

Conservative treatments pelvic organ prolapse (POP)

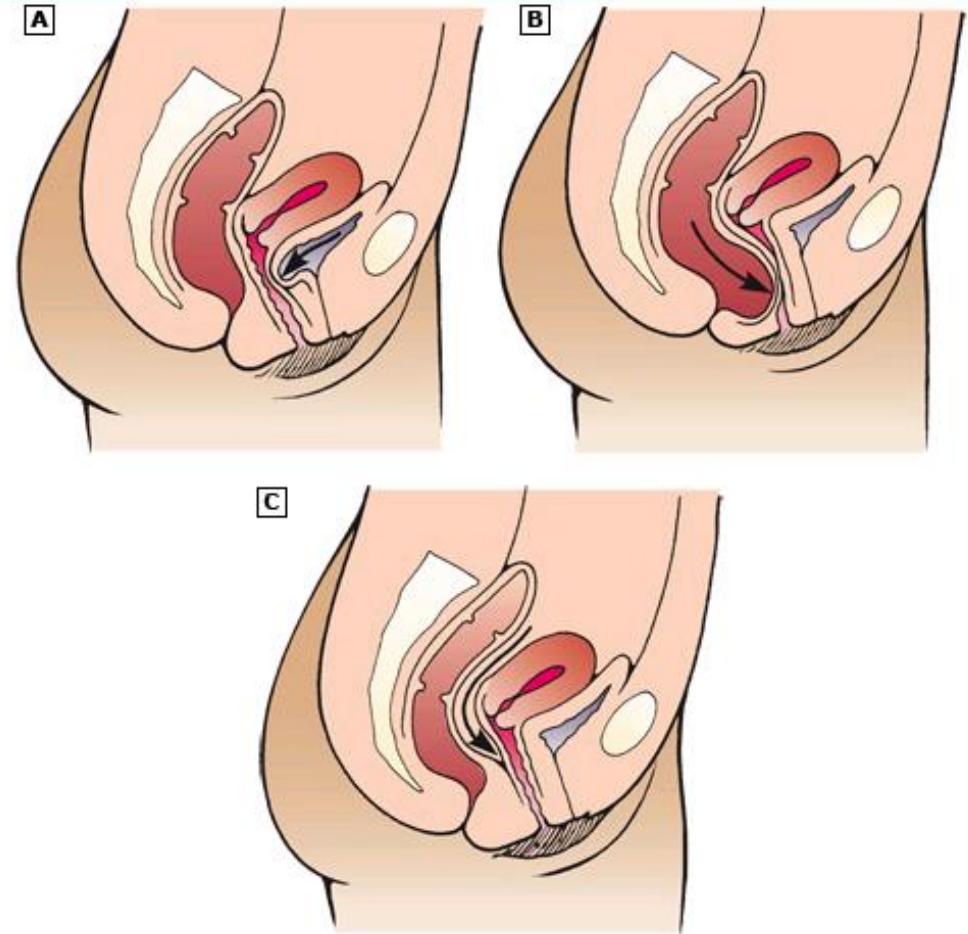
dilihat dari perspektif fungsionalitas

Daerah konflik!

- untuk memiliki kontrol untuk fungsi kandung kemih dan usus Anda <-x-> diizinkan masuk (koitus -> konsepsi),
- -> melahirkan)

*Excellent design, but the exhaust is too close to the ignition

Anatomic sites of pelvic organ prolapse



Pelvic support disorders.

(A) Cystocele.

(B) Rectocele.

(C) Enterocoele.

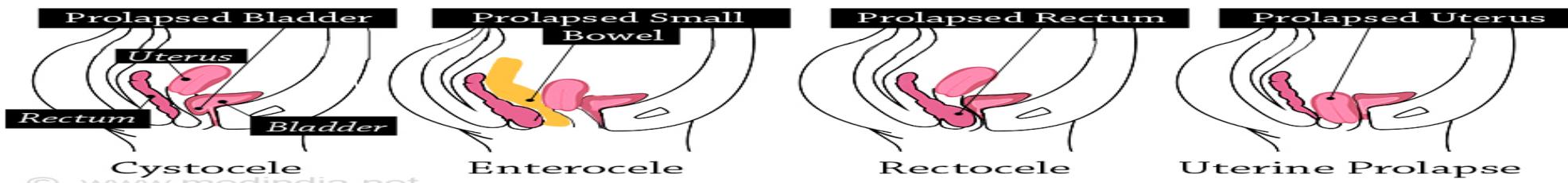
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Equal rights

I DEMAND EQUALITY BETWEEN MEN AND WOMEN!

**EXCEPT WHEN I GET SPECIAL
TREATMENT FOR BEING A WOMAN**

Types of Pelvic Organ Prolapse



Precautions

- Suspension (ligaments) - Support (fascia -pelvicfloor)
- Obstetric care to protect pelvic floor
 - Decreased pushing times
 - Avoid forceps, major lacerations
 - Permit passive descent
- General lifestyle changes
 - Smoking cessation and cough cessation
 - Routine use of Kegel pelvic floor exercises
 - Regular physical activity
 - Proper nutrition
 - Weight loss
 - Avoid constipation and repetitive heavy lifting
 - Hormone replacement therapy

Why not always POP?

the levator ani muscle and pelvic connective tissues

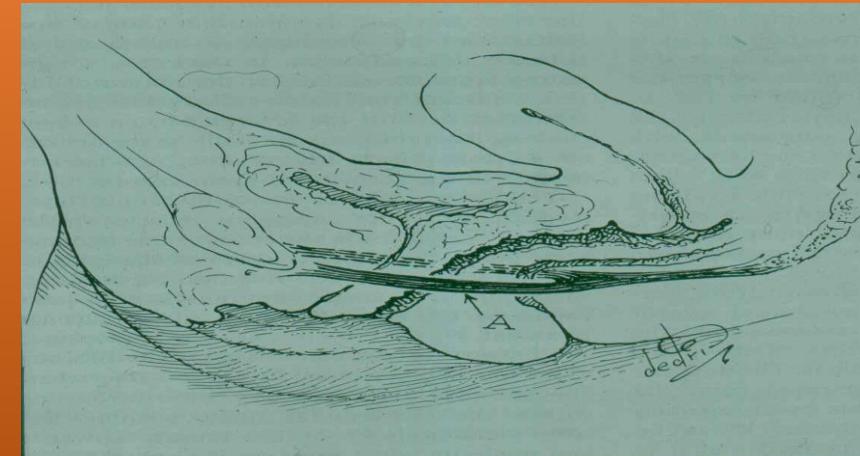
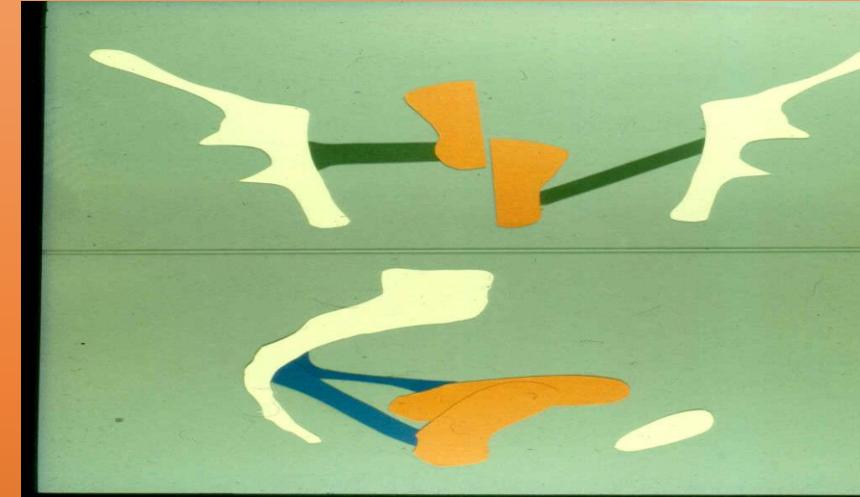
(in-) adequat interactions/cooperation between

Suspension

lig. SaUt-card.
fascia endopelv
pubo-urethr. lig.
rectal pillars

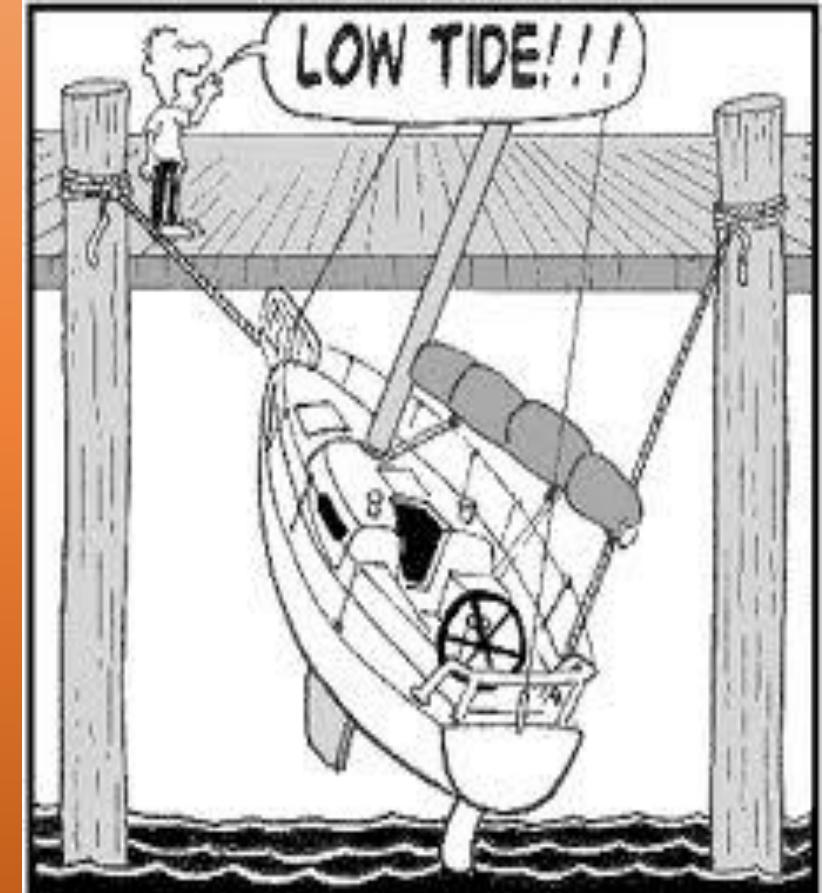
Support

levatorplate



Prolapse - boat analogy

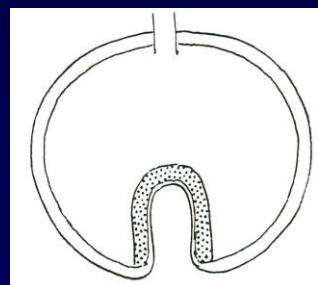
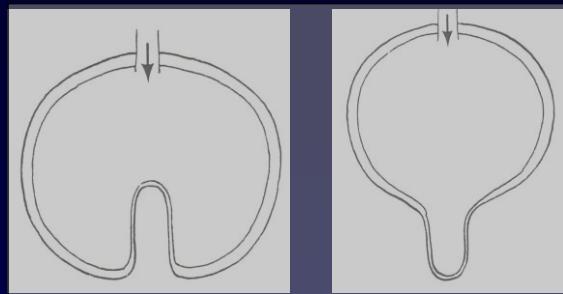
- Perahu-(cervix- uterus)
- Otot levator ani (support)
- Ligamen2 (suspension)
- Masalahnya
- Air yang memiliki daya dukung untuk kapal (support)
- dan / atau
- ligamen2 yang lemah
- Hasilnya adalah tenggelamnya kapal
- perahu sendiri sebetulnya baik



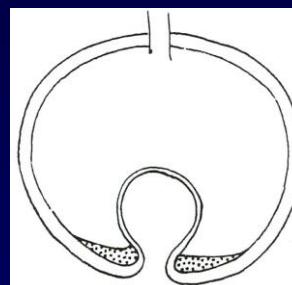
kapasitas daya dukung air telah hilang

Conservative -> operative treatments; since 1914..

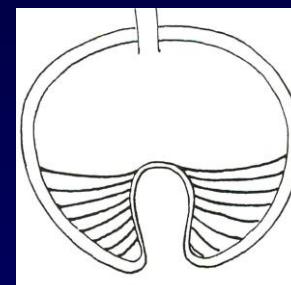
traditional methods in the surgical treatment of prolapse



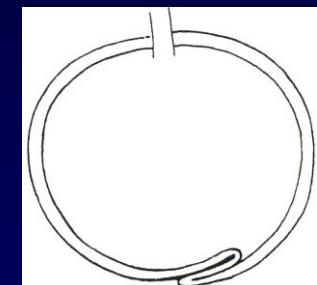
plication of
fascia



perineoplasty

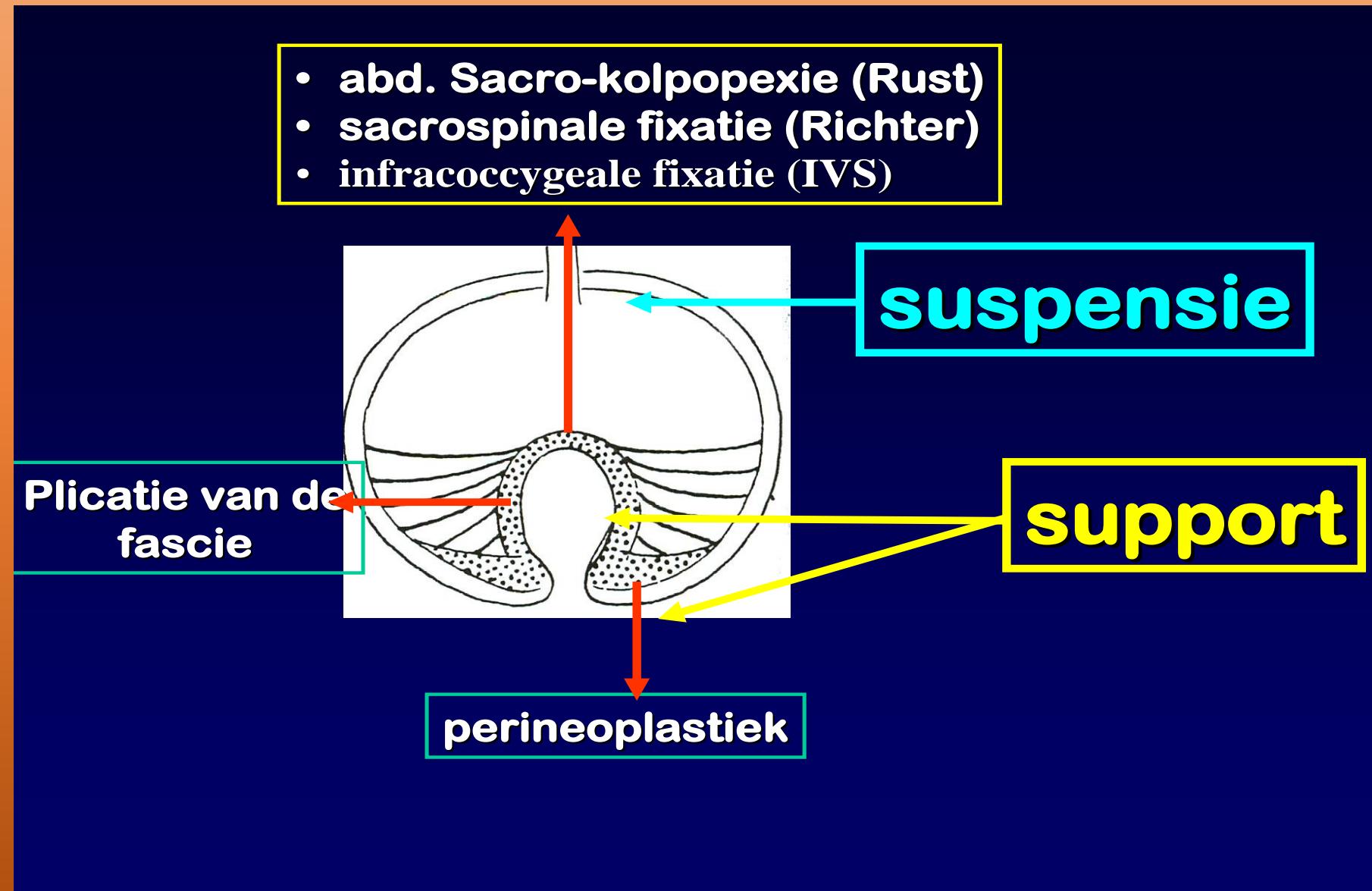


- abd. sacral colpopexy
- sacrospinous fixation
- infracoccygeal fixation



restoration
of vaginal
axis

Interakti Suspensi (ligamen)-dukungan (fascia-Pelvic floor) translates to therapeutic options..(non-surgical [pessary = support] → surgical)



