Robotic Sacrocolpopexy
Comparative Techniques and Pearls

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Indication for Sacrocolpopexy

- Stage 2-4 posthysterectomy prolapse or uterine prolapse if concomitant SCH or TLH
- Foreshortened vagina
- Failed vaginal apex suspension procedure
- Denervated pelvic floor
- Comorbid states of increased intrabdominal pressure
- Heavy manual labor
- Age of patient?
Patient Prep Positioning

- Pneumatic Compression Devices or SQ Heparin, bowel prep, broad spectrum antibiotics
- Egg crate to mattress or inflatable bean bags so that the patient does not slip up the bed
- Flexion of the hip and careful placement of legs in stirrups
Positioning is VERY IMPORTANT
Trocar Placement

A. Superficial epigastric artery
   - External iliac artery

B. Rectus muscle
   - Inferior epigastric artery
   - Superficial circumflex artery
   - 5-12 mm port
   - 8 mm robotic port
Key Steps in Sacrocolpopexy

1. Presacral dissection
2. Incision or tunneling to rectovaginal space
3. Rectovaginal dissection
4. Vesicovaginal dissection
5. Anterior mesh or arm attachment
6. Posterior mesh or arm attachment
7. Attachment of mesh to anterior longitudinal ligment
8. Retroperitonealization of the mesh
Videos

- Gaining Exposure
- Presacral Dissection
- Rectovaginal Dissection
- Bladder Dissection
- Attach the graft
  - Apex first so that you know how to tension
  - Anterior to Retract Forward
- Presacral Stitches
Smart Robotic Tools

- Decrease need to close lateral port by using small needles through 8 mm port
- Kit for sutures and needles—very innovative for the surgeon without assistance
- Minimize robotic instruments to save cost
- Taking out a cervical core and placing a vaginal transcervical port
- Timing of Peritoneal Closure
Results: Angles of Descent

L5 to S1 Vertebrae

Maximum angle
- CT: 89
- Cadavers: 81

Average angle
- CT: 65
- Cadavers: 61
- $P = .016$

Minimum angle
- CT: 43
- Cadavers: 40
Conclusions

- Optimal graft fixation location at S1

- S1 nerve may be as close as 1.5 cm from midline

- ~ 3 cm from the upper surface of the sacrum
- Adequate exposure of anterior longitudinal ligament
- Precise visualization of entry & exit point of needle

Avoid S1 Nerve Injury
Pelvic Floor Dissection
Final Points

- Have fun
- Do the right thing for your patient
- Good luck!
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