

## PELVIC FLOOR PROLAPSE

## by: Dr. Haj Hbrahimi



### treatment

It is helpful for the modern pelvic floor surgeons to think firstly as an architect secondly as an engineer: as an architect ,to design the form of reconstruction; as an engineer, so the construction can withstand the pelvic forces imposed upon it.

## Indicators for treatment

Treatment is indicated for women with:

- Symptoms of prolapse
- Urinary Symptoms
- Bowl Symptoms
- Sexual Symptoms

Treatment is generally not indicated for women with asymptomatic prolapse

## Establishing patient goals

Treatment is individualized according to each patient symptoms and their impact on her quality of life. Studies have demonstrated that patient satisfaction after pelvic reconstructive surgery correlates highly with achievement of self-described, preoperative surgical goal, but poorly with objective outcome measures.

## **MANAGEMENT OPTIONS**

### Expectant management

• It is a viable option for women who can tolerate their symptoms and prefer to avoid treatment but they should be evaluated on a regular basis to assess for the development or worsening of urinary or defecatory symptoms.

## **NONSURGICAL THERAPY**

## A. conservative management

- Lifestyle intervention:
  - Weight loss
  - Reduction of those activities that increase intra-abdominal pressure.

## Pelvic floor muscle training(PFMT)

• Pelvic floor muscle training appear to result in improvement s in pop stage and pop-associated symptoms.

## **Estrogen therapy**

 Use of estrogenic agents appears to be associated with a decrease in undergoing surgery for pop, according to systematic review of 6 small randomized trials. However, none of these evaluated the role of estrogen in treating pop.

#### **MECHANICAL DEVICES ARE USED FOR WOMEN:**

- Vaginal ulcerations caused by severe pop
- Diagnosis of occult SUI during urodynamic evaluation of women with pop.
- With medical problem
- Desire to avoid surgery
- Pregnancy related prolapse

#### **Mechanical Devices are used for women:**

- •With medical problems
- •Desire to avoid surgery
- pregnancy related prolapse
- prolapse and incontinence in elderly women

#### 2 kinds of pessaries:

Support pessary (for stage I and II prolapse)Space-filling pessary (for stage III and IV prolapse)

#### **Deferent kinds of pessary**













## **Complications:**

Vaginal discharge
Stress incontinence
Vesicovaginal fistule
Hydronephrosis
Urosepsis

There are no randomized controlled trials of pessary use in women with pop.

Then, there are no guidelines on the care of pessaries, the role of local estrogens, or the type pessary indicated for specific type of pop.

## **Surgical Management:**

The aims of surgery include restoration of:

Normal vaginal anatomy

Normal bladder function

Normal bowel function

Normal sexual function

## Surgical management

Guiding principles for vaginal surgery to minimize pain, urinary retention and Dyspareunia

- •Avoid tension when suturing the vagina
- Avoid vaginal tissue excision
- •Avoid surgery to the perineal skin
- •Avoid tightness in bladder neck area of vagina

•Avoid indentation of the urethra with a midurethral sling

## **Bladder Evaluation**

With severe POP, the urethral Kinking effect of the prolapse may mask a potential urine leakage problem. Therefore, basic office bladder testing with prolapse reduction should be Performed to mimic bladder and urethral function if the prolapse were Treated.

#### At a minimum:

- Test for infection
- Postvoid residual (PVR) urine
- Bladder sensation
- •Stress test

 Many women with stage II or higher opical prolapse remain continent despite loss of anterior vaginal and bladder/ Urethral support, and 13 to 65 percent of continent woman develop symptoms of SUI after surgical correction of the prolapse.



Fáscia Pubocervical



**Pelvic Floor Defects to be repaired** (Laxities)

Antrerior Zone: Extraurethral ligament (EUL) Hammock Pubourethral ligament (PUL)

Middle Zone: Pubocervical fascia (PCF) Arcus tendineus fasciae pelvis (ATFP) Cervical Ring (CX Ring), cardinal Lig.

Posterior Zone: Uterosacral ligament (USL) Rectovaginal fascia (RVF) Perineal body (PB)

Petros and Liedl 2009



#### Middle Zone Defects in cystoceles

(Petros 2006)





## Surgical correction of anterior vaginal prolapse (Middle Zone Defects)

The Indications for surgery

#### • Structural:

Ever ting anterior wall may cause dragging pain, discomfort or even ulceration if the eversion is chronic.

