

- Common complications of laparoscopic surgery for Endometriosis are inability to complete surgical removal of endometriotic lesions and recurrence because of chronic behavior of disease and incomplete removal.
- Post-operative recurrence rate is 21% at the end of 2 years and 40-50% at the end of 5 years even with expert hands. So if surgical clearance remains incomplete one can imagine the possibility of recurrence.
- My observation during laparoscopy is that area behind ovary should be watched for Endometriotic lesion on pelvic walls, uterosacral ligaments and rectovaginal area showing puckering/fibrosis or pigmented lesions should not be missed.
- Common lesions are : Endometrioma (Chocolate cysts) , superficial pigmented lesions, recto-vaginal endometriosis, abdominal wall scar endometriosis, stricture & multiple lesions in recto-sigmoid, bladder endometriosis, pelvic adhesions, frozen pelvis.
- Risk factors for post-operative recurrence are :- younger age at the time of surgery (<25 years), bilaterality, size of endometriotic lesion, revised AFS score > 24, pre-operative cyst rupture, type and extent of surgery [Laparoscopy less risk Vs Laparotomy] and post-operative interventions like pregnancy/aggressive fertility treatment, medical treatment- response to various treatment for prevention of recurrence, OCPs, Progesterone, Danazole, GnRh analog, Dienogest etc.
- For prevention of recurrence – Preoperative evaluation in the form of-symptoms- asking about dyspareunia, dysmenorrhoea, chronic pelvic pain, urinary and rectal symptoms, dyschezia and doing P/V & P/R, Bi-manual examination helps a lot.
- For prevention of recurrence – Preoperative assessment in the form of T.V.S., trans-Rectal USG, M.R.I., I.V.P./Barium Study, O.C. Pill trial, Ovarian suppression trial with GnRh analog and sigmoidoscopy are useful.
- For prevention of recurrence – Preoperative preparations such as counseling-about possible complications, results, re-occurrence, bowel preparation-liquid diet, erythromycin/Neomycin, Fleet /preglac enema, Urologist / G.I. Surgeons consultation – are very essential.
- For prevention of recurrence :- preoperative good preparation, anticipation of recto-sigmoid, bladder and ureter involvement, counseling with patient and her relatives about possible complications and associated surgeries, help of G-I surgeon and urologist during surgery.
- Principles of Re-do surgery –honor/respect the work of previous surgeon’s work-never criticize; don’t give false Hope; do optimum counseling; take consent for bowel /urinary surgeries if required and do exhaustive pre-op evaluation & preparation by liquid diet & peglac.
- Surgical tips for prevention of recurrence during operation&Principles of Re-do surgery : – Meticulously seeing the previous surgery video/reports, H/o of AKT taken, , talking with previous surgeon and in current surgery documentation&recording of laparoscopic surgery, sharing the video with senior/experienced consultant and future possibility of second opinion by showing video to another consultant in event of ReDo surgery.
- Surgical principals : - Laparoscopic approach is superior over laparotomy because of magnification, pneumo peritoneum creates good operative cleavages/dissection areas, varieties of dissection techniques-blunt and sharp dissection with stretching tissues on opposite ends and cutting at operative site under vision with all the three operating surgeons contributing during surgery by simultaneously seeing picture on monitor gives better surgical outcome, complete resection of the disease by searching for it at retro-peritoneal / pelvic side wall, ovarian fossae& ovaries, recto-vaginal area & pouch of Douglas, ureters and recto-sigmoid area. Understanding normal and distorted anatomy.
- Child bearing age patients should be counseled to try pregnancy aggressively after surgery instead of postponing pregnancy by GnRh analog or medical treatment as after surgery in first nine months gives best fertility results.  
**PREGNANCY CURES THE DISEASE.** Patients who had completed child bearing function should plan post-operative medical treatment –in the form of LNG-IUD, OCPill, Progesterone, Dinogest for prevention of recurrence.
- **Conclusion:** If patient’s ovarian reserve ( S.AMH level & Antral follicle count in TVUSG ) is normal and if you can archive good post-operative tubo-ovarian relationship with opened fallopian tubes DURING LAPAROSCOPIC SURGERY YOU can recommend spontaneous pregnancy by natural conception for 3 months followed by IUI 3 cycles and followed by IVF. Endometriosis always requires ART/IVF is wrong & option of Natural conception should be offered before IVF. Best fertility outcome seen in first **NINE** months& medical/alternate treatment suppresses the diseases- Never cures-Delays Ovulation/postpones pregnancy in most fertile window period. Understand the difference between superficial lesion and deep infiltrating lesions with patient’s main reason for coming to you is infertility or pain affecting quality of her life during period.
- **For detail description of actual lecture- video visit at <https://www.youtube.com/watch?v=fe7x54ifDP4>**