Safety and efficacy of bilateral cervical and vaginal sacrocolpopexy

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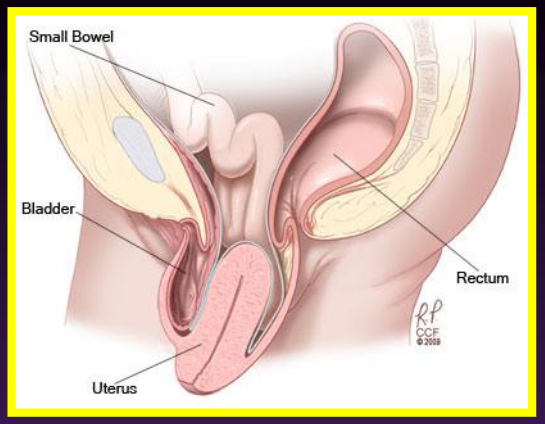
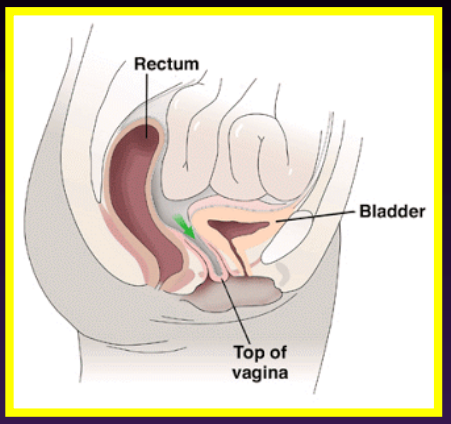


Introduction



- Apical prolapse includes descent of the uterus, vaginal cuff, or rarely solely of the cervix
- Pelvic organ prolapse (POP) can be seen in up to 50% or more of parous women

Nygaard et al, 2008

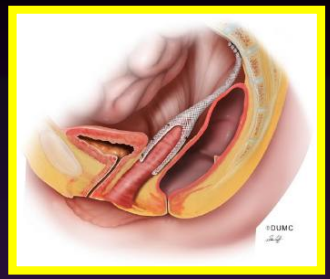
- Loss of apical support is usually present in women with prolapse that extends beyond the hymen

Delancey et al, 2002

- Adequate support of the vaginal apex is essential in women with advanced prolapse

Shull, 1999

Introduction



- **Abdominal sacrocolpopexy (ASC)** represents the gold standard for surgical repair of vaginal apical prolapse

RCOG Green-top Guideline, 2015

- Compared to sacrospinous fixation, ASC associates with:

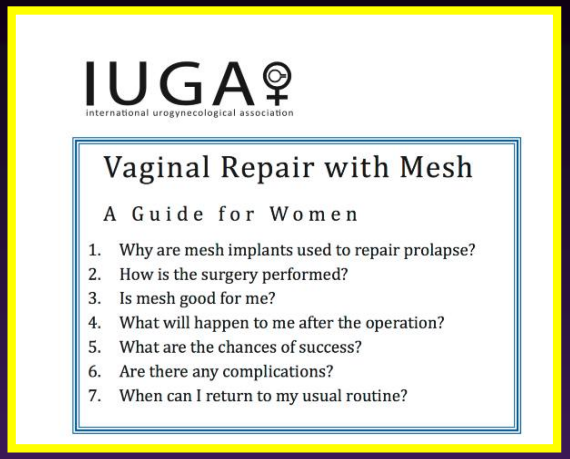
1. lower rates of recurrent vault prolapse
2. less postoperative stress urinary incontinence (SUI)
3. less postoperative dyspareunia

Maher et al, 2013

- ASC involves apical suspension of the vault with a mesh
- Mesh erosion: 2-11%
- Serious complications (bowel injury, sacral myelitis): 0-8%

5th International Consultation on Incontinence 2012

Introduction


IUGA
international urogynecological association

Vaginal Repair with Mesh

A Guide for Women

1. Why are mesh implants used to repair prolapse?
2. How is the surgery performed?
3. Is mesh good for me?
4. What will happen to me after the operation?
5. What are the chances of success?
6. Are there any complications?
7. When can I return to my usual routine?

- FDA report in 2008 drew attention to mesh-related complications in POP surgery
- It is recommended to limit the amount of mesh
- New innovations in mesh technology are required to improve safety and efficacy

FIGO 2015

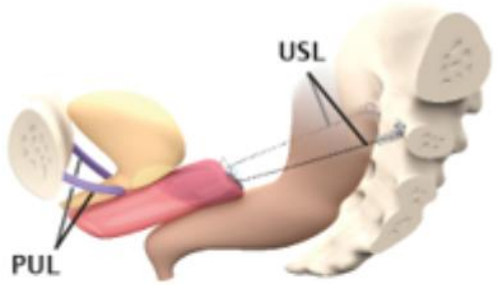
- In a murine model, polyvinylidene fluoride (PVDF) meshes were found to induce less inflammatory reaction than polypropylene meshes