#### • Functional:

abnormal empting and symptoms of urgency







# Surgical repair of apical and posterior wall defect

#### (posterior zone defect)

The posterior zone extends between the cervical ring and perinecal body. It includes the utero sacral and cardinal ligaments the apical segment of the vaginal, rectovaginal fascia and perineal body.





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### Indications for posterior zone surgery: damage to the uterosacral ligaments

#### Structural:

Prolapsed uterus or vaginal apex, or posterior vaginal wall defects causing discomfort.

#### Functional:

symptoms of posterior fornix syndrome: urgency, frequency. Noctaria, abnormal empting and pelvic pain Hysterectomy may weaken the fascial side- wall support, and weaken the uterosacral ligaments by removing a major part of its blood supply. Conservation of the uterus is important in the long – time prevention of vaginal prolapse and incontinence (Browan and petros) The choice of surgical route for repair of opical prolapse is catraversial. Open abdominal repairs are more effective in restoring vaginal topography , but vaginal repair incur lees serous morbidity and have a shorter recovery.



#### b- Sacrospinous ligament fixation





#### d-Hysteropexy



# Abdominal sacral colpopery is appropriate for women with:

- Young age insufficient vaginal length for SSLS
- obesity other indication for abdominal
- stage 3 or 4 pop surgery
- Previous failed pop repair

# (sacrocolpopexy appear to result in lower incidence of dyspareunia)

# **Obliterative procedures**

- Obliterative procedures are reserved for women who are not candidate for more extensive surgery or do not plan fature vaginal intercourse.
- These procedures have a shorter operative duration, decreased perioperative morbity, and low risk of prolapse recurrence.

# The two most common techniques:

- Portial colpocleisis (le fort colpocleisis)
  The primary purpose for this techningue is to provide an outlet for cervical or uterin bleeding in patients where the uterus is left insitu.
- Total colpocleisis : it is reserved for vaginal vault prolapse

#### c- obliterative procedures for vaginal prolapse





# Whether performing a partial or total colpocleisis,

3 to 4 cm of distal vaginal epitheliom should be left in place to avoid placing traction on the posterior urethra it may increase SUI postoperatively.

# Posteroir colporrhaphy





# **Posterior colporrhaphy**





# **Posterior colporrhaphy**



Posterior colporrbaphy result in greater reduction of recurrent posterior prolapse. Bowel and sexual function an quality of life significantly improve with any of 2 procedures.

- The surgeon should take care to ensure that each plicatin sature is in continuity with the previous one, or ridging of the posterior vaginal wall may occur and cause dyspareunia.
- We suggest not performing levator plication in patients who are sexually active, given this procidure is associated with a high risk of de novo dyspareunia.

### **Pelvic organ prolapse and stress urinary incontinence in women:**

## **Combined surgical treatment**

- Pelvic organ prolapse (pop) and stress urinary incontinence (SUI) coexist in 15 – 80 percent of women with pelvic organ symptoms.
- Up to 80 percent of women with advanced pop have occult SUI caused by urethral obstruction. These women are at risk of developing SUI after prolapse repair.

- Il women who are considering pelvic reconstructive surgery should hare a comprehensive evaluation for both prolapse and urinary incontinence, including:
- Assessment of urinary symptoms
- Pelvic examination for pop
- Clinical or urodynamic urinary stress testing with or without reduction of prolapse
- Discussion of patient goals and quality of life

### **Recommendations:**

- Women with symptoms of both pop and SUI are treated with combined prolapse repair and continence procedure
- Women with symptomatic pop and SUI symptoms:
- Continent women with stage I pop who are planning pralapse repair are unlikely to have urethral obstruction and resultant occult SUI, and thus are unlikely to benefit from a concomitant continence procedure

- For women with stage II or greater pop who are undergoing abdominal sacrocolpopexy, regardless of the results of preoperative testing for occult SUI, it is recommended a concomitant Burch colposuspension
- For women with stage II or greater pop and positive preoperative testing for occult SUI who are undergoing prolapse repair via a vaginal approach, it is recommended A combined procedure for prolapse and SUI

 For women with stage II or greater pop and negative preoperative testing for occult SUI who are undergoing prolapse repair via a vaginal approach, we suggest prolapse prolapse repair alone.

