and awareness regarding potential complications associated with this procedure. Healthcare providers must be vigilant in recognizing such uncommon complications to ensure timely intervention and optimal patient care outcomes. Imaging modalities play a crucial role in diagnosing and managing complications like bladder stones post-PUL, aiding in treatment decisions and patient management.

CONCLUSION

The development of a bladder stone as a rare complication following prostatic urethral lift for BPH warrants careful consideration in clinical practice. Enhanced understanding, early detection, and appropriate management strategies are essential to ensure favorable outcomes for patients undergoing PUL procedures.

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