



A Novel Technique for stone management without ureterocele incision

CLH Leung, SMS Wong, JHK Ngan
eFLO UROLOGY

Objective:

Ureterocele is an uncommon condition, with stone inside being a rare condition. Incision of the ureterocele is typically necessary. Conventional wisdom is that ureteric orifice could not be found easily in such case and even when they could be found, it cannot be easily negotiated. Ureterocele incision to recover the stone is thus the usual management, with the risk of VUR. We aim to share a case demonstrating a technique to clear a stone without incising the ureterocele.



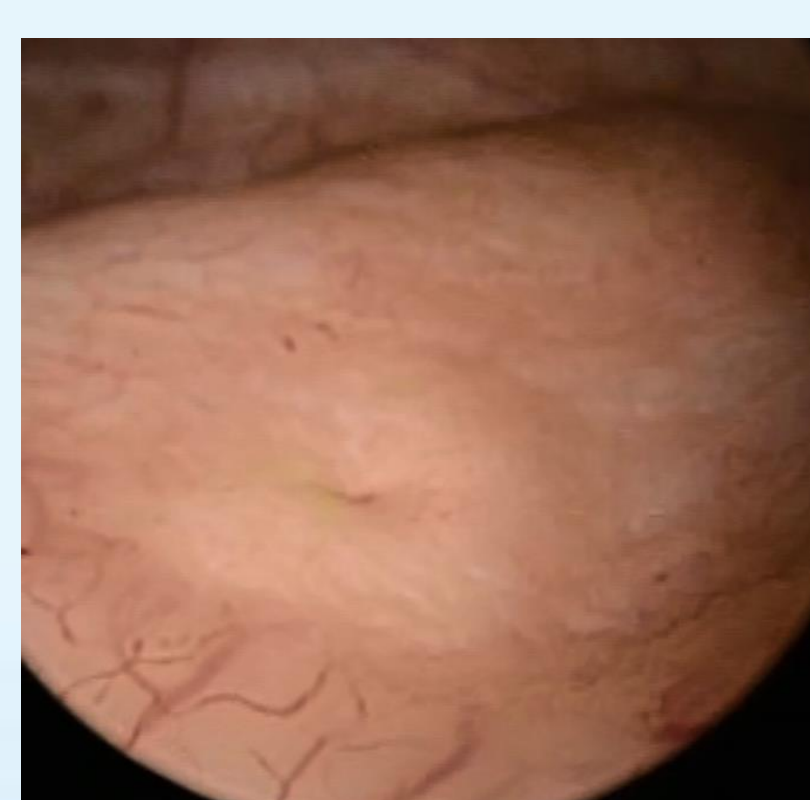
KUB Showing Left ureterocele stone



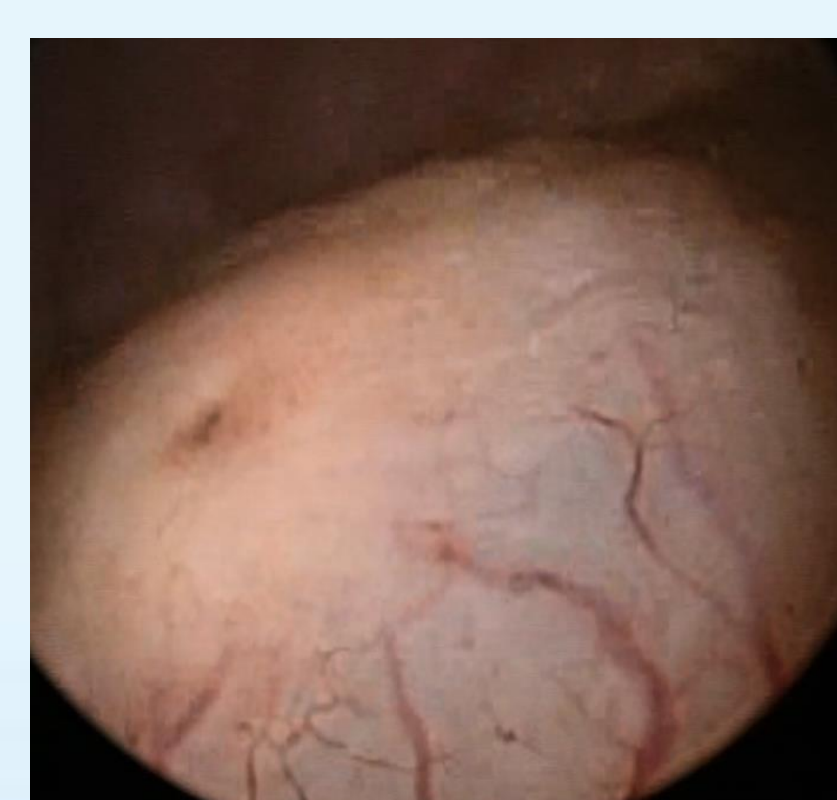
Reconstructed CTU showing left ureterocele

