Ureteric Injury
During Lap. Hysterectomy
History

- A 54 yr. old female patient presented with urine leak from lower ab.wound-2 weeks.
- She developed a tender swelling in the lower abdomen which was incised resulting in urine leak
Past: Underwent Lap. Hysterectomy 6 M back

- Fifth post.op day developed lower ab. pain ileus, associated with fever.
- USG showed urinoma and Rt. HDUN.
- Exploration revealed lower ureteric injury, drained the urinoma and uretroneocystostomy performed on a DJ stent.
- She was doing well all these days till she developed urinoma again 6 m. after surgery.
Failed retrograde stenting

• Antegrade stenting attempted.
• But urine continued to leak from the lower ab.wound.
• Cystoscopy revealed absence of DJ stent in the bladder.
• RFT-normal(S.cr:0.7)Hb% was low and urine C/S- sterile.
Exploration through the same midline incision

• Post.op bowel adhesions-released.
• Ureter was identified after mobilizing the caecum over the ileac vessels and traced down opening into a big cavity over the dome of the bladder.
• Thick walled cavity and thickened ureter. The DJ stent was coiled in the cavity.
• Bladder was mobilized and Psoas hitch-ureteric reimplantation could be performed.
• Serosal injury of the bowel –repaired
• SPC and urethral catheters are left.
• Post op –ileus continued for 4 days.
• On 5th post op :moved her bowel,drains removed.Discharged
Review of literature

• The incidence of ureteral injury (including transaction, obstruction, fistula formation, and necrosis from thermal injury) during gynecologic laparoscopy as ranging from < 1% to 2%.

• Ureteral injury was reported in 1.7% of cases with no differences found in incidence of ureteral injury among abdominal hysterectomy, vaginal hysterectomy, or laparoscopic hysterectomy.

• However, other studies have noted a higher risk of ureteral injury with a laparoscopic approach to hysterectomy when compared with an abdominal or vaginal approach.
How to prevent? Especially in difficult pelvic surgery

- Prior stenting may not be useful
- Illuminated ureteral stents can be tried
- Exposure of the ureter is better lateral to the IP ligament in malignant conditions
- Skelenisation of uterine arteries is better at the internal os level
- Pull the uterus upwards to taught the uterine arteries, so that they can be clipped clearly.