Tell me the difference; pathophysiology



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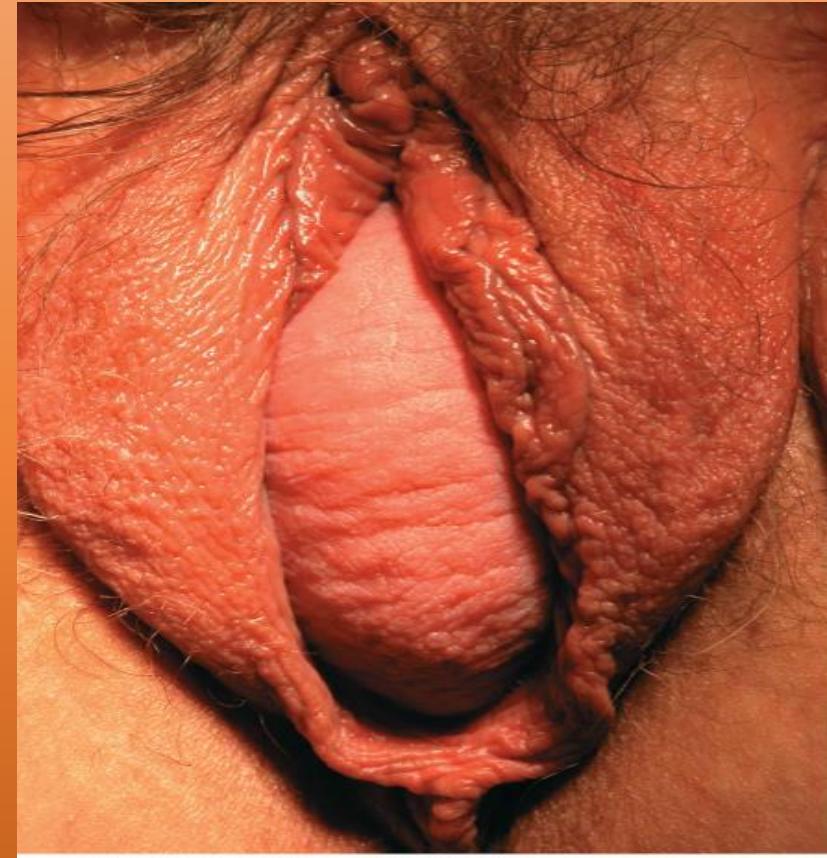
Bradshaw KD, Cunningham FG: *Williams Gynecology*:

Source: Schorge JO, Schaffer JI, Halvorson LM, Hoffman BL,

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garis tengah-lateral Cacat Garis tengah atau distension cystocele: perhatikan hilangnya karakteristik rugae vagina



Foto menunjukkan cystocele lateral, juga disebut cystocele paravaginal atau perpindahan. Rugae yang hadir, yang menunjukkan bahwa hilangnya dukungan adalah lateral daripada pusat

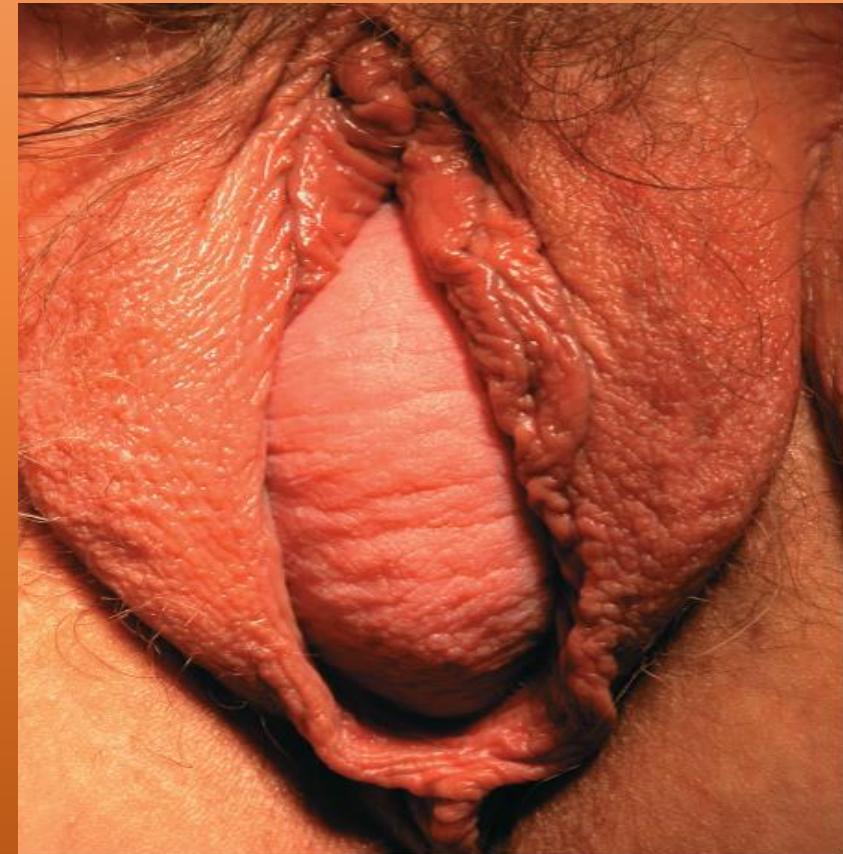


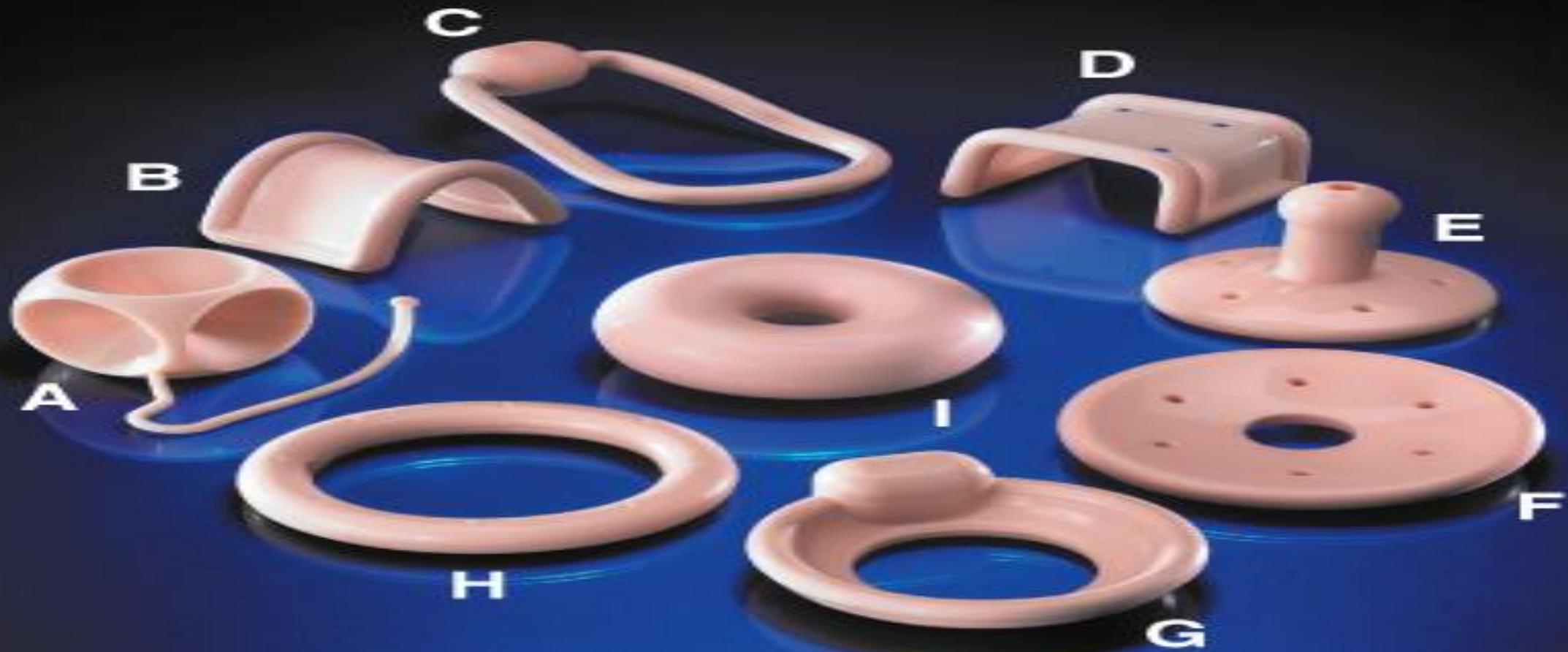
Foto menampilkan kerusakan dinding vagina melintang. Catatan “detachment” dinding vagina anterior dari puncak dan kehadiran Rugae, yang menunjukkan bahwa ini bukan garis tengah atau cacat pusat.



Source: Schorge JO, Schaffter JI, Halvorson LM, Hoffman BL,
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Types of Pessaries



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technique for placement and removal of a Gellhorn pessary (Youtube instruction video)



A

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Bradshaw KD, Cunningham FG; *Williams Gynecology*:
<http://www.accessmedicine.com>
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B

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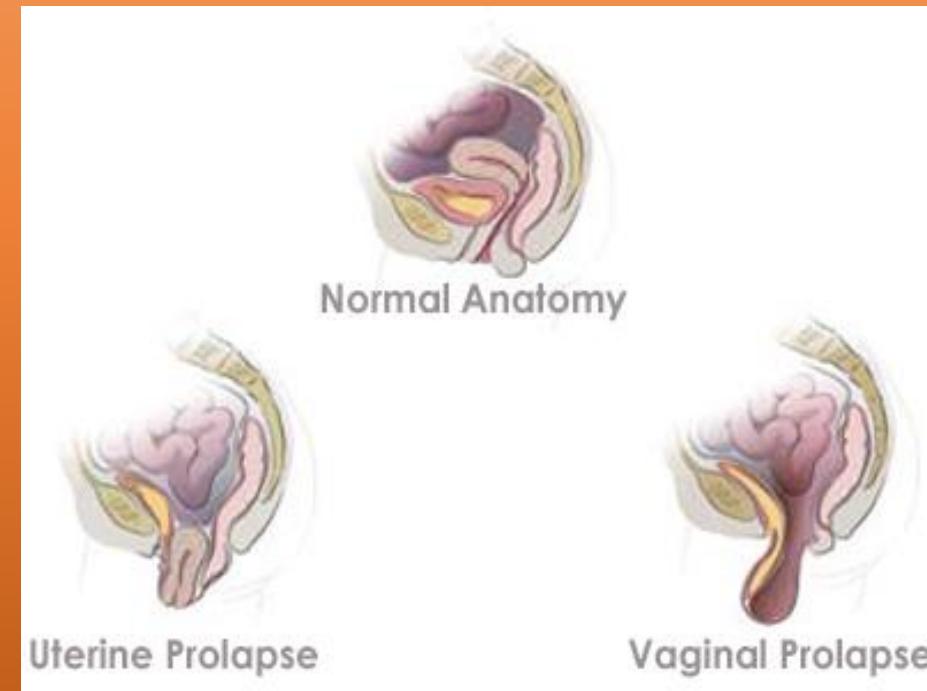
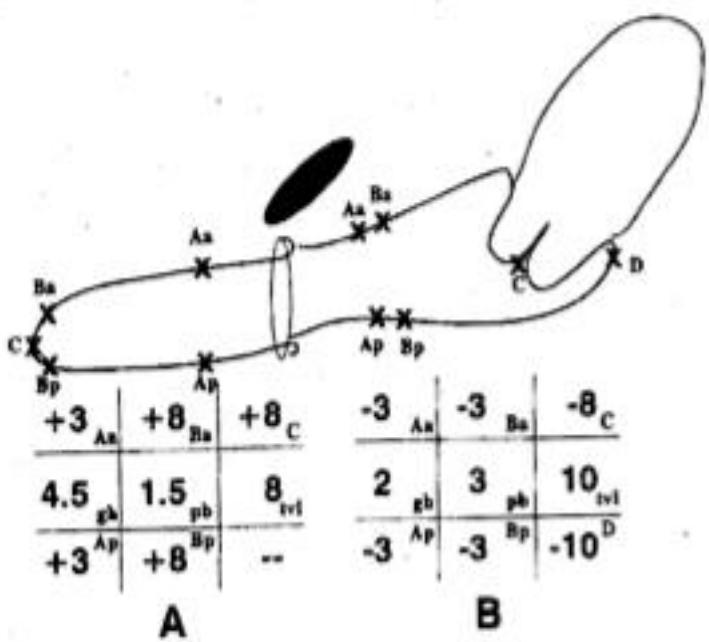
Who do we operate?

- 1. functional complaints are leading
- 2. there appears to be a relationship between abnormal anatomy and abnormal function
- 3. good life expectancy
- 4. well considered question
- 5. we have good solution

How do we operate?

- 1. Operation per compartment
- 2. Optionally combine with incontinence surgery
- 3. Vaginal or abdominal
- 4. With or without mesh
- 5. Obliterative or not

The standardization of terminology



prolaps repair

Suspension & support
bridge Calatrava



Operasi konvensional
Menangguhkan operasi (pemulihian
anatomis)

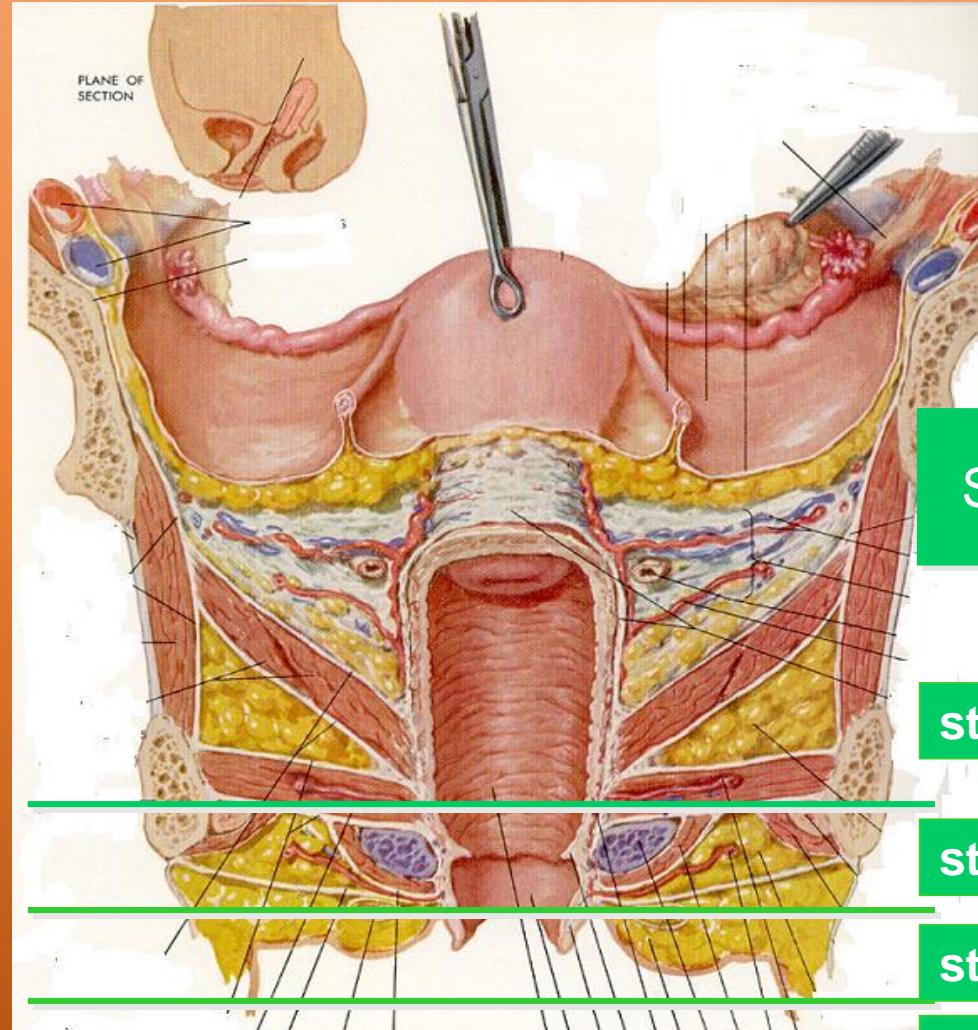
Dengan autologous tissue

Vaginal approach:

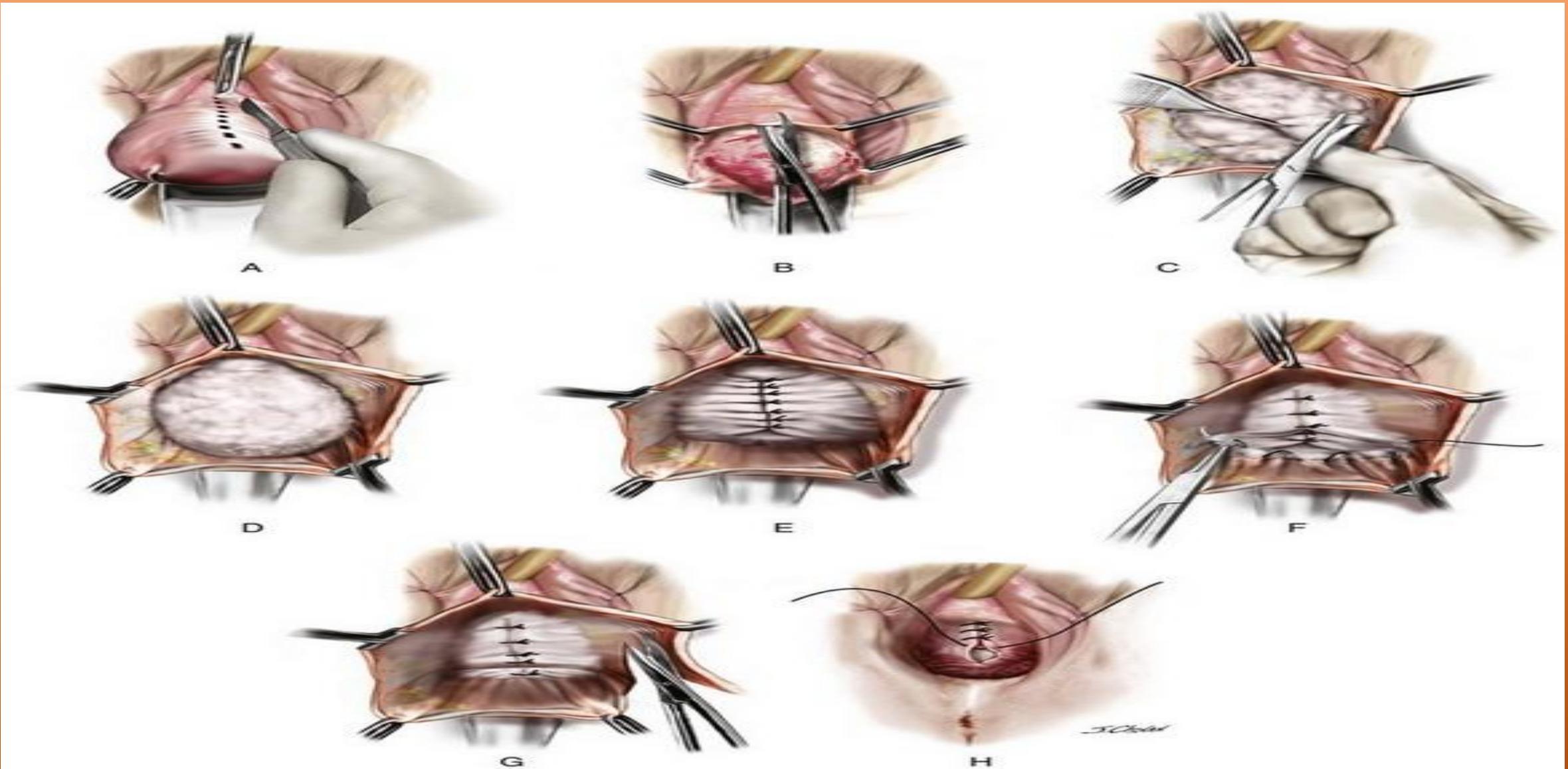
- Cysto- recto-enterocele repair
- Fiksasi SacroSpinal
- Uterus in situ: cervico (hystero)pexy
- Obliterative (kolpocleisis)

