TIPS AND TRICS: HOW TO INSERT AND HOW TO USE URETERIC CATHETER (LIGHTED/NON-LIGHTED) IN DIFFICULT GYNECOLOGICAL CASES

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ABSTRACT

Study Objective: This video demonstrates how to insert ureteric catheter (lighted/non-lighted) and how to use in difficult gynaecological cases with high risk of ureteric injury. It also shows how ureteric catheter can prevent ureteric injury at all levels (pelvic brim, ovarian and uterine vessels, pelvic side wall, vaginal cuff).


Setting: Ureteral injury is a rare but important complication of gynecologic surgery with serious morbidity. Gynecologic surgery accounts for 75% of iatrogenic ureteral injuries. Incidence of ureteral injury is 1-8% during abdominal and pelvic surgery (1). Nearly half of them diagnosed after the operation. Ureter is most likely to be injured during diathermy and cutting of ovarian and uterine vessels, pelvic sidewall dissection and closure of vaginal cuff angle. Cystoscopy and dye study is a common practice to rule out ureteric injury. It is usually done at the end of the operation. But it can miss as many as 60% of the ureteric injury since most of the injuries are thermal injuries. Also it does not prevent ureteric injury and does not help for ureteric identification and dissection.
There is no randomized controlled trial about use of infrared ureteric catheter. But retrospective study showed that there was no ureteric injury when infrared ureteric catheter used in difficult cases (1). Infection, hematuria, temporary complete anuria from ureteric catheter insertion were reported (2). But undiagnosed ureteric injury can cause loss of renal function and lifelong disability (1).

**Intervention:** Ureteric catheters were used in following cases. **Case 1:** Laparoscopic excision of peri-ureteral endometriosis **Case 2:** Laparoscopic Right oophorectomy for persistent ovarian complex cyst after failed oophorectomy by laparotomy. **Case 3:** Total laparoscopic hysterectomy for cervical- intra-ligamentous fibroid **Case 4:** Total laparoscopic hysterectomy in a patient with the history of bilateral ureteric re-implantation **Case 5:** Total laparoscopic hysterectomy and bilateral salpingo-oophorectomy in a frozen pelvis with bilateral endometrioma.

**Measurement and Main Results:** None of the patients had any post-operative complications.

**Conclusion:** Prophylactic use of infrared ureteric catheter in difficult gynaecological cases may reduce risk of iatrogenic ureteric injuries.

**REFERENCES**