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Case report

Management of a Lost Stone During Laparoscopic Ureterolithotomy: Video Article

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HIGHLIGHTS

- The lost stone during laparoscopy is a rare event and most reports are in gallstone surgeries.
- In laparoscopic ureterolithotomy with lost stone, the optimal management is controversial
- We believe that any effort should be performed to extract lost stone in laparoscopic ureterolithotomy cases due to the potential risk of abscess formation.

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ABSTRACT

Introduction

Laparoscopic ureterolithotomy (LU) is a viable option for large ureteral stones (1, 2). The lost stone during laparoscopy is a rare event and most reports are in gallstone surgeries. Most experts recommended that the lost gallstone should be extracted from the abdominal cavity to prevent abscess formation but in laparoscopic ureterolithotomy with lost stone the optimal management is controversial (3-5). We report our experience with a lost ureteral stone during laparoscopy and the technique that was successful to find it.

Case presentation

The patient was a 28-year-old man, presented with a 22 millimetres stone in the proximal part of the left ureter. The spiral computed tomography scan revealed severe hydronephrosis. The patient was positioned in the left flank and camera port inserted in the lateral border of rectus muscle then two 5 mm working ports inserted in the left upper quadrant and left lower quadrant, respectively. The ureterolithotomy process was performed uneventfully with Double-J stent insertion, but during the extraction of stone from 10 mm port, the stone was lost in abdominal space due to rupture of our endobag (which was a finger of a surgical glove). We extract the lost stone with stepwise searching of the dependent part of the abdominal cavity and found the stone in the dependent part of the right lower quadrant. The operative time was 165 minutes. The patient had no complication in the Post-operative course, the Foley catheter was removed on post-operative day 2 and the drain was removed on post-operative day 3. The patient was discharged home at post-operation day 4 and stent removed four weeks later.

Conclusions

We believe that any effort should be performed to extract lost stone in laparoscopic ureterolithotomy cases due to the potential risk of abscess formation and the probability of misleading imaging in the future follow-up of patients.

Keywords: Ureteral Stone; Laparoscopy; Ureterolithotomy

Authors' contributions

All authors contributed equally.

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Conflict of interest

All authors declare that there are no conflicts of interest.

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Ethical statement

All authors ensured our manuscript reporting adheres to CARE guidelines for reporting of case reports, and patient consent undertook before surgery.

Data availability

Data will be provided by the corresponding author on request.

Abbreviation

LU Laparoscopic ureterolithotomy

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