Abdominal approach: Laparoscopy

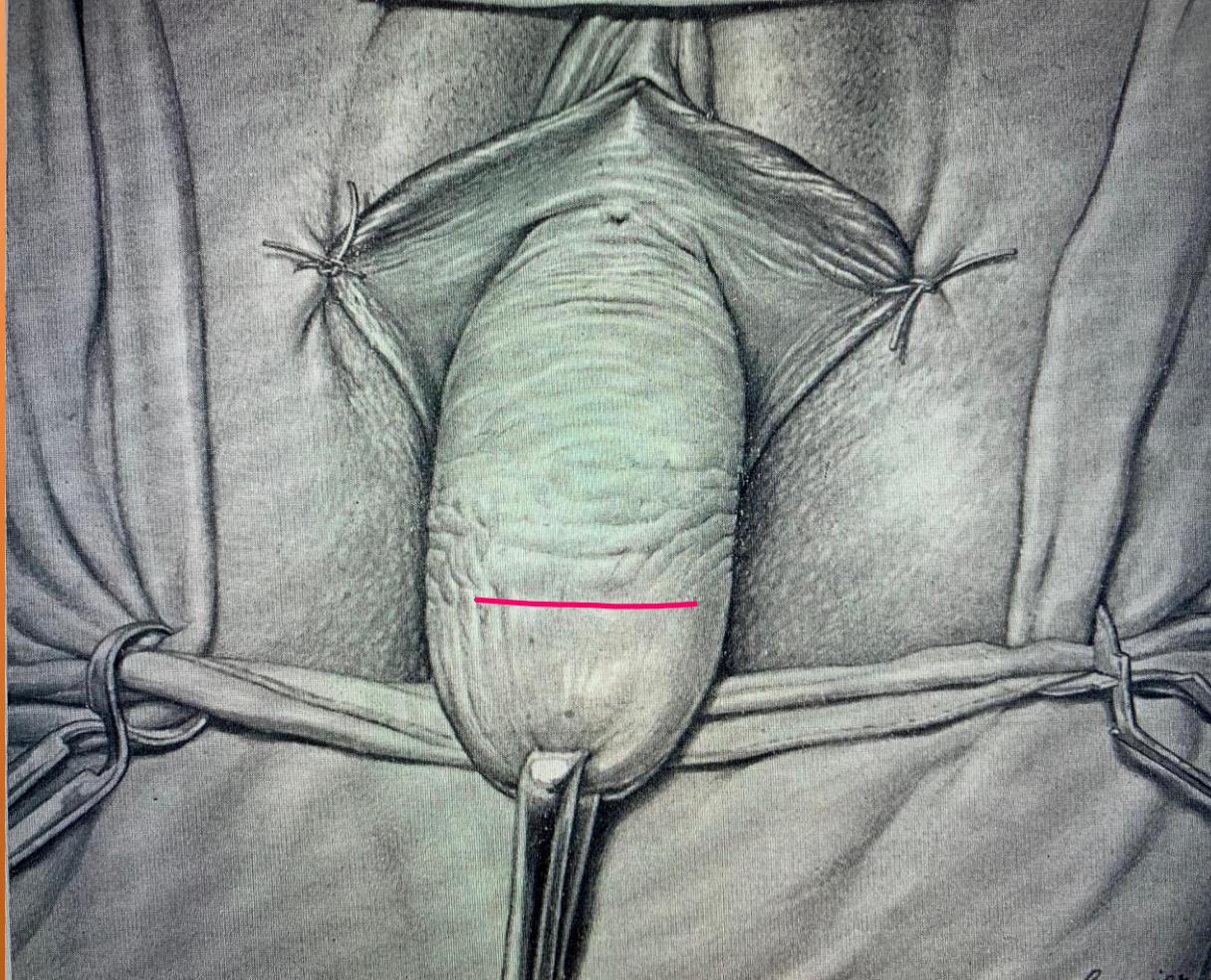
Simplified POPQ (Valsalva)



anterior colporrhaphy

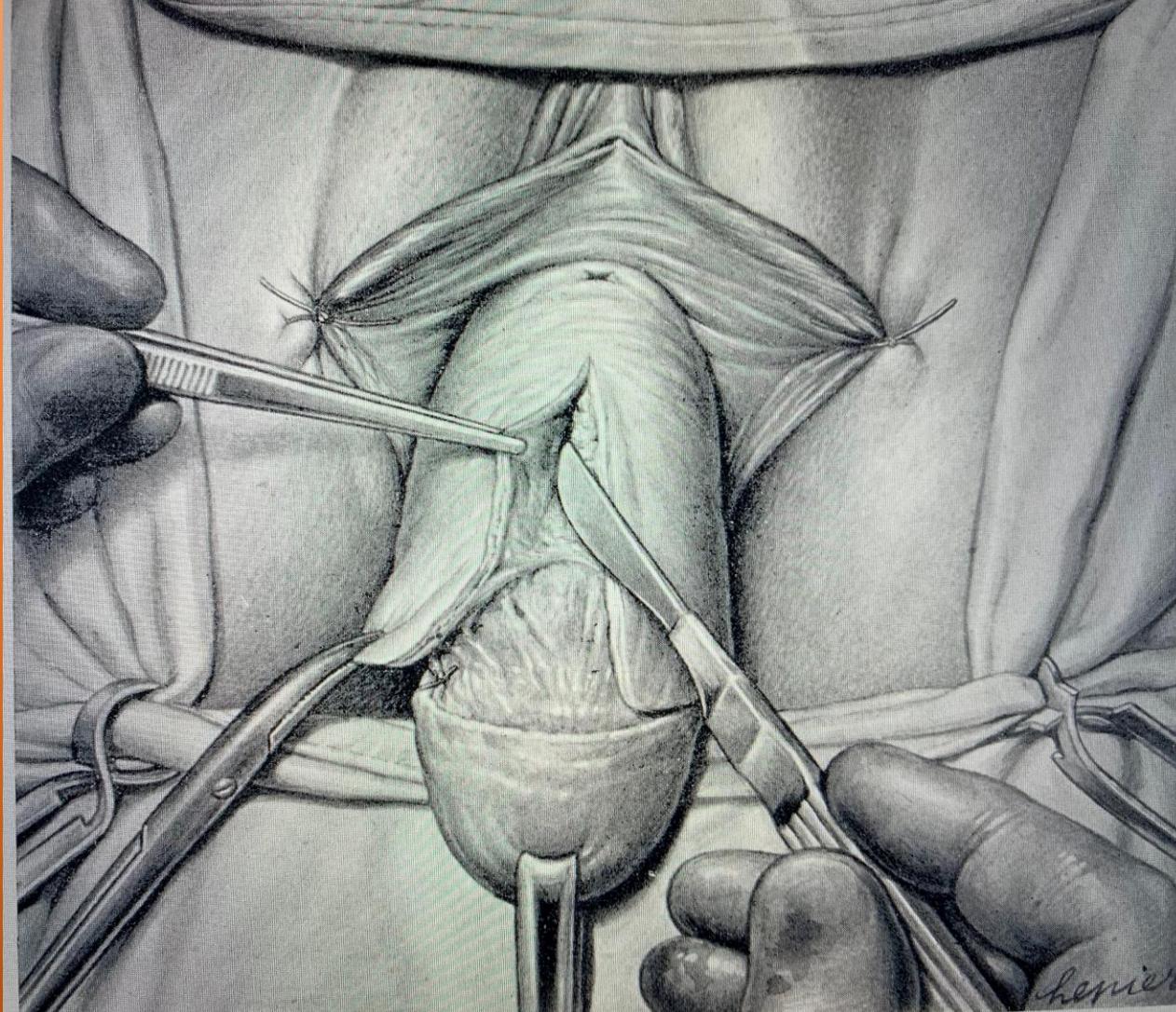


anterior colporrhaphy step by step



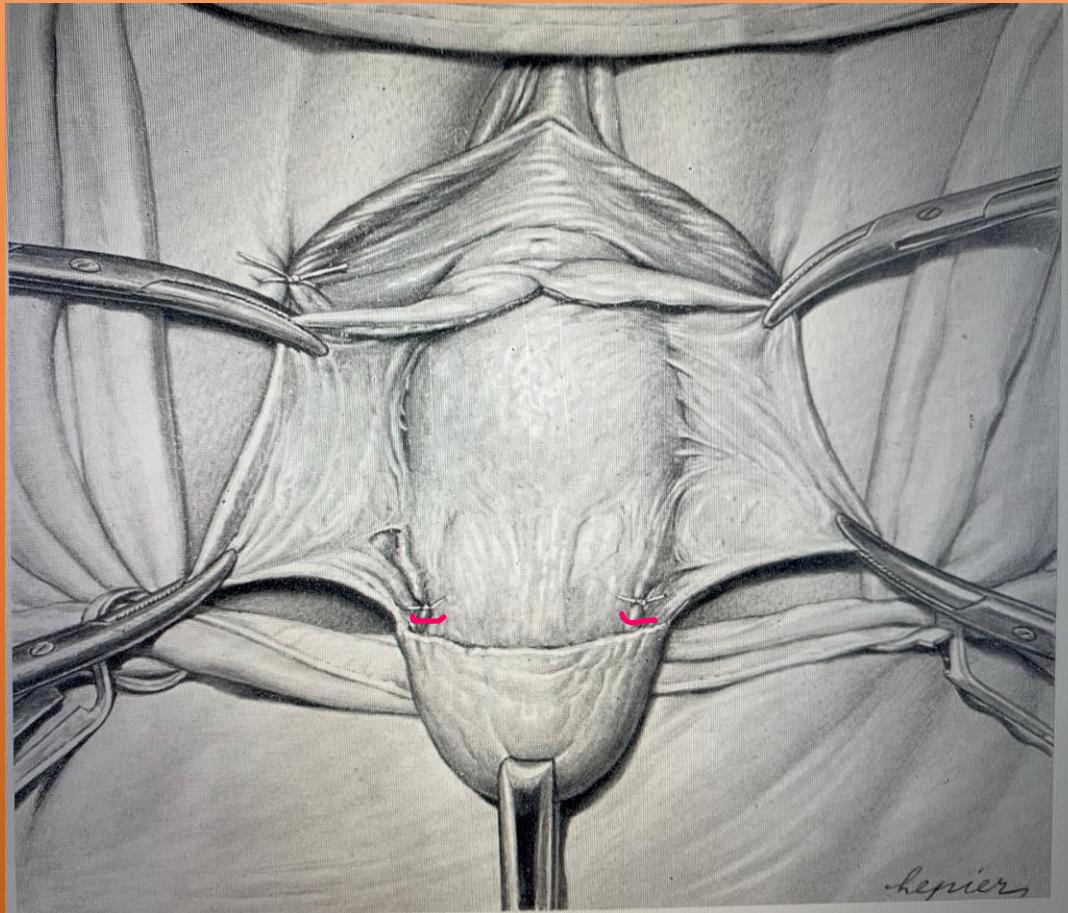
The labia minora have been sutured away from the operation area and the cervix has been pulled downwards. Note particularly the positions of the bladder sulcus and the transverse vaginal sulcus.

Anterior colporraphy (1): most common POP operation



A longitudinal incision has been made in the anterior vaginal wall together with a transverse incision. Note the method of dissecting the vagina together with the vaginal fascia away from the vesicovaginal space

anterior colporrhaphy (2)



The vaginal wall, together with the vaginal fascia, has been stripped away from the vesicovaginal space. The bladderpillars can also be seen (with stitches)

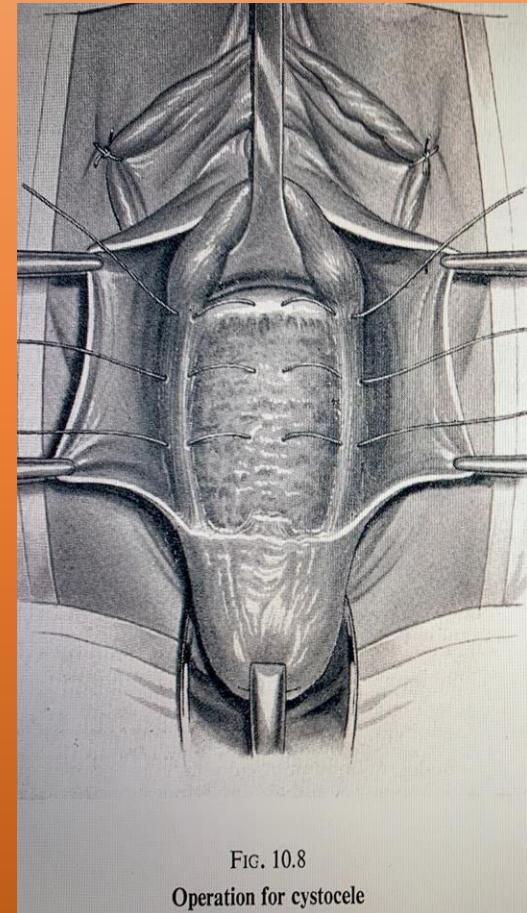


FIG. 10.8
Operation for cystocele

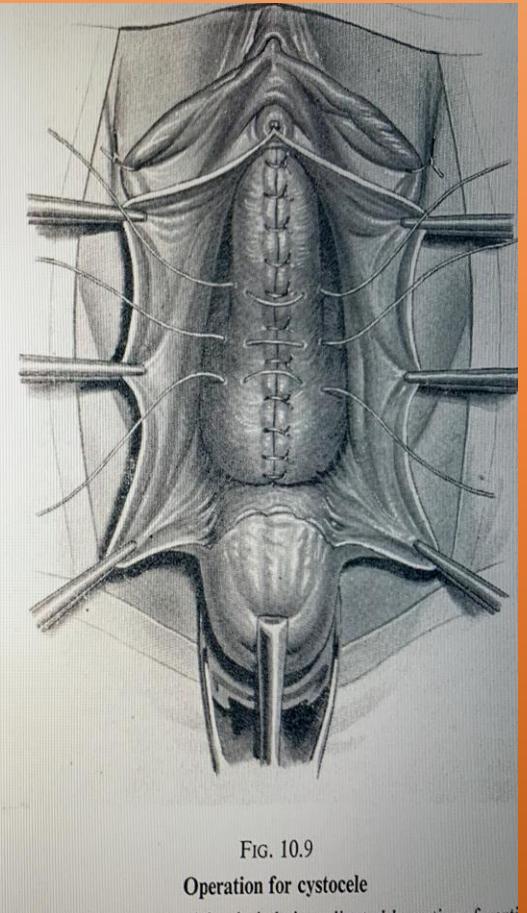
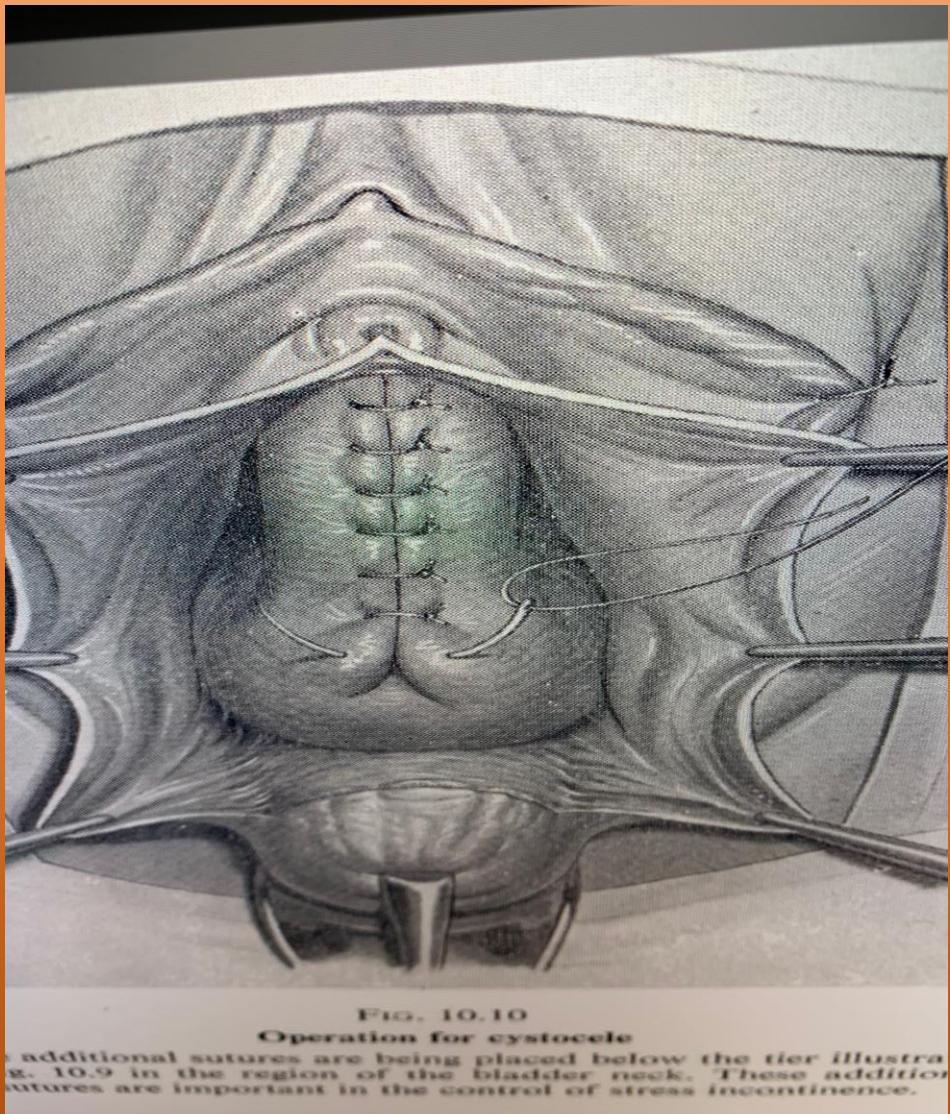


FIG. 10.9
Operation for cystocele

The vesical and urethral fascia is being plicated by a tier of vertical mattress sutures to form a firm buttress (penopang yang kuat) from the urethral meatus to the cervix.

