Obliterative Procedures

LeFort Colpocleisis
Colpectomy (Vaginectomy)

April 4, 2018
Obliterative Procedures for uterovaginal prolapse

- Total colpocleisis
- Partial colpocleisis (LeFort)
- Vaginectomy (colpectomy) - partial / total
Obliterative Procedures
colpocleisis

- 1867-Neugebauer (Germany): denudation 3x6cm anterior and posterior near introitus and suturing them together. Published 1881
- 1877-LeFort (France): narrow area of denudation followed by colpoperineoplasty 8 days later
- 1912-Wyatt: wider dissection
- 1900s: sparing distal vagina/urethra to lessen urinary incontinence
Obliterative Procedures
Indications / Candidates

- Advanced prolapse
- No desire to preserve vaginal sexual function
- Failed / unsatisfactory pessary trial
- Recurrent prolapse / Failed prior procedures
- Elderly (mean age 79 ± 10)
- Co-morbidities
- Avoidance of major surgery
- Avoidance of the peritoneal cavity
- Avoidance of general anesthesia
Obliterative Procedures
Contraindications

- Vaginal preservation desired for any reason
Obliterative Procedures for Prolapse

Benefits

- Minimally invasive
- High satisfaction rates
- Regional anesthesia (spinal, epidural)
- Low complications
- Shorter operation time
- Less blood loss
- Low regret, improved QOL, substantial goal attainment (Hullfish, et al 2007)
Low Regret
High Satisfaction
Body Image improved

Body image, regret, and satisfaction following colpocleisis.


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Abstract

OBJECTIVE:
Colpocleisis is a definitive surgical treatment for prolapse resulting in vaginal obliteration. We sought to evaluate body image, regret, satisfaction, and pelvic floor symptoms following this procedure.

STUDY DESIGN:
This was a prospective multicenter study through the Fellows’ Pelvic Research Network. All women electing colpocleisis for management of pelvic organ prolapse were screened for enrollment. The Pelvic Floor Impact Questionnaire, Pelvic Floor Distress Inventory, and the modified Body Image Scale (BIS) were completed preoperatively and 6 weeks following surgery. Additionally, the Decision Regret Scale and the Satisfaction with Decision Scale were administered at the 6-week postoperative visit. A sample size of 88 subjects was calculated to evaluate change in the BIS score.

RESULTS:
In all, 87 patients were analyzed. Mean age was 79 years (SD 5.8) with a mean body mass index of 27 (SD 5.3). The majority (89.3%) was Caucasian. Six weeks after surgery, significant improvements were noted in all parameters. Mean BIS scores decreased from 4.8 to 1.2 (P < .001), signifying improved body image. Indeed, the overall number of subjects with BIS scores in the normal range doubled after surgery. Pelvic Floor Distress Inventory and Pelvic Floor Impact Questionnaire scores decreased significantly (P < .001 and P < .001), suggesting a positive impact on bladder, bowel, and prolapse symptoms. Finally, low levels of regret (mean score 1.35) and concurrent high satisfaction (mean score 4.73) were documented.

CONCLUSION:
Colpocleisis improves body image and pelvic floor symptoms while giving patients a definitive surgical option that results in low regret and high satisfaction.
Bowel symptoms obstructive and incontinence symptoms improved

- Effects of colpocleisis on bowel symptoms among women with severe pelvic organ prolapse.
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- Abstract
- INTRODUCTION AND HYPOTHESIS:
  Our objective was to evaluate bowel symptoms after colpocleisis.
- METHODS:
  This was a planned ancillary analysis of a prospective, colpocleisis cohort study of 152 women. Those with baseline and 1-year questionnaires (Colorectal-Anal Distress Inventory (CRADI) and the Colorectal-Anal Impact Questionnaire (CRAIQ)) were included. "Bothersome" CRADI symptoms (score>2("moderately", "quite a bit")) were identified. CRADI and CRAIQ scores were compared, and postoperative symptom resolution and new symptom development were measured.
- RESULTS:
  Of 121 (80%) subjects with complete data, mean age was 79.2 +/- 5.4 years and all had stage 3-4 prolapse. Procedures performed: partial colpocleisis (61%), total colpocleisis (39%), levator myorrhaphy (71%), and perineorrhaphy (97%). Bothersome bowel symptom(s) were present in 77% at baseline (obstructive (17-26%), incontinence (12-35%) and pain/irritation (3.34%)). All bothersome obstructive and most bothersome incontinence symptoms were less prevalent 1 year after surgery. CRADI and CRAIQ scores significantly improved. The majority of bothersome symptoms resolved (50-100%) with low rates of de novo symptoms (0-14%).
- CONCLUSIONS:
  Most bothersome bowel symptoms resolve after colpocleisis, especially obstructive and incontinence symptoms, with low rates of de novo symptoms.
Preoperative Considerations

- Elderly-Functional status
  - General physical condition
  - Cognitive status (Capacity for independent decision making)
  - Social support
  - Living situation
  - Post op rehab, SNF
  - Advance Directive, Living Will, Healthcare POA

- Obstructive uropathy ? For advanced prolapse
- Co-morbidities (74% have at least one)
  - Cardiac
  - Pulmonary
Postoperative Considerations

- **Geriatrics**
  - Decreased renal function (fluids, NSAIDs)
  - GI reflux (H2 blockers, PPIs)
  - Decreased muscle mass /increased fat = increased Vd
  - Decreased max HR (beta blockers)

- **Post op risks increased**
  - Falls
  - Delerium (17% gynonc pts---SNF)
  - SSI
  - Electrolyte imbalance
Should hysterectomy be done at the time of colpocleisis?

