

**Evidence Based Surgical
Management of POP; Traditional
Repairs**

**1st ANNUAL MIPS MEETING
AUGS LECTURE**

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Goal of Reconstructive Pelvic Surgery

- 1. Restore Anatomy ;Correction vs. Overcorrection**
- 2. Restore Or Maintain Visceral Function Bladder and Bowel**
- 3. Restore Or Maintain Sexual Function**

Type of Procedures

- 1) Restorative which use the patient's endogenous support structures.
- 2) Compensatory which attempt to replace deficient support with some type of graft.
- 3) Obliterative which close the vagina.

Defining Success for Prolapse Surgery

- Some degree of loss of anatomic support is normal
- Perfect anatomic support is associated with worse HRQOL
- Symptomatic cure is more clinically relevant than anatomic cure
- Definitions of anatomic success commonly used are too strict and often not clinically relevant

What is long-term follow up?

- The efficacy and safety of surgical interventions requires to be judged over a longer timescale than that of nonsurgical treatments.
- The ICI (1999) defined durations of surgical follow up: short term being up to 3 months, medium term from 3 to 12 months and long term over 12 months.
- The consensus view is that in order to be considered safe and efficacious in the long-term, surgical procedures for POP require evaluation over at least 5 years.

Preoperative Discussion Points with Patient

- **Sexual Activity**
- **Need for hysterectomy**
- **Route of surgery**
- **Native tissue repair vs graft augmentation**
- **Occult SUI**
- **Long term outcomes**
- **De Novo development of functional derangements**

Keys to Successful Vaginal Repair

- **Correct All Defects**
- **AVOID DISTORTION OF VAGINAL AXIS**
- **Preserve Vaginal Length (Minimum Of 7 cm)**
- **Create Normal Vaginal Caliber**
- **Avoid Constriction Rings**

Cochrane Review 2013 (Maher et al)

- *40 RCT evaluating 3773 women.*
- **Abdominal sacral colpopexy was better than vaginal sacrospinous colpopexy for recurrent vault prolapse (RR 0.23, 95% CI 0.07-0.77) and dyspareunia (RR 0.39, 95% CI 0.18-0.86).**
- **Sacrospinous colpopexy was quicker, cheaper and women had an earlier return to activities of daily living.**

Cochrane Review 2013 (Maher et al)

- Standard anterior repair was associated with more recurrent cystoceles than when supplemented by polyglactin (RR 1.39, 95% CI 1.02-1.9), porcine dermis (RR 2.72, 95%CI 1.20- 6.14), polypropylene (RR 2.14, 95% CI 1.23- 3.74) or armed transobturator (RR 3.55, 95% CI 2.29- 5.51) meshes.
- For posterior vaginal wall prolapse, the vaginal approach was associated with a lower rate of recurrent rectocele and/or enterocele than the transanal approach (RR 0.24, 95% CI 0.09- 0.64).
- The addition of TVT to endopelvic fascia plication (RR 5.5, 95% CI 1.36-22.32) and Burch colposuspension to sacral colpopexy (RR 2.13, 95% CI 1.39-3.24) were followed by a lower risk of postoperative SUI.

Cochrane Review 2013 (Maher et al)

Conclusions:

- Adequately powered RCT clinical trials are urgently needed.
- Prospect -UK, TVM III- Sweden (in progress).