Patients & Methods:

We present a 70-year-old gentleman who complained of haematuria and left loin pain. CT urogram revealed a 6mm stone within a left ureterocele, accompanied by hydronephrosis. ESWL was attempted but failed to fragment the stone, leading to the decision for direct engagement. Patient was prepared for ureterocele incision. However, the ureteric orifice could be identified and it could be negotiated with a 0.035inch Sensor guidewire. A decision was therefore made for URSL, without dilatation or incision, sparing the patient from VUR.



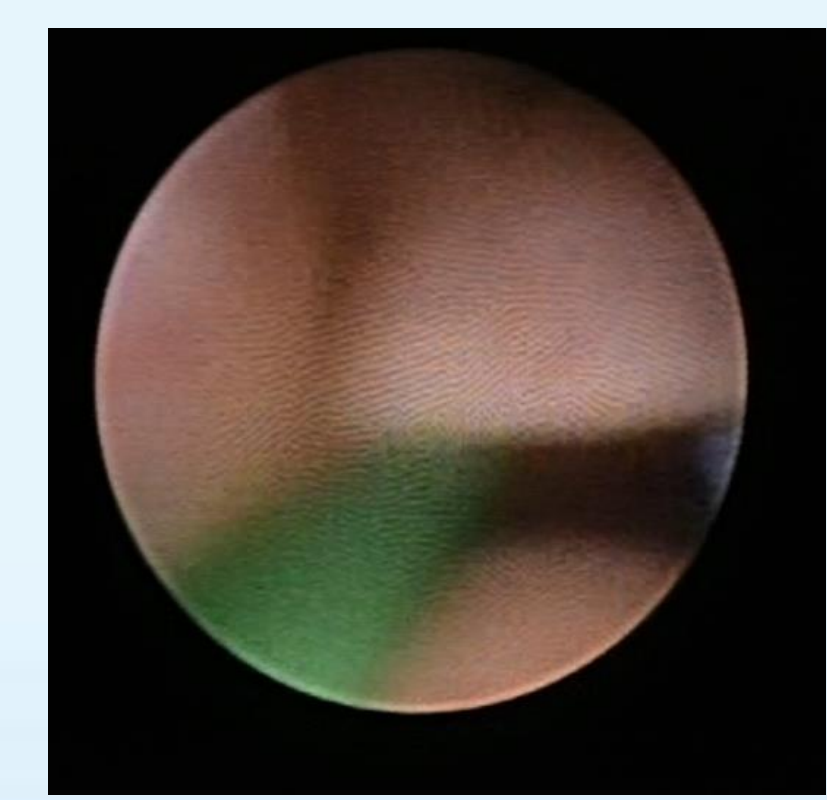
Step 1: identify the left ureteric orifice