- Current practice patterns vary in US. Routine hyst is uncommon. (Jones et al 2017)

- Benefit -
  - Prevention High risk for cancer cervix / endometrium
  - Prevention pyometrium (rare)

- Hysterovaginectomy in high risk population is not associated with clinically significant difference in morbidity over vaginectomy alone 13pts vs 41 (Hoffman, et al 2003)

- Risk –
  - Increased operation time
LeFort colpocleisis
Should pre-op endometrial evaluation be performed? (asymptomatic)

- No consensus
- Based on risk factors, is often recommended (expert opinion)
- Cervical stenosis and elongation- (D+C in OR)
- Jones et al 2017 practice pattern study– 68% routine eval (81% utilized TVUS endometrium)
Risk of occult endometrial CA is low in asymptomatic women with prolapse 2/63 (3.17%)

- Unanticipated uterine pathologic finding after morcellation during robotic-assisted supracervical hysterectomy and cervicosacropexy for uterine prolapse.
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Abstract

BACKGROUND:
Identification of occult malignancy after intra-abdominal morcellation at the time of robotic-assisted supracervical hysterectomy and cervicosacropexy for uterine prolapse may lead to challenging postoperative management and leads one to question the need for preoperative evaluation.

CASES:
We present 2 cases of occult endometrial carcinoma after robotic-assisted supracervical hysterectomy and cervicosacropexy with intra-abdominal uterine morcellation from January 2008 to December 2010. A total of 63 patients underwent the stated surgical procedure with 2 patients (3.17%) found to have abnormal uterine pathologic finding with International Federation of Gynecology and Obstetrics grade 1 endometrial adenocarcinoma. Both cases occurred in asymptomatic postmenopausal patients without risk factors for endometrial cancer, including no history of postmenopausal bleeding or hormone replacement therapy. Owing to intraoperative uterine morcellation and cervical retention, appropriate postoperative management was controversial and problematic. Each patient was referred to gynecologic oncology. To date, both patients are without evidence of residual disease.

CONCLUSION:
Owing to the risk of occult uterine pathologic finding and complicated postoperative management, preoperative endometrial assessment should be considered on all postmenopausal patients undergoing intra-abdominal uterine morcellation, regardless of risk factors.
Should concomitant prophylactic urethral sling be placed?

- Individualize
  - Dementia, UUI, elevated PVRV, +ST ???
- Similar rates of complications in those with and without MUS. (Catanzarite, et al 2014)
- Jones et al practice pattern study - MUS is common (54% required +ST, nl PVRV)
- Urinary retention uncommon after colpocleisis with concomitant MUS (Abbasy, et al 2009). regardless of preop PVRV, voiding improved
Complications

- UTI most common 6-35%
- Mortality -0.4 (Catanzarite, et al 2015)- 1.3% (Zebede, et al 2013)
- Return to OR with in 30 days 2.1%
- Complications not increased with concomitant sling, anesthesia type, or OR time
- Blood loss- increased with concomitant hyst
- Hematocolpos- Bakri balloon,
- Pyometria- H/S via tunnel drainage, gent irrigation
Adverse Events
Low

- Mueller et al 2015---
  - multicenter 4776 cases
  - Age 43% >80yo  52% 60-79yo
  - High volume centers had lower ICU admissions, lower complication rate, and shorter LOS
  - Younger women had high ICU admissions, higher complications, and higher LOS

- Surgeon type-
  - Complications higher- urol and obgyn vs urogyn
  - ICU admissions higher- urol vs obgyn and urogyn
  - LOS longer- urol

LeFort Colpocreisis Procedure

Everyone is a little different
Exam under anesthesia
What do I have to work with?
What is behind the prolapsing vagina?
Where will I encounter my blood supply, bladder, and ureters?
What is the status of the urethra?
What is different from the office exam?
Lateral drainage tunnels
Anterior to posterior sutures
Posterior colpoperinorrhaphy
High levator plication
Perineoplasty

Shortens the Genital Hiatus
Takes tension off prior layers, reduces recurrence risk
Close epithelium

Interrupted or running
Colpectomy

- Mark out dissection limits
- Infiltrate
- Sharp mobilization or epithelium from fibromucularis
- Mobilize levator ani m. and perineal muscles from skin
- Control bleeding
- Suture concentric or A to P multiple layers/rows
- Colpoperinorrhaphy
- Close epithelium
- Cystoscopy +/- MUS
Should cystoscopy be performed?

- YES
When should ureteral catheters or stents be placed?

- Selectively
  - Known or suspected obstruction preop
  - Known or suspected risk of obstruction intraop
  - Concurrent fistula
  - Concurrent removal of mesh