Karabalut et al, 2016

Introduction

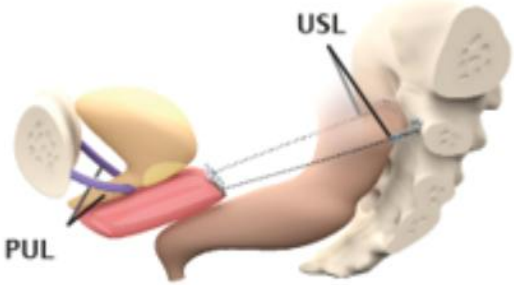
- A modified ASC involves the bilateral reinforcement or replacement of the uterosacral ligaments (USL)

CErvico-SAcropexy (CESA)



Bilateral fixation
of the **cervical stump**
to the sacrum

VAgino-SAcropexy (VASA)

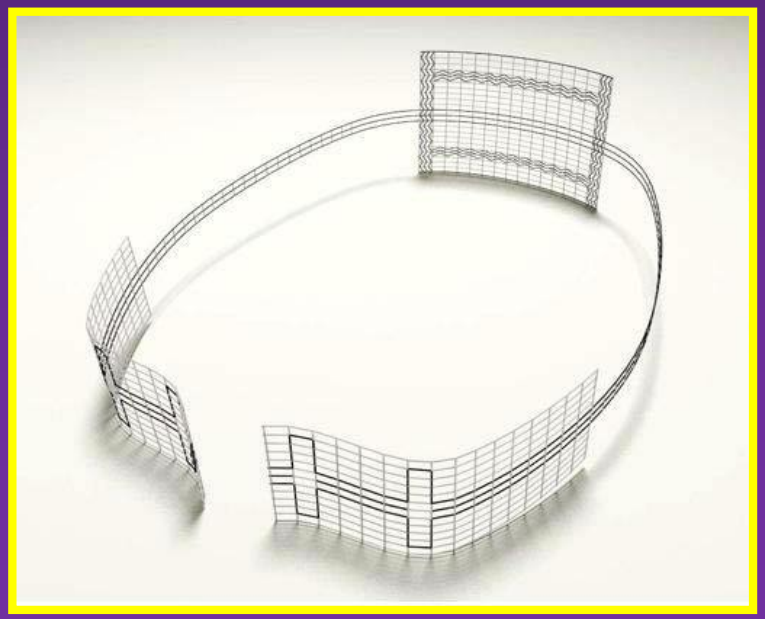


Bilateral fixation
of the **vaginal stump**
to the sacrum

Introduction

1. **Anatomy:** physiological and anatomically correct reconstruction. The tape is attached proximally to the presacral fascia in front of S2, on both sides of the rectum

2. **Amount** of mesh: specially designed PVDF mesh kit (Dynamesh®)



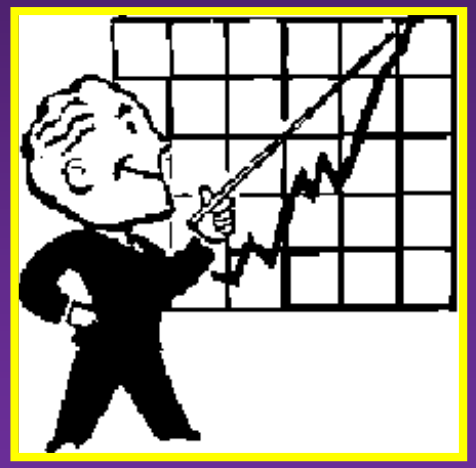
Aim and Methods

- To assess the efficacy and safety of CESA/VASA

- Service evaluation
- Setting: tertiary urogynaecology department
- Study period: July 2013 – October 2015
- Women with vaginal apical prolapse who underwent:

- CESA (in patients with uterus)
- VASA (in patients without uterus)

- At baseline and 3 months:
  - POP-Q assessment
  - International Consultation on Incontinence Questionnaire-Vaginal Symptoms (ICIQ-VS)



- Descriptive statistics (demographic information and clinical features)
- Mann-Whitney test was used to compare pre- and post-operative findings
- p-value <0.05 was considered statistically significant

Results-baseline characteristics (*n*=102)

Age, years, mean (SD)	65 (9.7)
Parity, median (range)	2 (1-6)
BMI, median (range)	27 (23-32)
Previous surgery, *n* total abdominal hysterectomy vaginal hysterectomy surgery for apical prolapse	 55 19 13
Overactive bladder (OAB), *n*	51
Stress urinary incontinence (SUI), *n*	24

Results-surgery

- 100 out of 102 planned procedures were performed

VASA, *n* CESA (+subtotal hysterectomy), *n*	75 25
Operating time, mean (SD)	93 min (22.6)
Estimated blood loss, mean (SD)	154 mls (52)
Complications, *n* wound infection small bowel obstruction	 3 1

Results-follow up at 3/12

POP-Q scoring and ICIQ-VS scores*

POP-Q	Pre-operative	Post-operative	*p-value*
Ba	+0.18	-2.25	*p<0.05*
C	+0.13	-7.07	*p<0.05*
Bp	-0.5	-2.5	*p<0.05*
ICIQ-VS	25.3	4.1	*p<0.05*
*Mann-Whitney *U* test			

- OAB symptoms were reported in 10/51 patients
- SUI symptoms were reported in 12/24 patients (3 worsening) + 4/76 de novo

Conclusions

- CESA/VASA is an effective and safe treatment for vault prolapse
- OAB symptoms might improve
- This may be consequence of the normal anatomy and physiological axis of the vagina restoration
- We continue surveillance at 1-year follow-up to detect long-term problems