# in women with SUI and asymptomatic prolapse:

- In women with stage I prolapse, it is suggested against prolapse repair at the time of continence surgery
- Treatment of women with stage II or greater prolapse must be individualized according to patient treatment goals and the risk of subsequent surgery.

Do you think we are doing enough with traditional prolapse surgeries?

Why do we need a change? It 's not a matter of opinions

All we know is that we have at least 30% of failure rate and an average of 50% in serious journals

*C. Maher and Kaven Baessler: Surgical management of anterior vaginal wall prolapse: an evidence based literature review Int Urogynecol J (2006) 17: 195–201* 

# So the goal is reproduced anatomy with the meshes

Evidence favours using of type I macroporus monofilament prolen meshes with: High success rate Low infection rate

Low extrusion rate

# When..

**Bad tissue quality Replace weak or absent fascia** Need of a "bridge" **Concern about vaginal length or diameter** Obesity More and more emphasis on the management of recurrent prolapses **Prolapse III- IV ( Apical defect )** 

#### How can you lift this prolapse?



### **Anterior correction**

Dr

#### Percutaneus

#### NAZCA TC




### Results

#### Anatomic cure rates with good function

Anatomic support90%Satisfaction95%

### Complications

Rate of complications with the adequate prothesis does not seem to be alarming

Removal of the prothesis does not seem to affect the outcome



#### Procidentia and uterine preservation

Case: the patient is a 35-year-old para 4 woman with severe pelvic pressure and mild stress incontinence. She has had a tubal ligation. On examination, There is complete uterine procidentia with eversion of the anterior vaginal wall. Subtracted urodynamics revealed mild urodynamic stress incontinence(USI), without evidence of intrinsic sphincter deficiency(ISD). She is not interested in using a pessary and insists on uterine preservation.

#### Cystocele and potential stress incontinence

**Case:** a 49-year-old para 5 woman complains of pelvic pressure and the feeling that she does not completely empty her bladder. She had an anterior colporrhaphy (without hysterectomy) 7 years ago. On examination, she had recurrent anterior vaginal wall prolapse that descends beyond the hymen, with straining in the supine position. The cervix descends to the hymen, and a small enterocele and rectocele are also noted. On spontaneous uroflowmetry, the patient voided 240 ml, with a 10-ml postvoid residual urine volume. Time to void was 42 seconds with a maximum flow rate of 12 mL/sec. filling subtracted cystometry showed a stable cystometrogram to a maximum capacity of 440 mL. Despite numerous provocative maneuvers in the standing position, no stress incontinence could be demonstrated. A static maximum urethral closure pressure (MUCP) with prolapse unreduced was 35 cm H2O. The prolapse was then gently reduced using a Sims speculum and leakage was demonstrated with coughing and straining, with a Valsalva leak point pressure (LPP) of 45 cm H2O and MUCP of 30 cm H2O. The patient desires surgical correction of her prolapse.

- Evaluation and Management of Complete Vaginal Eversion
- **case:** the patient is a 56-year-old woman with severe pelvic pressure. She had an abdominal hysterectomy and retropublic repair 20 years ago. She had a history of recurrent stress incontinence, however, over the last 2 years, this resolved, and she currently has to reduce her prolapse to empty her bladder. Complete Vaginal Eversion was found On examination. filling cystometry revealed an uninhibited detrusor contraction at maximum capacity, which was less than 200 mL.

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مورد ۵- خانم ۵۰ ساله با سابقه ۵ مورد زایمان واژینال که با شکایت خروج توده از واژن مراجعه نموده است مشکل ادراری یا روده ای را ذکر نمی کند در معاینه پرولاپس توتال واژن دارد وی ۱۵ سال پیش به دلیل نامعلوم تحت هیسترکتومی ابدومینال قرار گرفته است و بعد از آن نیز به دلیل پرولاپس کاف واژن ۲ بار ساکروپکسی و یک بار کولپورافی شده است.

وی اکنون خواهان جراحی مجدد جهت رفع مشکل فعلی می باشد.

مورد ۶- خانم ۴۸ ساله با سابقه ۲ مورد زایمان واژینال که با شکایت از خروج توده از واژن و احساس فشار درلگن مراجعه کرده است. هم چنین ذکر می کند که قبلا" به دنبال عطسه و سرفه دچار بی اختیاری ادرار می شده است که در ۲-۱ سال اخیر بهتر شده است. در معاینه پرولاپس درجه III رحم دارد. وی خواهان درمان جراحی با حفظ

رحم می باشد