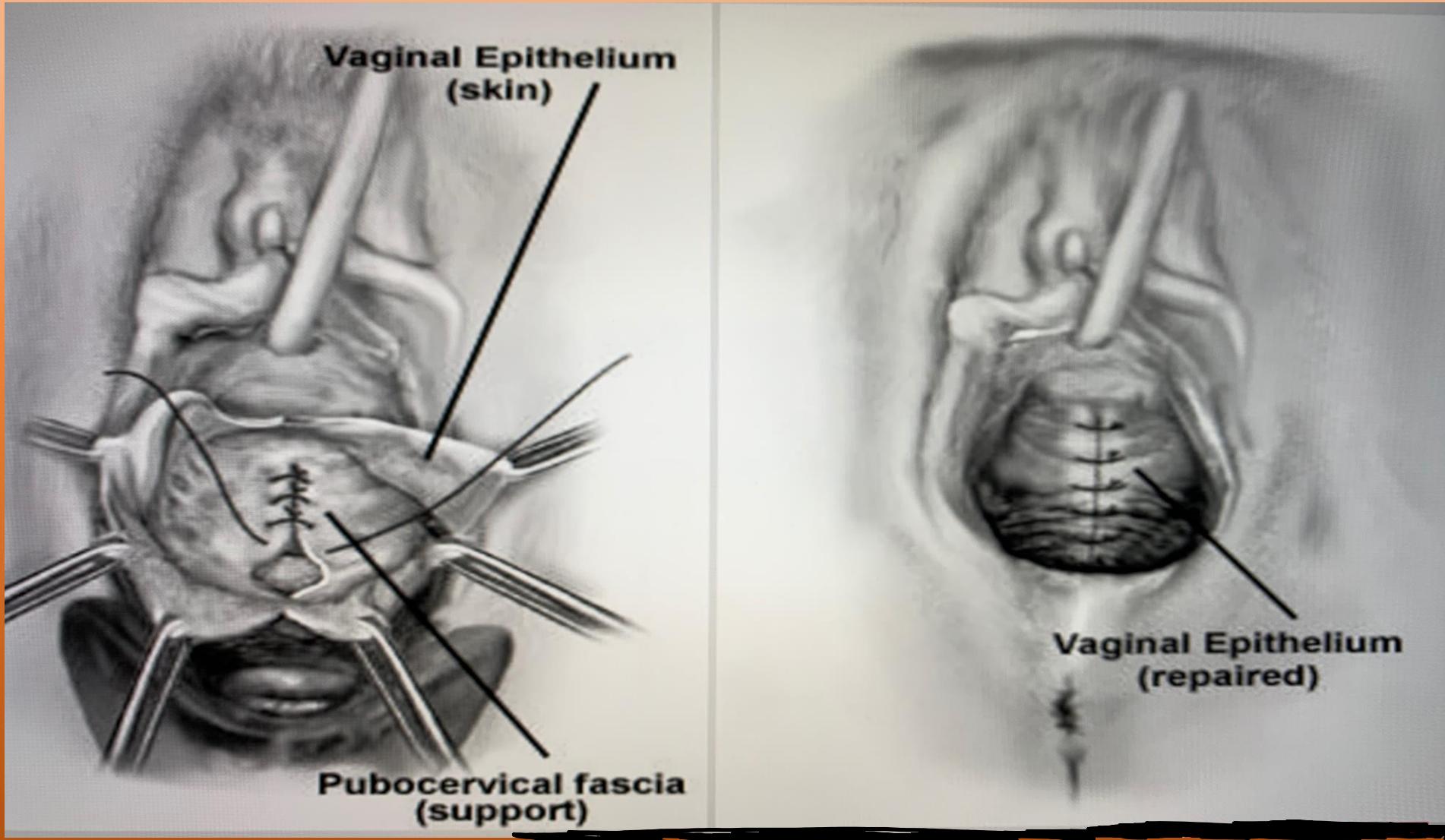
anterior colporrhaphy (3)



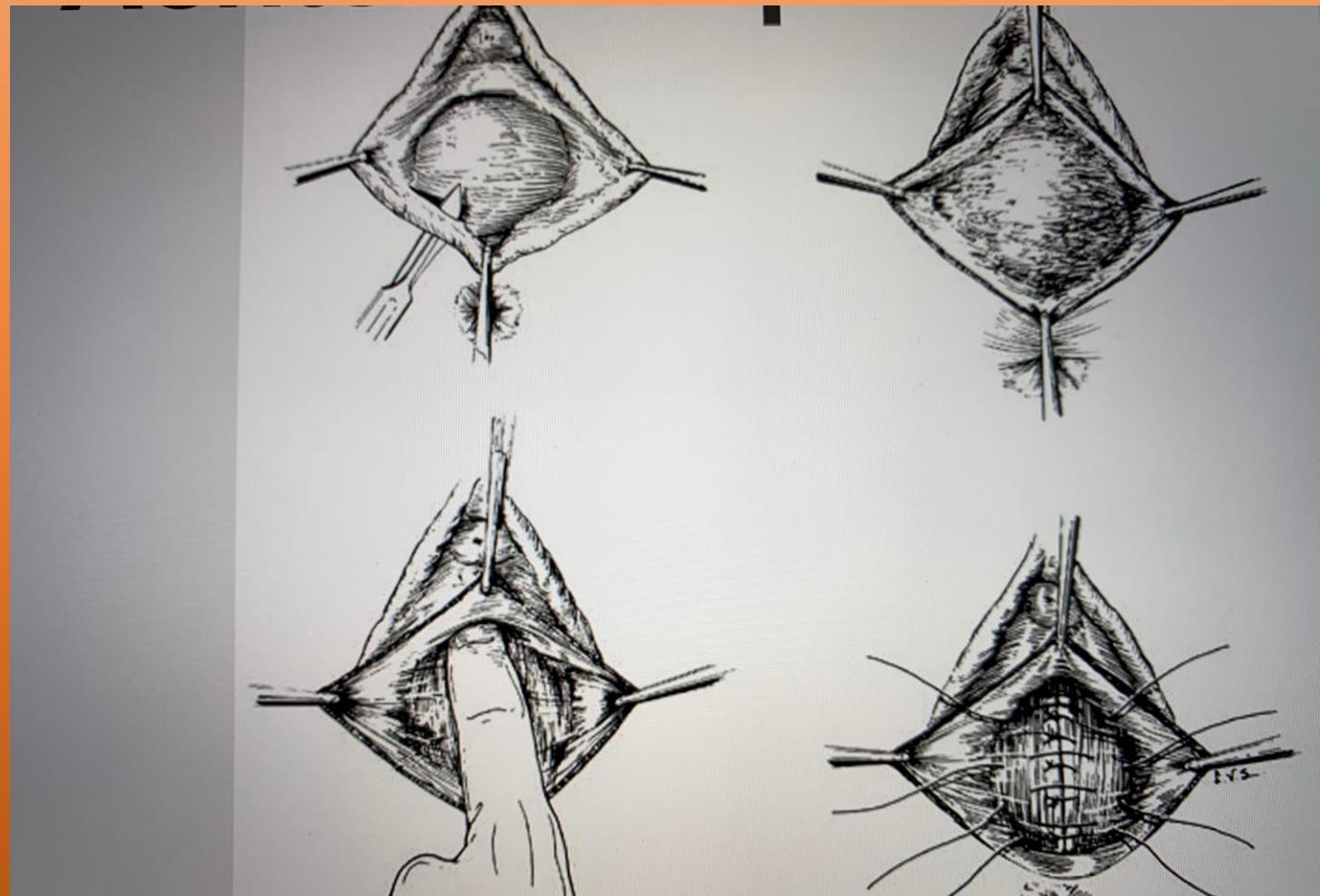
Three additional sutures are being placed below the tier in the region of the bladder neck.

These additional sutures are important in the control of stress incontinence (*evidence?)

Ant. colporrhapy (4) – pubocervical fascia (support)



Posterior colporrhaphy



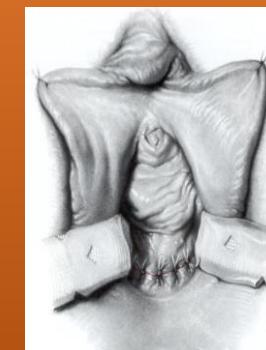
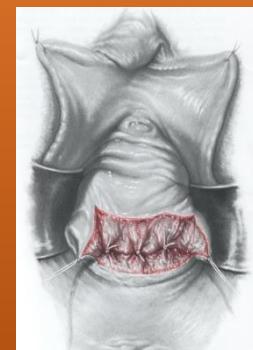
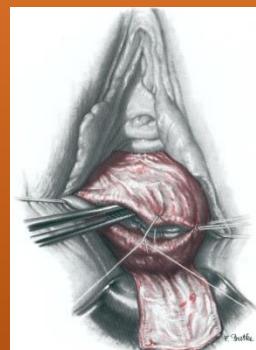
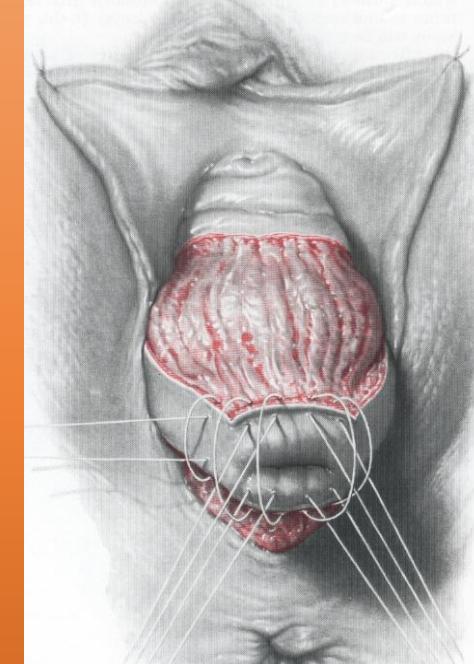
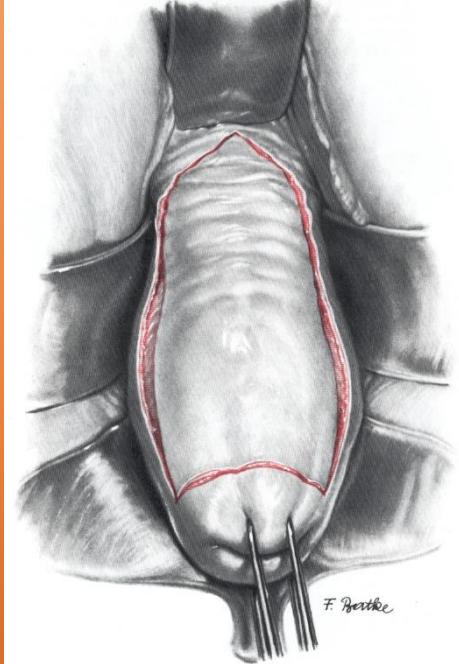
Colpocleisis

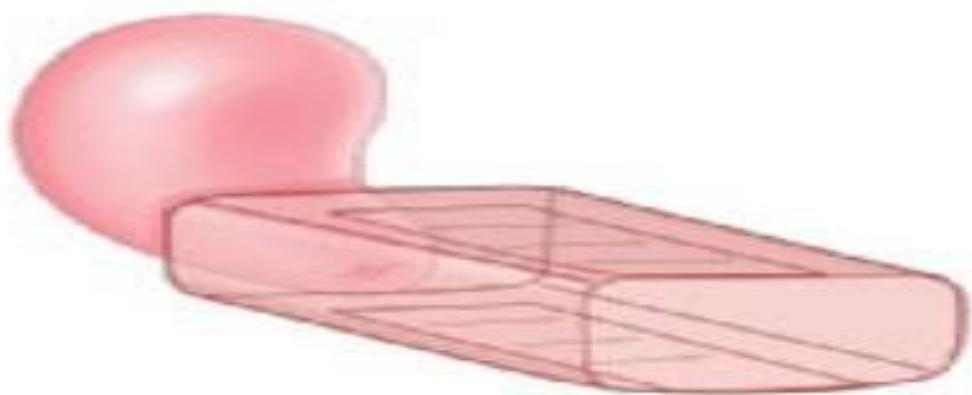
- Neugebauer-LeFort (1867)
- Doederlein cross-bar colporrhaphy
- Conill colpocleisis
- Labhardt (1932)

Colpocleisis

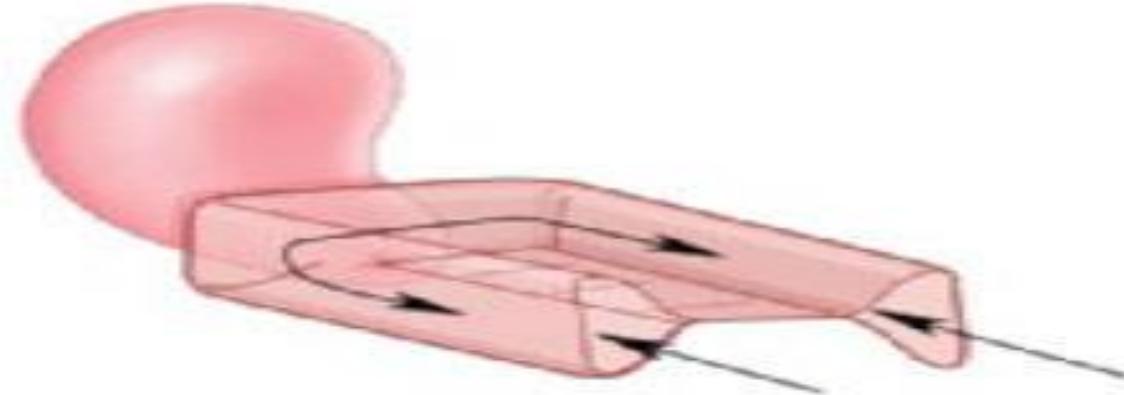
- Manfaat:
- Anestesi lokal
- Waktu perekaman singkat/perawatan hari
- Solusi sederhana untuk masalah serius
- Kerugian:
- Coitus kurang mungkin lagi (*)
- Jarang memburuknya inkontinensia berkemih (lefort)
- Probabilitas relapse (Labhardt)
- Rahim tidak tersulasi (skrining pra-endometrium dan serviks dalam operasi perencanaan)

Lefort

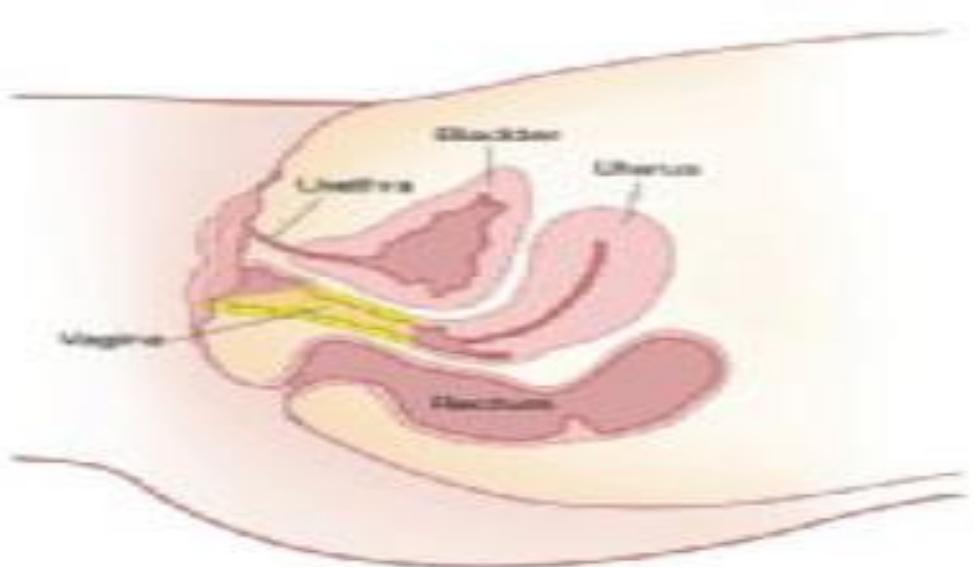


A

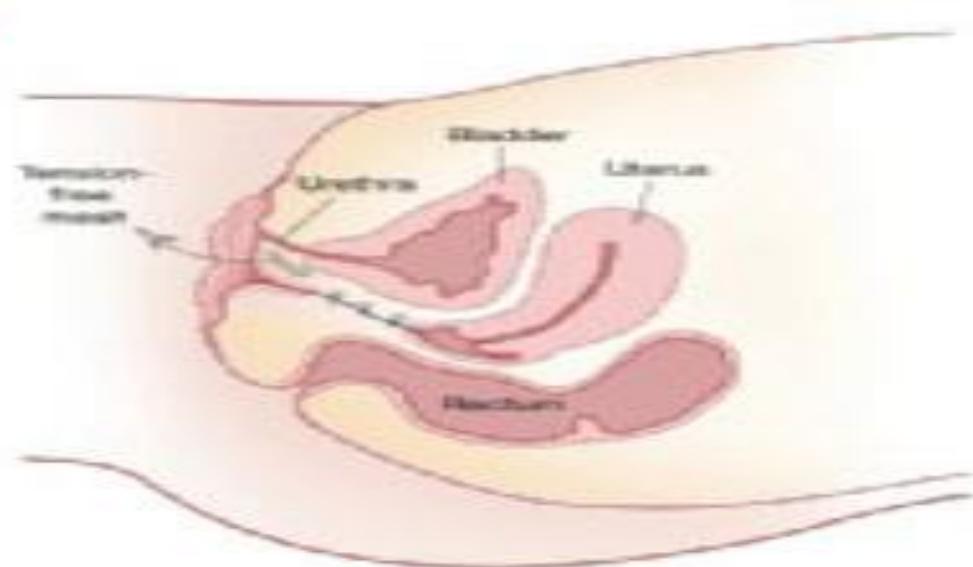
Two rectangular pieces of vaginal epithelium are removed, one each from the anterior and posterior vaginal walls.

