

EXCISION OF PERFORATED TVT MESH SEGMENT WITH SUPRAPUBIC-ASSISTED OPERATIVE CYSTOSCOPY

Synopsis of Video

The purpose of this video is to describe a novel, minimally-invasive approach for excising an intravesical TVT mesh segment. The patient is a 26 year old G2P2 female who was referred for management of a polypropylene mesh (TVT) segment perforation that was diagnosed 4 months after her TVT surgery. Within days of the procedure, she developed swelling in her left labia and was found to have an elevated serum creatinine. The patient also complained of urgency, frequency, suprapubic pain and dysuria, and was treated for recurrent urinary tract infections. Outpatient cystoscopy revealed the presence of a 2-3 cm segment of polypropylene mesh on the left side of her bladder. Under general anesthesia, a flexible grasper was placed through the operating channel of a 22 Fr cystoscopy sheath with a 70 degree lens. A 5 mm laparoscopic trocar was inserted suprapubically directly into the dome of the bladder. With the flexible grasper putting tension on the mesh, standard laparoscopic scissors were introduced into the suprapubic port and the superior portion of the mesh segment was cut at the level of the bladder mucosa. The inferior portion of the mesh segment was then cut with flexible cystoscopy scissors, while tension was applied with graspers inserted through the suprapubic port. The patient was discharged home the same day with a transurethral catheter. She was placed on nightly Ciprofloxacin post-operatively for 10 days, and then had a retrograde cystogram, which demonstrated a normal appearing bladder and no evidence of dye extravasation. The catheter was then removed. The patient continued to be continent and reported resolution of her irritative symptoms. This case report demonstrates an alternative approach to sling segment excision in the bladder. By applying laparoscopic surgical principles to this condition, tension could be applied while cutting the perforated mesh. Inserting a 5 mm suprapubic port directly into the bladder is no more traumatic than the insertion of a standard suprapubic drainage catheter, and its use greatly facilitated the procedure. This novel approach avoids the more conventional, open techniques that are often recommended for the treatment of this condition. It is possible that this technique of intravesical operative cystoscopy may be used for other complicated urologic disorders, which may obviate the need for more invasive surgery.