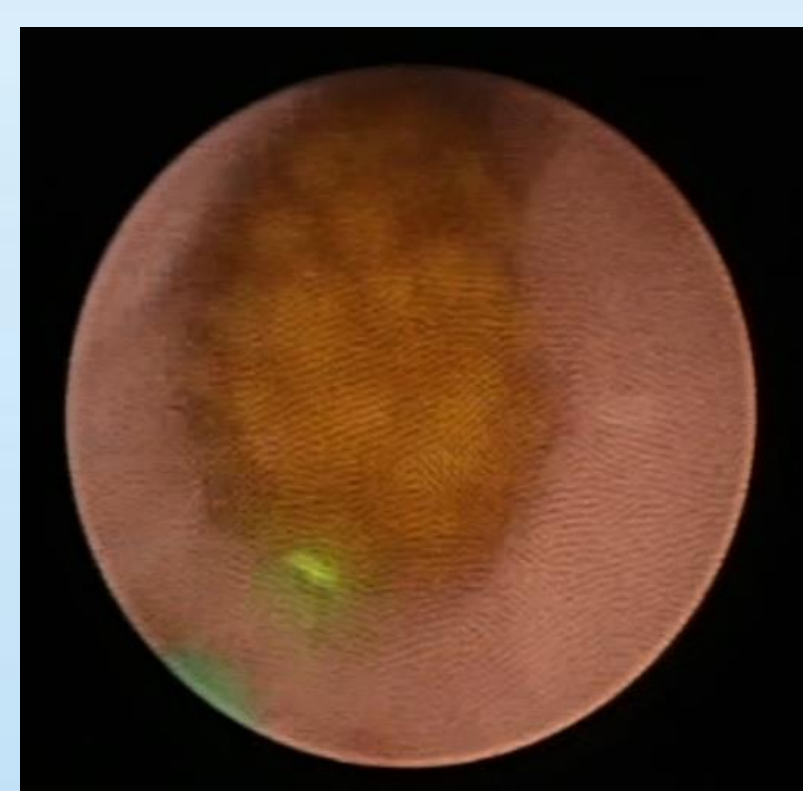
Protrusion of ureterocele noted upon peristalsis



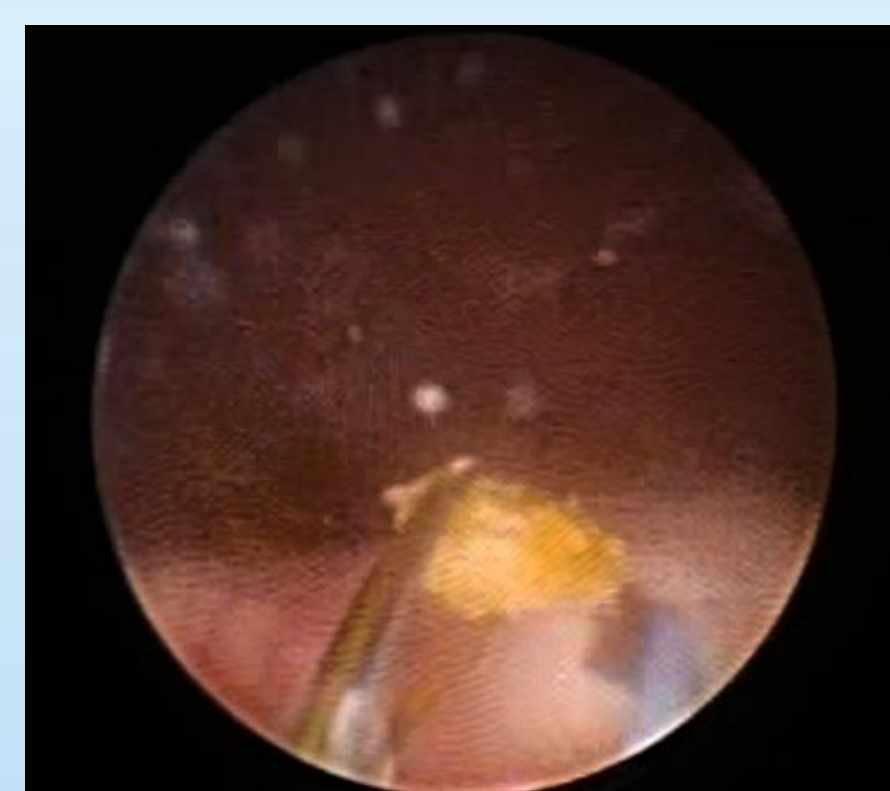
Step 2: Cannulate the ureteric orifice with guidewire



Step 3: Introduce semi-rigid URS with the help of Holmium-YAG LASER fibre and double-guidewire technique



Step 4: identify stone and fragmentation with LASER



Step 5: retrieve larger fragments with stone basket



Intact ureteric orifice noted post-operation

Results:

Postoperatively, the patient experienced slight haematuria on day zero but was otherwise well and pain-free. A JJ stent was not required, and a CT urogram reassessment is scheduled for six months later.

Conclusion:

Ureteric orifice in stenotic ureterocele is narrower than normal one but we found that it could be easily negotiated via gentle insertion of ureteroscope. It is a feasible option for managing stones within a ureterocele and thus a no-incision URSL should always be kept as an option.