B

The corresponding sides of these rectangles are sutured together, creating bilateral channels that connect at the vaginal apex. (Three short transverse lines represent row-by-row suturing of the raw surfaces.)

C

Sagittal representation of the denuded rectangular areas on the anterior and posterior vaginal walls (highlighted in yellow).

D

The procedure is completed by suturing the corresponding sides of the rectangles and denuded surfaces in three rows.

Apical prolaps (1)

- Descensus uteri
 - Preservation uterus
 - Sacrospinal Fixation
 - Manchester Fothergill

Vaginal uterus extirpation

- McCall procedure

Abdominal approach

-Supravaginal uterus extirpation & sacrocolpopoxie

-Sacrocolpopexie & uterus preservation

Hysteropexie

Apical prolaps (2)

- Vaginatop prolaps

- Vaginal approach

- - SacroSpinalFixation

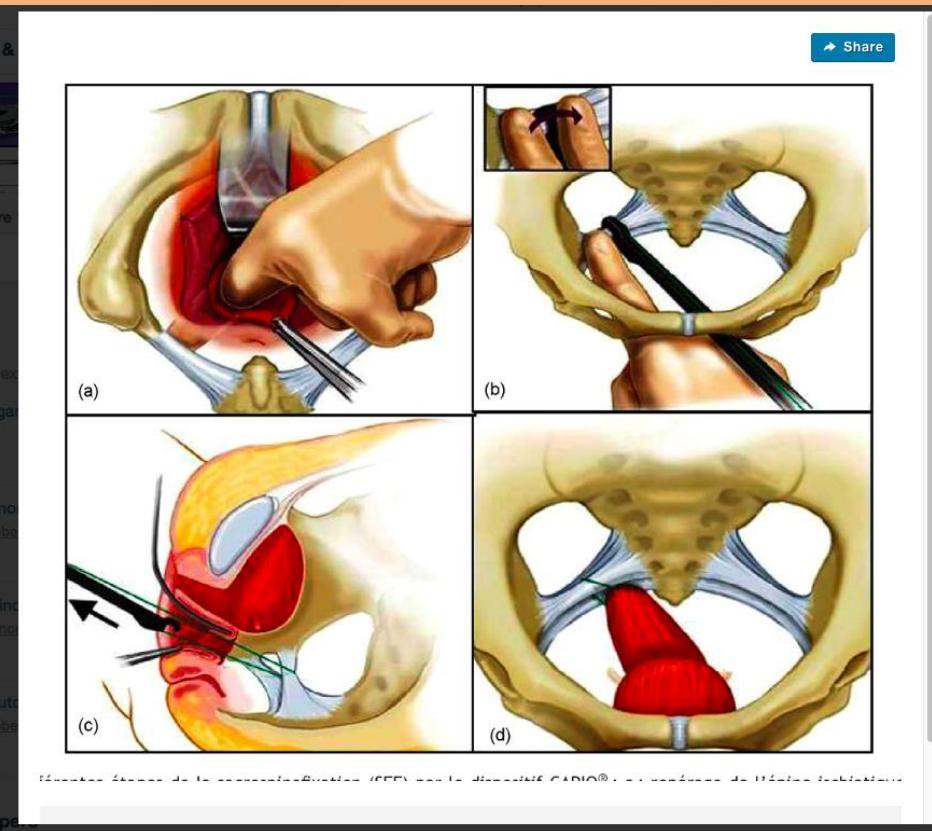
- - Plication sacro-uterine ligaments (Bob Shull)

- - Mesh (single incision technique)

- Abdominal approach

- McCall procedure

- Laparoscopic sacrocolpopexie



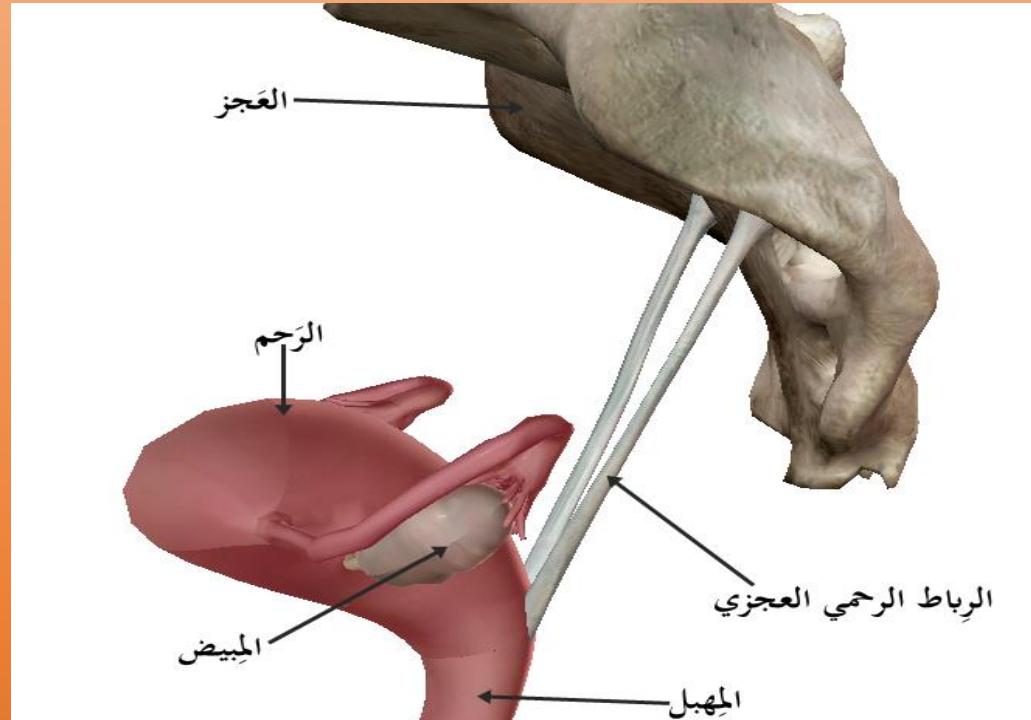
Sacrospinal fixation

- Benefit vs. vaginal uterine extirpation: shorter hospitalisation, quicker recovery, quicker return to work, longer vaginal length, little dyspareunia Complication: Pain in the buttock (may also be so severe that the adhesion should be loose again), bleeding, urinary retention Aftercare: Tampon and catheter for 1 day, determine residue Recurrence Rate: 10-21% top, 40-50% cystocele

Dietz V et al. One year follow-up after sacrospinous hysteropexy and vaginal hysterectomy for uterine descent: a randomised controlled trial. 2010, Save U



Manchesterprocedure

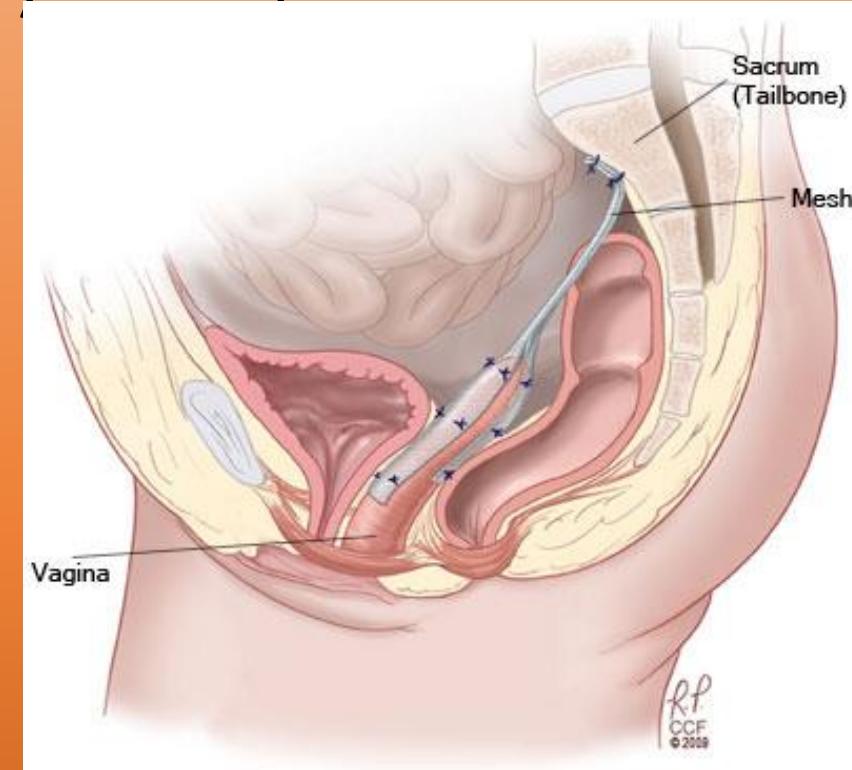


- Complication: bleeding, urinary retention, urinary incontinence, injury ureter Possible cervix stenosis
- Aftercare: Tampon and catheter for 1 day, determine residue Recurrence rate: None in apical compartment, possible up to 40% (anatomically) in all compartments (cystocele)

Ayhan A, et al. The Manchester operation for uterine prolaps. Int J Gyn Obstet 2006

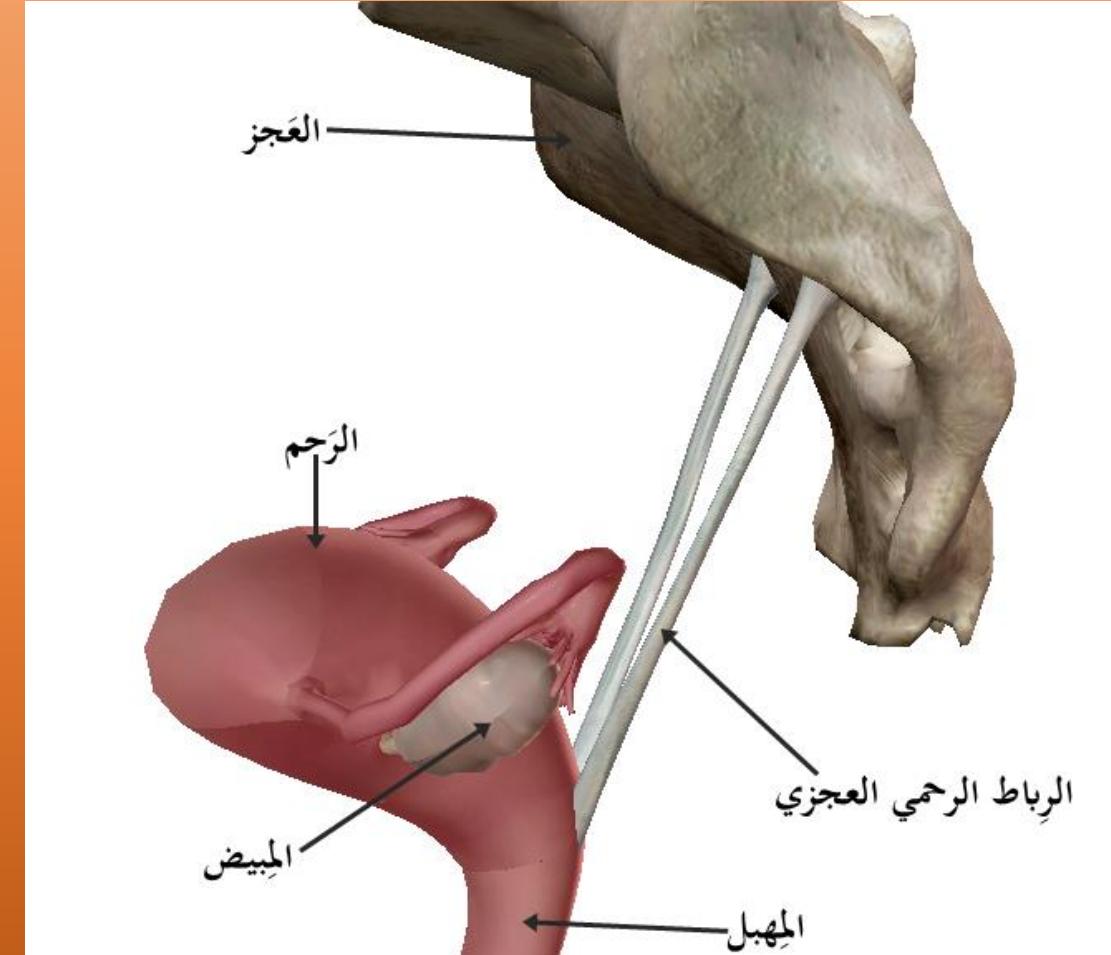
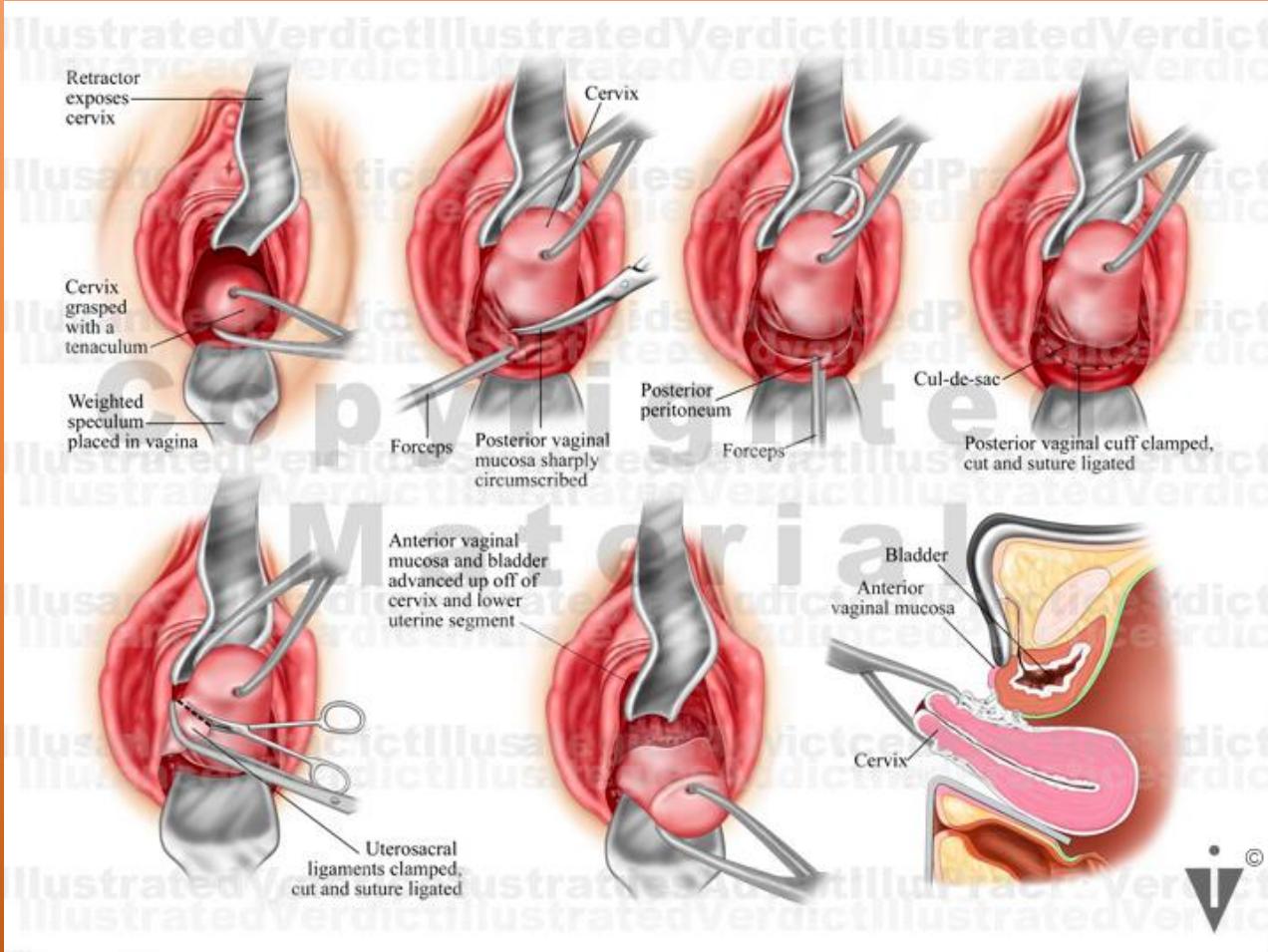
De Boer et al. The effectiveness of surgical correction of uterine prolapse: cervical amputation with uterosacral ligament plication (modified manchester) versus vaginal hysterectomy with high uterosacral ligament plication. Int Urogyn J Pelvic Floor dysfunct 2009

Sacrocolpo/hysteropexie



- Route: Abdominal, laparoscopic, robot
- Complications: pre-sacral bleeding, pain, bowel injury, ileus, bladder injury, exposure mesh
- Aftercare: No catheter or tampon for non-vaginal surgery

VUE & reten sacro-uteriene ligaments



Aftercare: Tampon and catheter for 1 day, determine residue

Complications: bleeding, lesion rectum, lesion bladder, dyspareunia

operasi prolaps

- Recovery is 1st choice
- obliterating operations are 2nd choice
- recovery position uterine/vaginal atop is the basis of any prolapse operation (lifting Inversiecele), with autologous suspensors as long as it can
- mesh as own suspensors fail
- if vagina length is recovered, it follows correction of the (remaining) eversieèle after cysto-rectocele repair and recovery support

NOTE: This is not synonymous with a high levator plasty!

