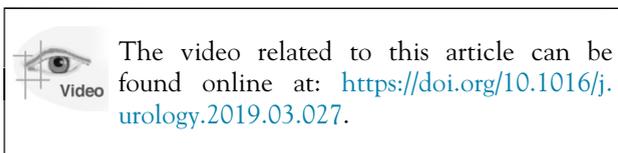


## Tips and Tricks for Performing a Retrograde Pyelogram



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<b>OBJECTIVE</b>	To demonstrate indications, review tools and techniques, as well as abnormal findings when performing a retrograde pyelogram.
<b>METHODS</b>	Retrograde pyelogram is a procedure which consists of introducing water-soluble contrast in a retrograde fashion into the ureter and collecting system of the kidney under fluoroscopic guidance. Conditions in which a retrograde pyelogram are indicated include iatrogenic ureteral injuries, ureteral obstruction, identification of stones or tumors, assistance for stent placement or ureteroscopy, and trauma evaluation. This video will explain surgical technique to perform a retrograde pyelogram in an operative setting. Normal and commonly encountered abnormal findings when performing a retrograde pyelogram will be reviewed.
<b>RESULTS</b>	This video will review a series of 8 cases and will demonstrate normal and abnormal findings and complications identified when performing a retrograde pyelogram. In some cases, anterograde nephrostogram was also performed to further delineate the ureteral injury or obstructions.
<b>CONCLUSION</b>	The tips and tricks reviewed can facilitate surgical techniques to perform a successful retrograde pyelogram and identify abnormal findings; especially in situations in which a urologist is not readily available. A retrograde pyelogram can be performed intraoperatively to identify iatrogenic ureteral injuries, ureteral obstruction, identification of stones or tumors, assistance of stent placement and ureteroscopy, and evaluation of trauma. UROLOGY 129: 234, 2019. © 2019 Elsevier Inc.



**Funding:** No financial support.

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Submitted: October 25, 2018, accepted (with revisions): March 29, 2019