Long-Term Outcomes 2013 (Funk et al)

- *27,809 anterior vaginal wall prolapse surgeries using native tissue versus mesh repair.*
- *Conclusions:*
- **5-year cumulative risk of any repeat surgery was significantly higher for vaginal mesh versus native tissue repair (15.2% vs 9.8%, $p < 0.0001$) with a 5-year risk of mesh revision/removal of 5.9%.**
- **5-year risk of surgery for recurrent prolapse was similar between vaginal mesh and native tissue groups (10.4% vs 9.3%, $p = 0.7$).**

Procedures to Correct Prolapse

- <http://www.academyofpelvicsurgery.com/>

Evidence-based Surgical Management

- The uterus plays a **PASSIVE** role in prolapse, vaginal hysterectomy **ALONE** does not address the underlying problem.
- The same procedures performed for vaginal suspension can be performed with uterine conservation: uterosacral or sacrospinous fixation by the vaginal approach or sacral hysteropexy by the abdominal approach.
- For pregnancy and delivery after prolapse repair, decisions regarding mode of delivery should be made on a case-by-case basis; evidence to guide such decisions is **LACKING**.

Evidence-based Surgical Management

- Restoration of apical support is indicated once the uterus is removed using suspension procedures to sacrospinous ligaments, uterosacral ligaments and iliococcygeus fascia or muscle.
- Round ligament suspension is NOT effective in treating or preventing vault prolapse.
- The use of ROUTINE perineorrhaphy and levator plication has been STOPPED because of postoperative dyspareunia except when postoperative sexual activity is not anticipated.

Evidence-based Surgical Management

- There is **NO CLEAR** risk–benefit information for mesh use and many are being incorporated **RAPIDLY** into clinical practice despite associated serious complications.
- Cadaveric fascia should not be used as graft material for abdominal sacral colpopexy because of a higher risk of recurrent prolapse than with synthetic mesh.
- Cystoscopy should be performed intra-operatively to assess bladder or ureteral damage after all prolapse procedures with risk of injury to bladder or ureters (Uterosacral ligament suspension, risk of 11% of ureteral injury + Paravaginal repair + Sacral colpopexy).

4th International Consultation on Incontinence: Committee on Surgery for POP

- **Grade D Recommendation (no recommendation possible)**

“There is insufficient information to provide evidence-based recommendations for the route of primary prolapse repair. There is level 1 evidence that ASC is more effective and durable in correcting anatomical defects, while native tissue vaginal route is faster and less expensive to perform with quicker return to normal activities and fewer serious perioperative complications.”

Evidence-based Surgical Management

- Occult stress-continent women with *positive* stress test are at higher risk for postoperative SUI after POP repair alone versus with women with negative stress test.
- For women with positive stress test who are having vaginal prolapse repair, TVT or TOT reduces postoperative SUI (RR 5.5, 95% CI 1.36-22.32).
- For stress-continent women planning sacral colpopexy, regardless of the results of preoperative stress testing, the addition of Burch procedure reduces the likelihood of postoperative SUI (RR 2.13, 95% CI 1.39-3.24)- *The Colpopexy and Urinary Reduction Efforts (CARE) trial.*

FDA Public Health Notification

- **Issued: July 13, 2011 based on an updated analysis of adverse events reported to the FDA (2008-2011) and complications described in the scientific literature.**
- **FDA identified surgical mesh for trans-vaginal repair of POP as an area of continuing serious concern because the associated serious complications are not rare.**
- **It is NOT YET clear that mesh repair is more effective than traditional repair in ALL patients with POP and it may expose patients to greater risk.**

Obliterative Procedures

- **Highly successful for POP – approaches 100%**
- **Effect on incontinence/ voiding/ bowel require discussion**
- **Concomitant hysterectomy appears to add morbidity**
- **QOL and patient symptoms generally improve (bowel, voiding function)**
 - **90% of patients satisfied with results**

Conclusions

- **Prevalance of POP continues to increase**
- **Consider standard use of cul-de-sac obliteration at time of hysterectomy**
- **At the present time vaginal native tissue repairs are best suited for older patients, primary prolapse repairs, less severe cases and women with co-morbidities**
- **ASC should be considered in the prolapsed short vagina, younger women , more severe cases and recurrences**
- **More information is needed about pros and cons of surgical innovations such as vaginal grafts and the use of the surgical robot**
- **Obliterative procedures should be considered in the elderly , medically fragile patient who does not desire a functional vagina**