Middle compartment prolaps

Chirurgie Middelste compartiment

Abdominaal
laparoscopisch



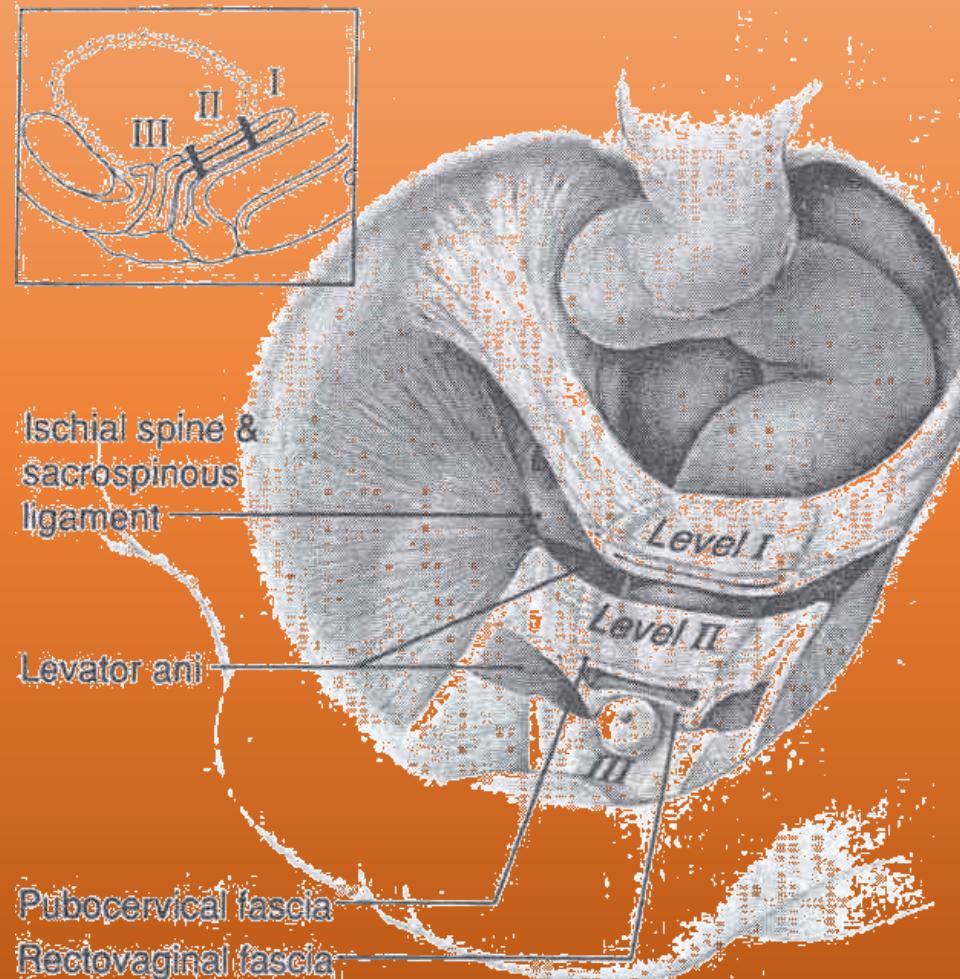
Vaginaal

Uterus verwijderen (VUE)



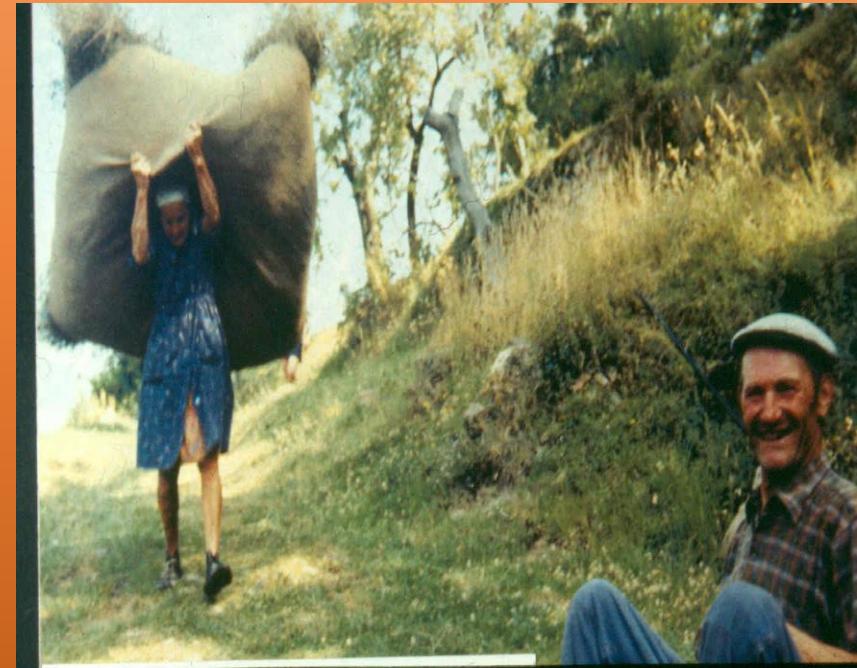
Uterus sparend (SSH of
Manchester)

Levels of support, according to DeLancy

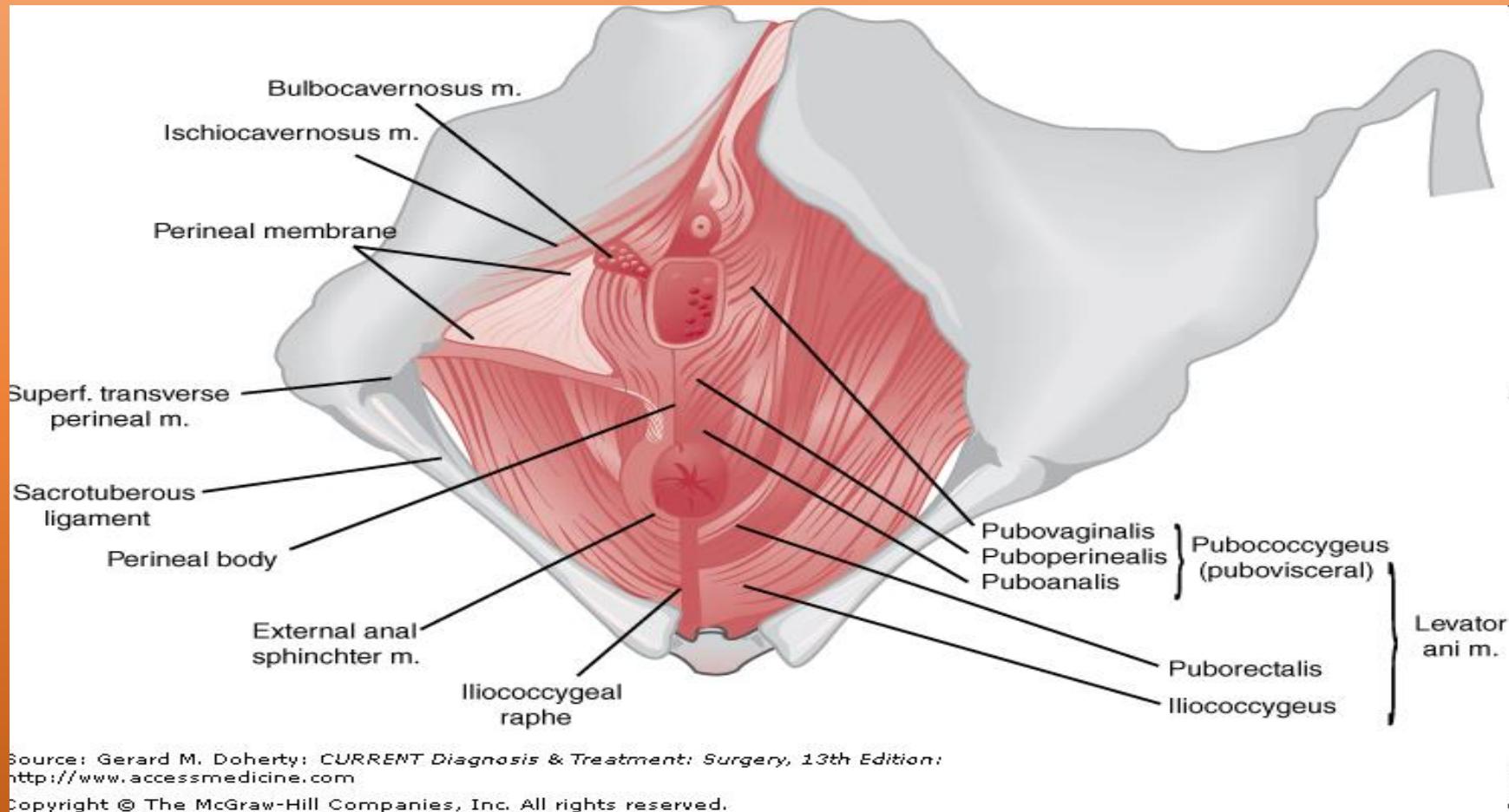


Sejarah kesahitan..kegelisahan?

- complaints + symptoms
- dysfunctional voiding/constipation
 - bladder/urethra
 - rectum/anus
 - sex
- straining
 - heavy lifting
 - sports
 - hypermobility (Ehler Danlos)



Anatomy of pelvic support. (From Schorge JO, Williams JW: *Williams Gynecology*, Figure 38–8. McGraw-Hill Medical, 2008.)



Evaluation of uterine prolapse



Reproduced with permission from: RG Rogers, MD, Division of Female Pelvic Medicine and Reconstructive Surgery, University of New Mexico Health Sciences Center, Albuquerque, NM.

prolaps operaties

Operasi konvensional

Menangguhkan operasi (pemulihan anatomis)

Dengan autologous tissue

MC Call

Manchester,

Richter (SSF-SSH)

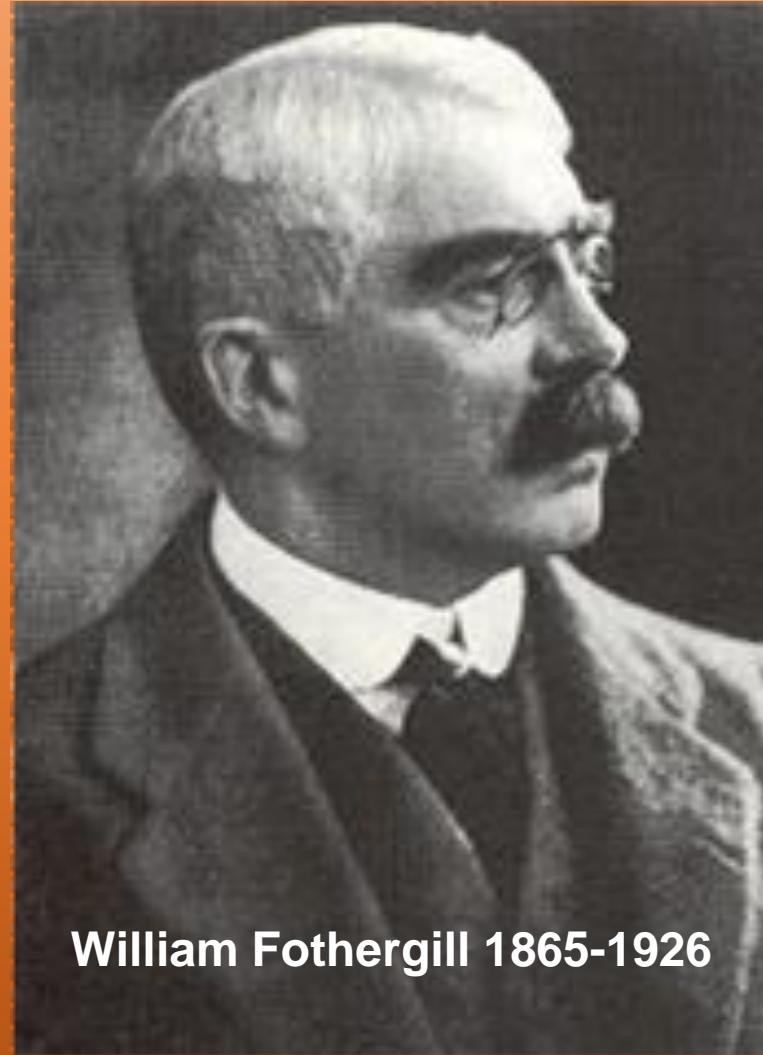
Dengan mesh

Rust (SCP)

Post IVS

- **menghapuskan operasi**
- **Pemusnahan lengkap (Lefort)**
- **Pemusnahan parsial (Labhardt)**
-

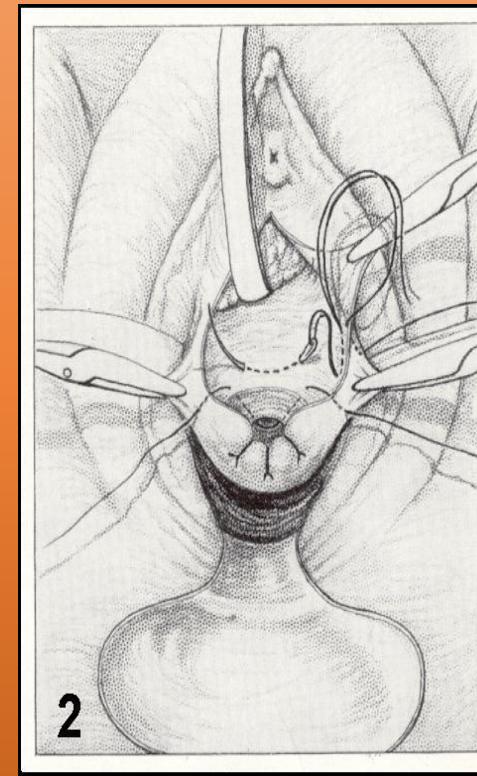
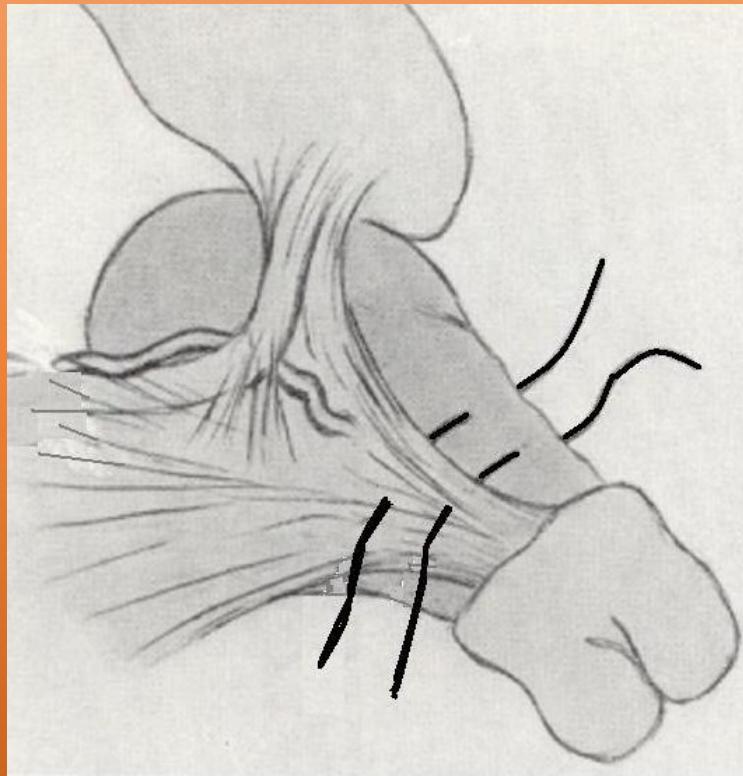
Manchester Fothergill



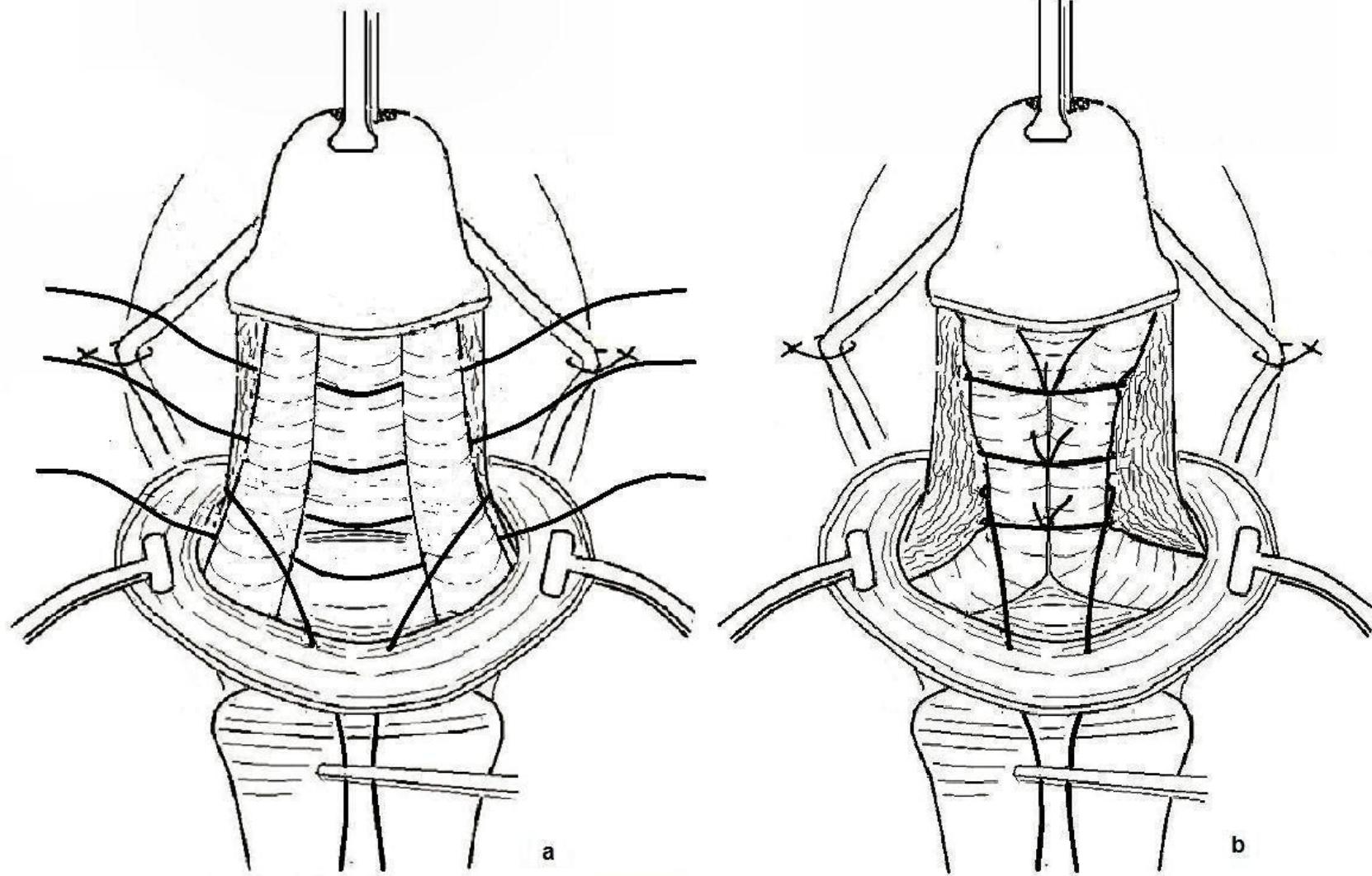
William Fothergill 1865-1926

1915

Manchester Fothergill

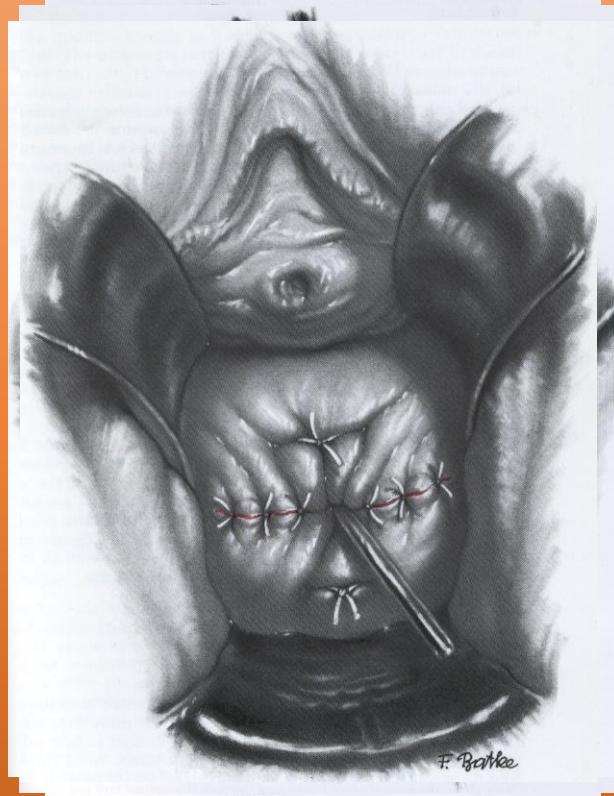


ligamenta cardinalia



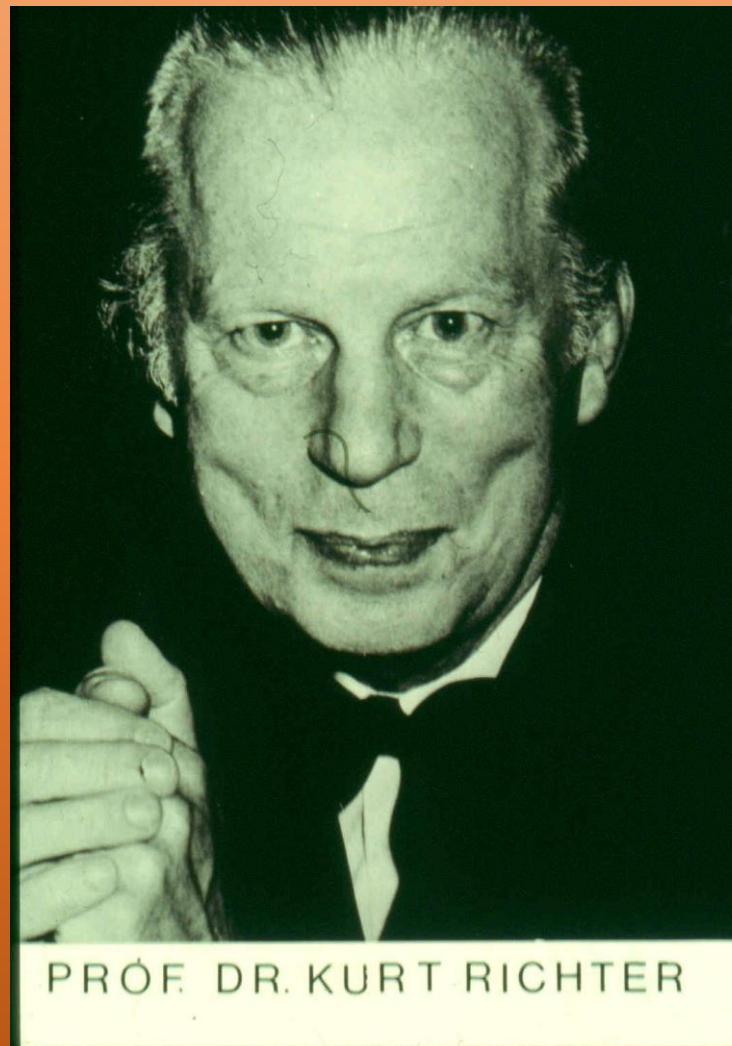


Modified Manchester



portioamputatie
Sturmdorf hechtingen

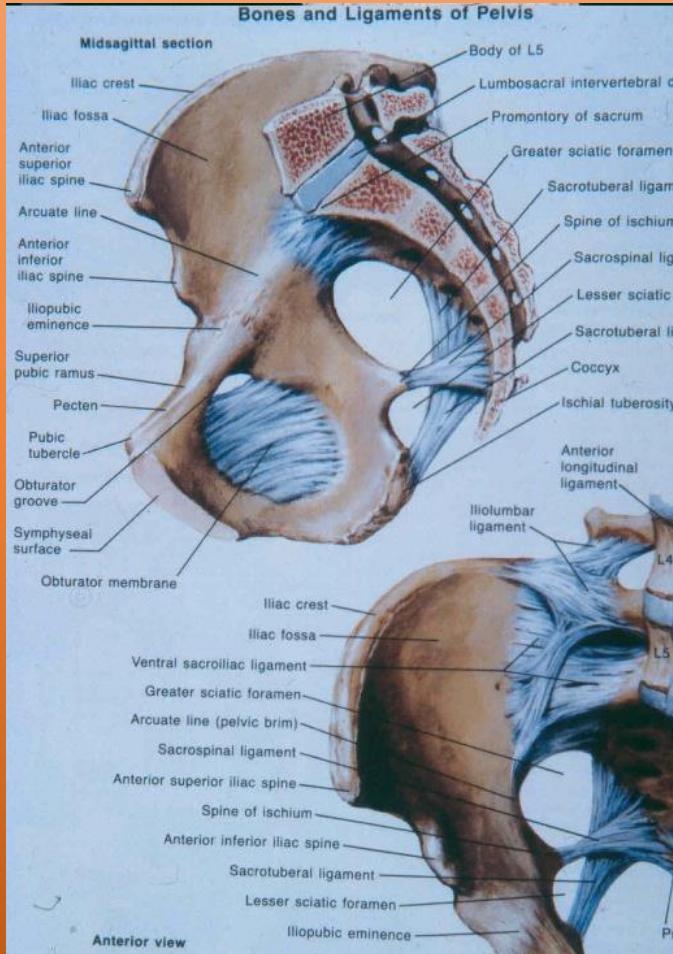
Richter



PROF. DR. KURT RICHTER

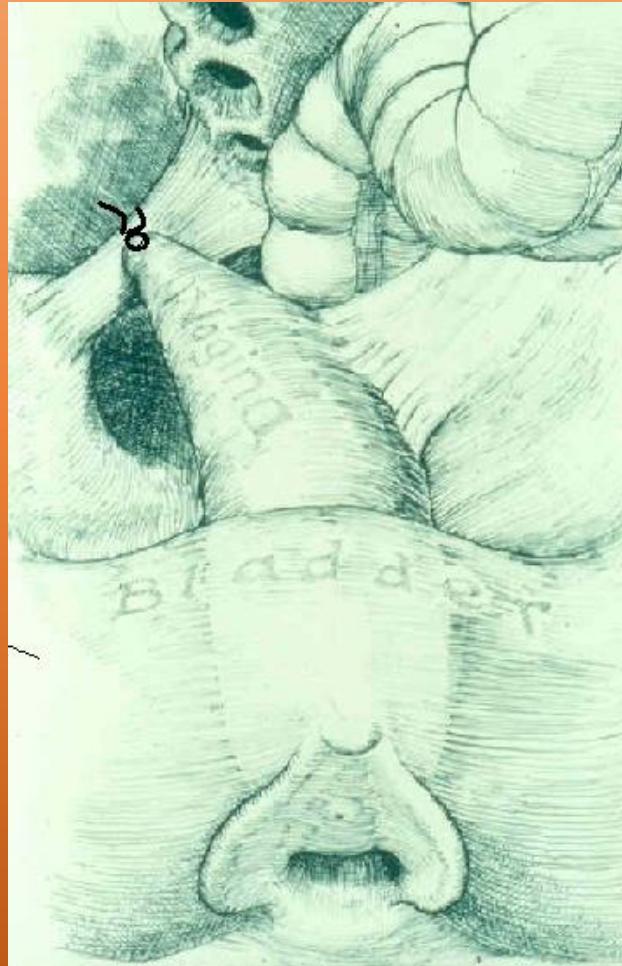
1967

sacrospinale fixatie



lig. sacrospinale

sacrospinale hysteropexie



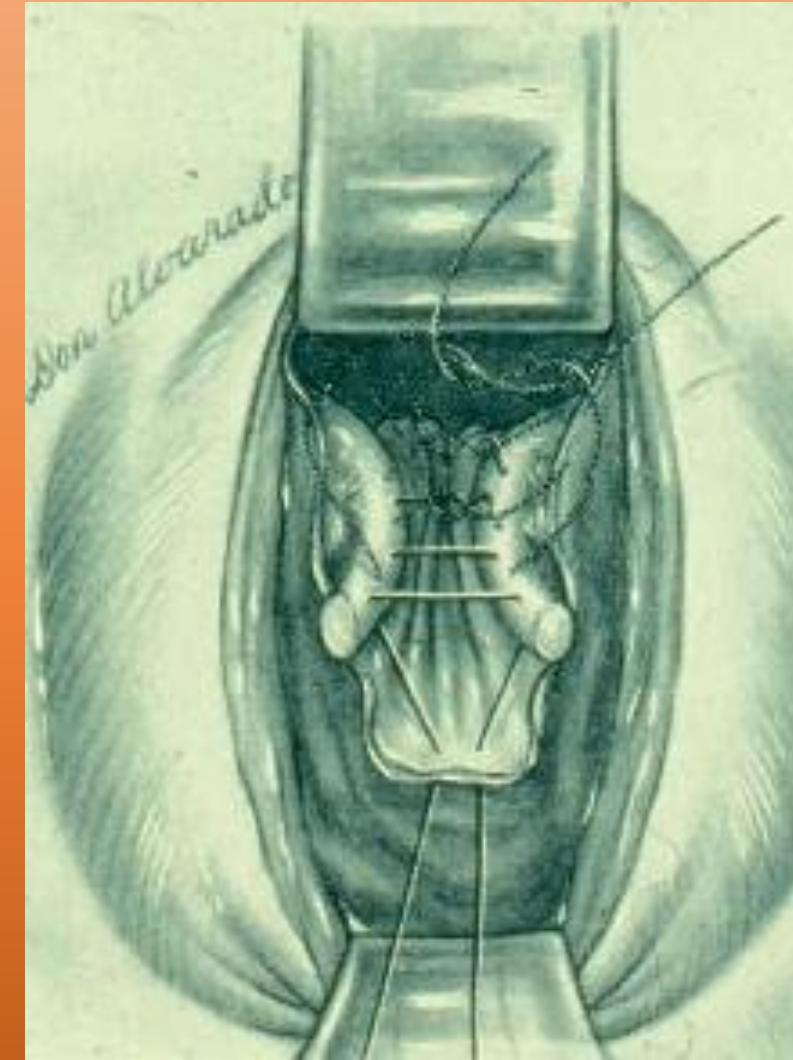
McCall



Milton Lawrence McCall 1911-1963

1957

McCall



reven ligamenta sacrouterina

uterus ?

ja

POPQ

= of < 2

3

- 1. MM
- 2. SSH
- 3. Mc Call

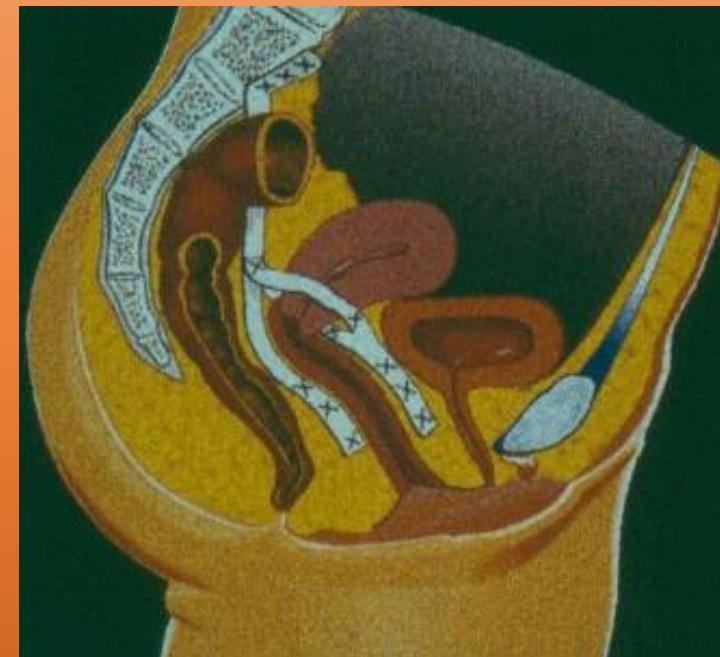
- 1. MM
- 2. SSH
- 3. SVUA/SCP

<75

sacrocolpopexie vgl Rust



zonder..

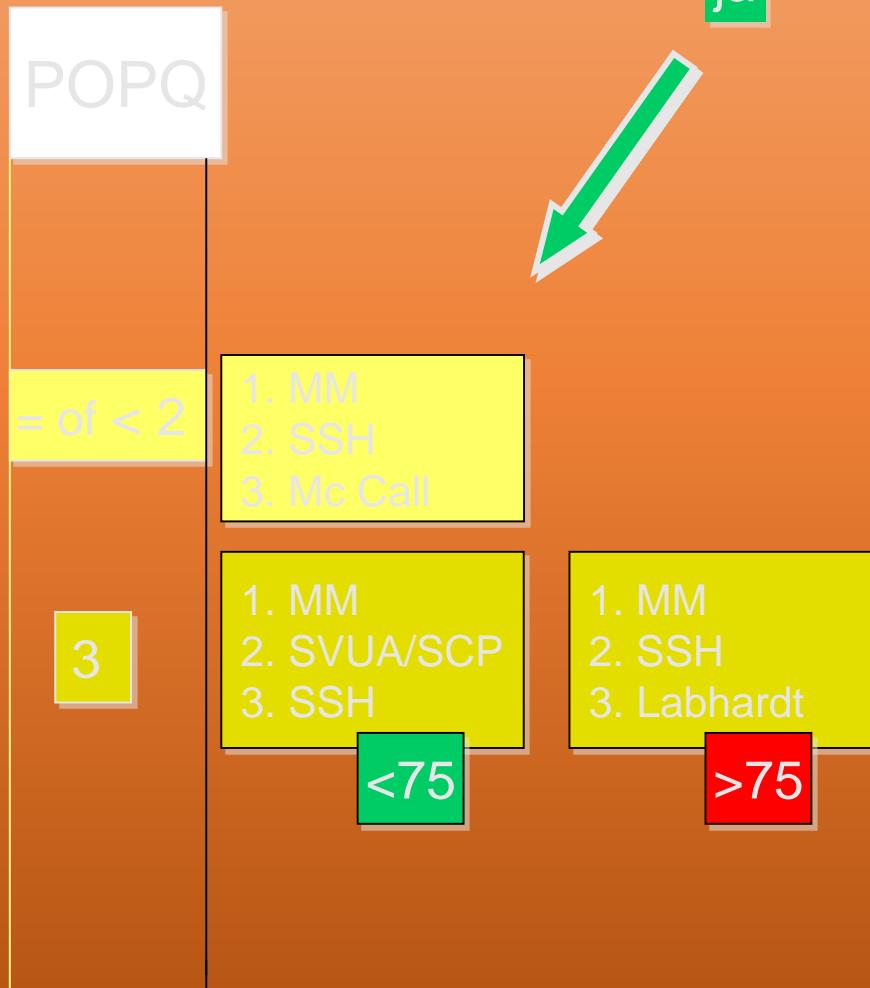


met uterus

1976

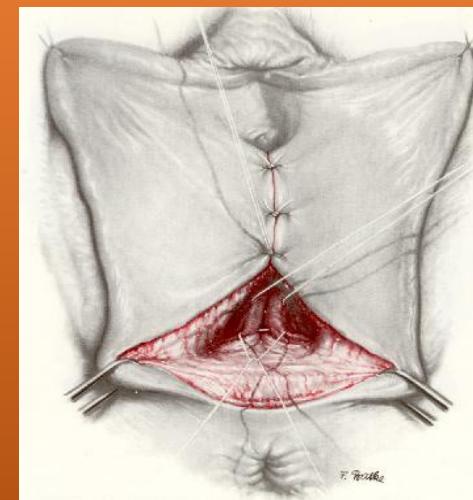
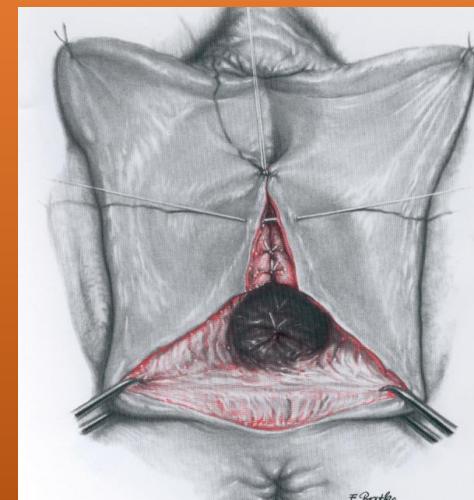
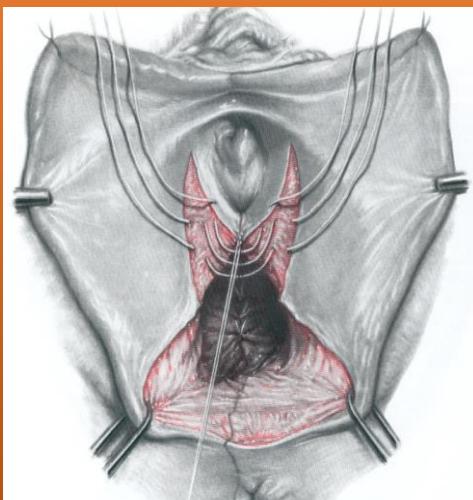
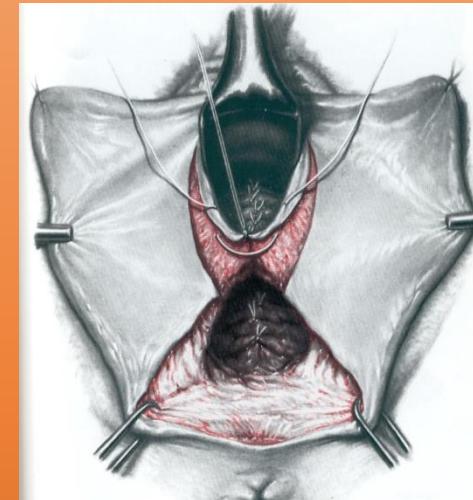
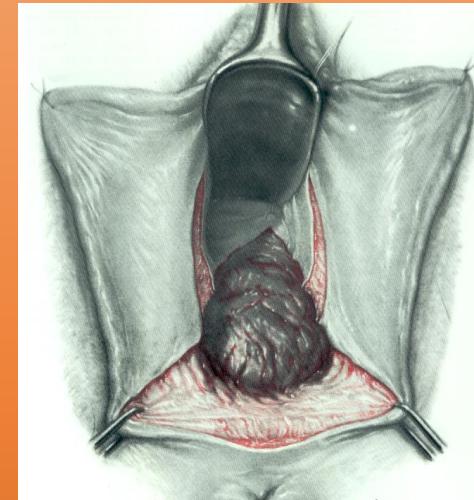
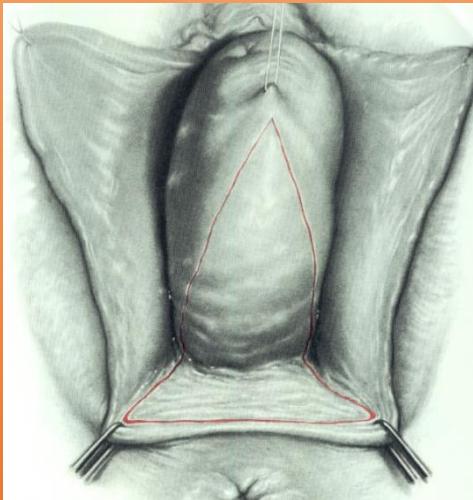
uterus ?

ja



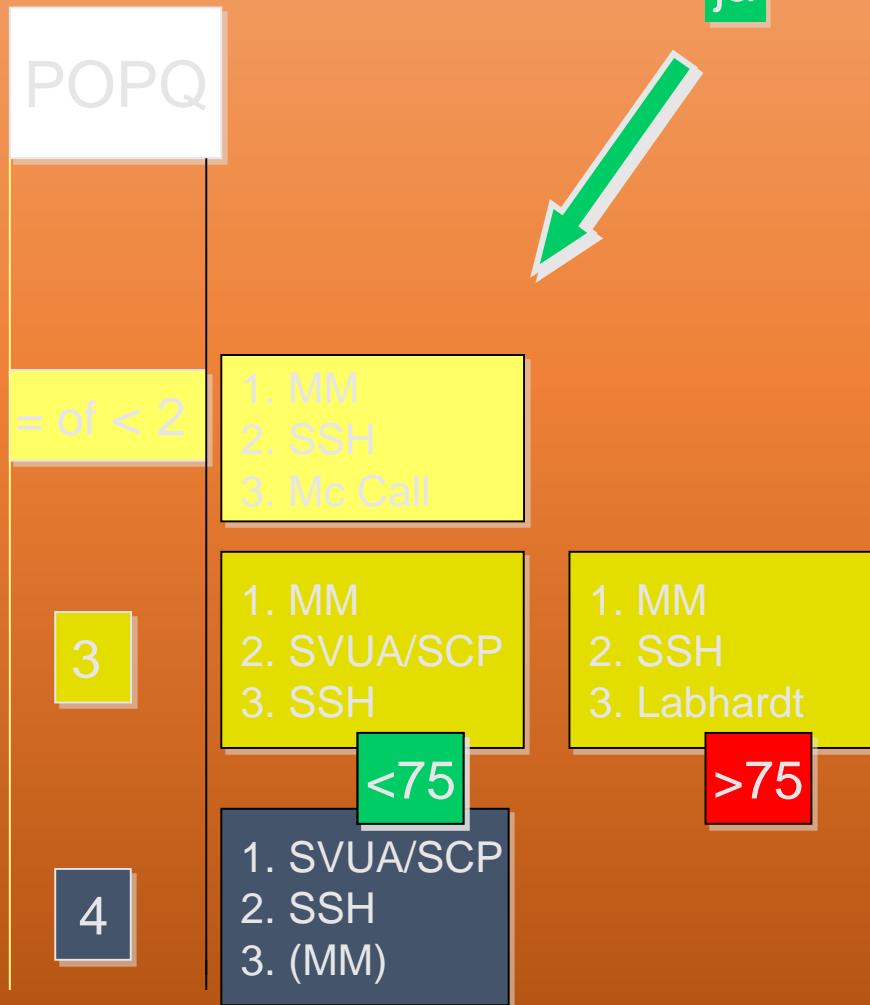
Labhardt

1932



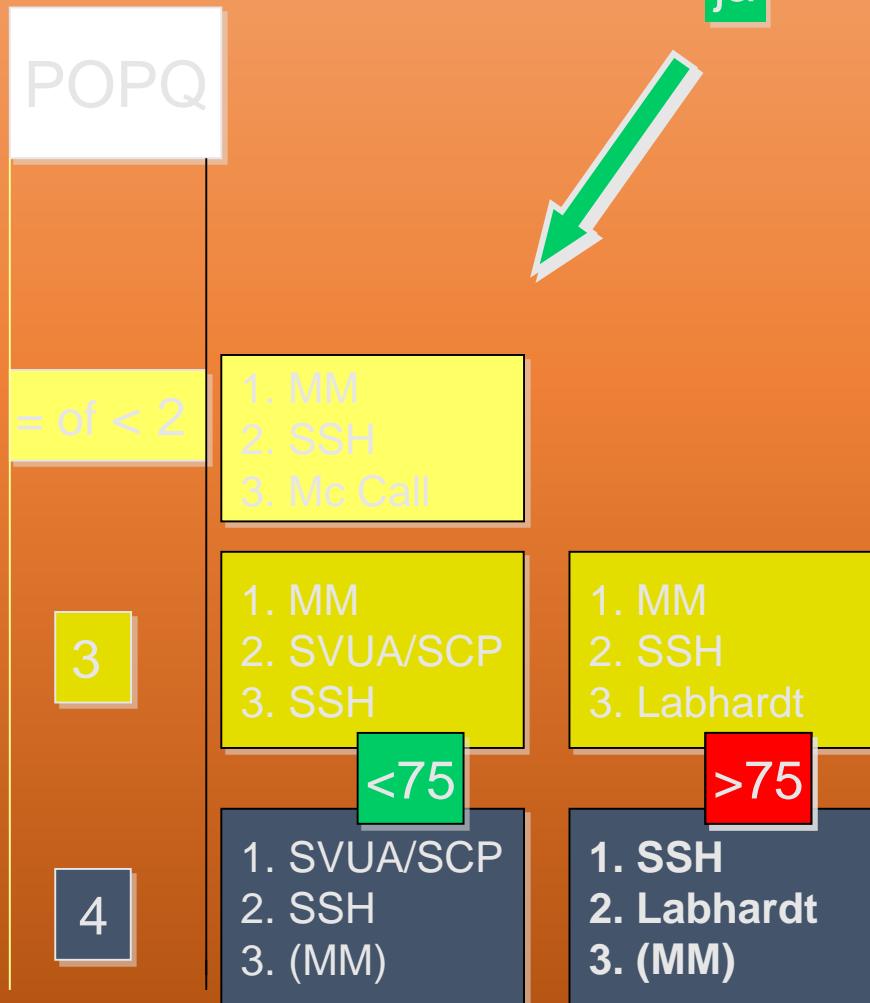
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POPQ

= of < 2

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4

1. MF
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<75

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individualiseren

<75

1. SCP
2. SSF
3. Post IVS

expectatief

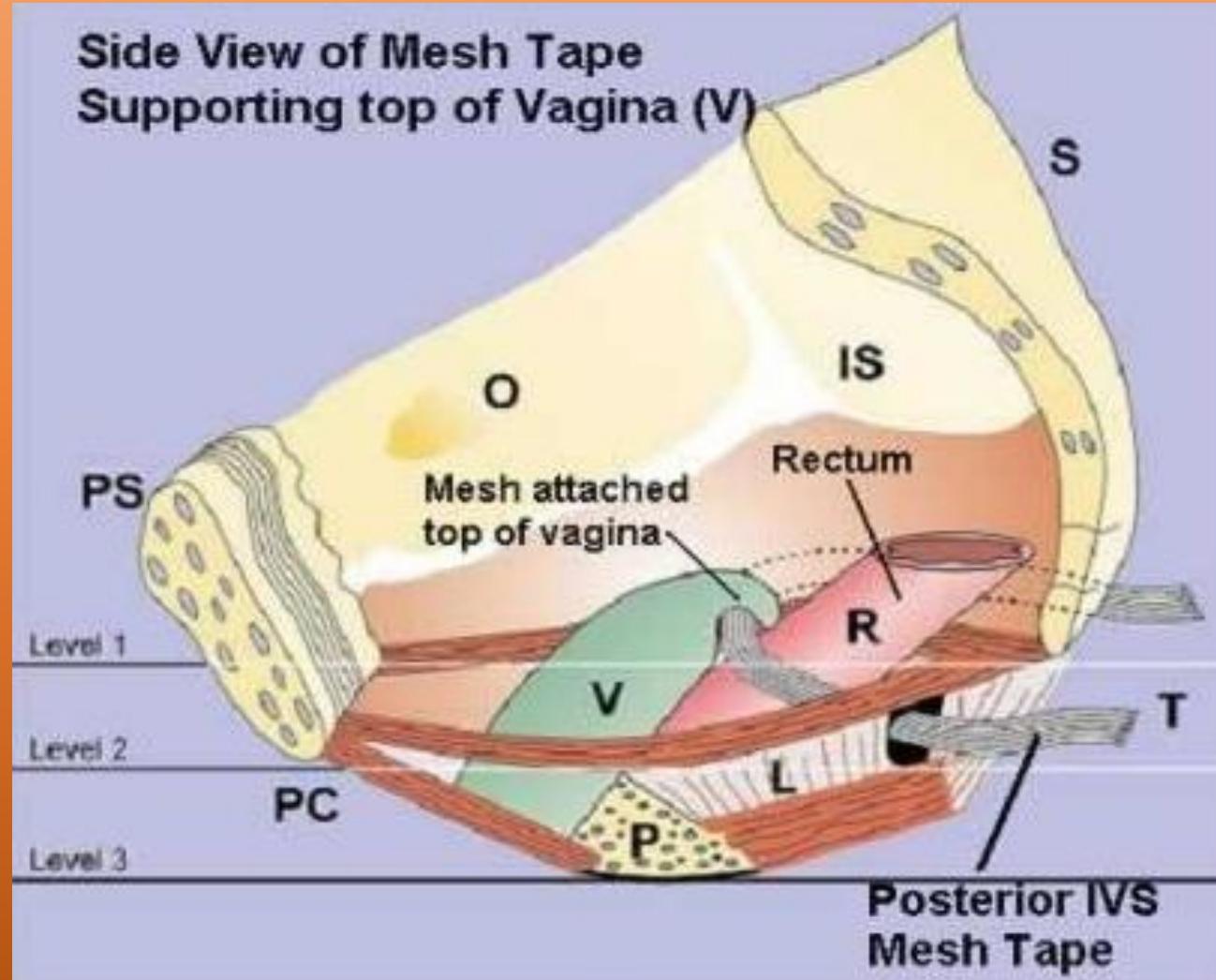
>75

POPQ

1

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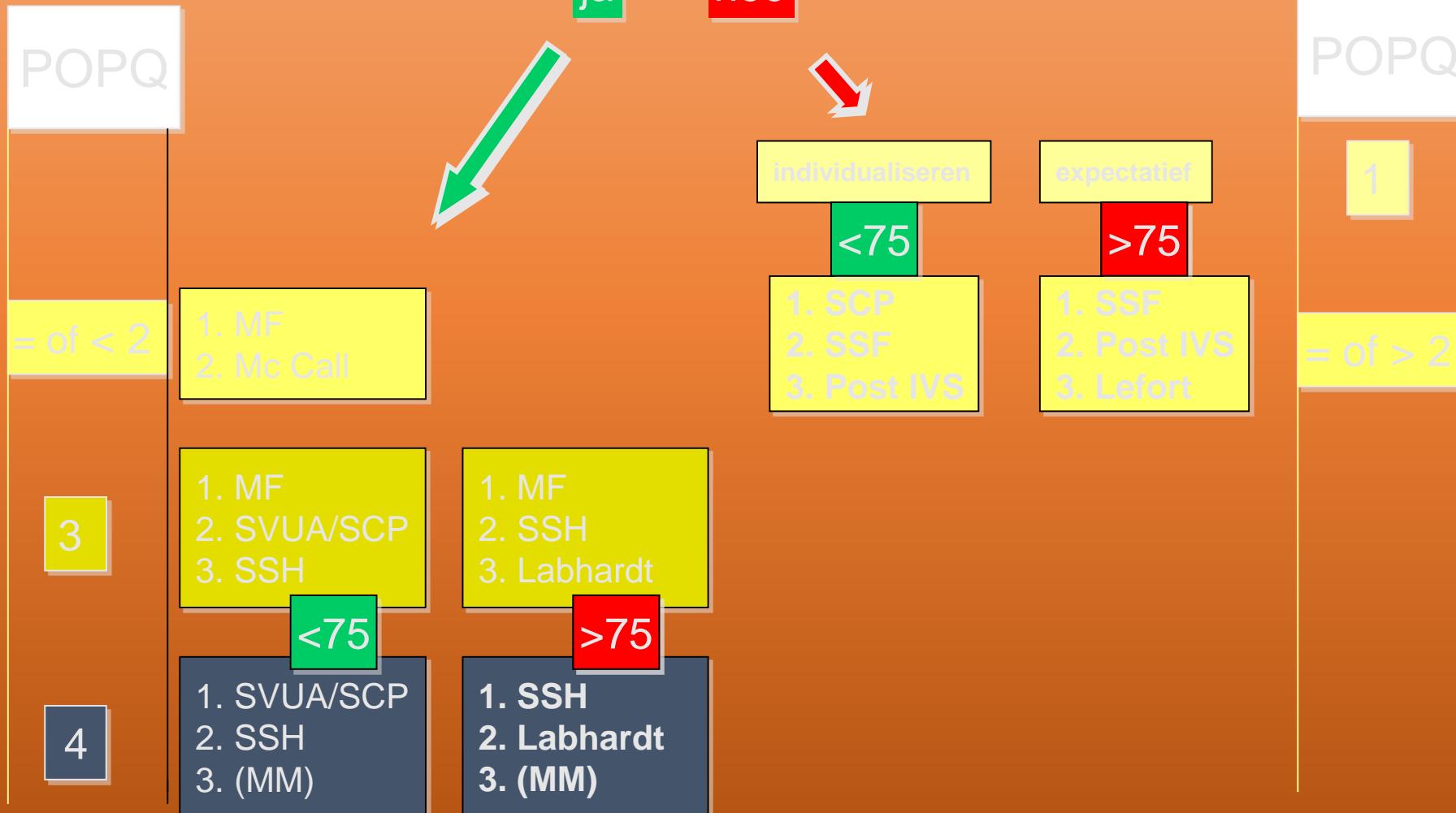
posterior IVS



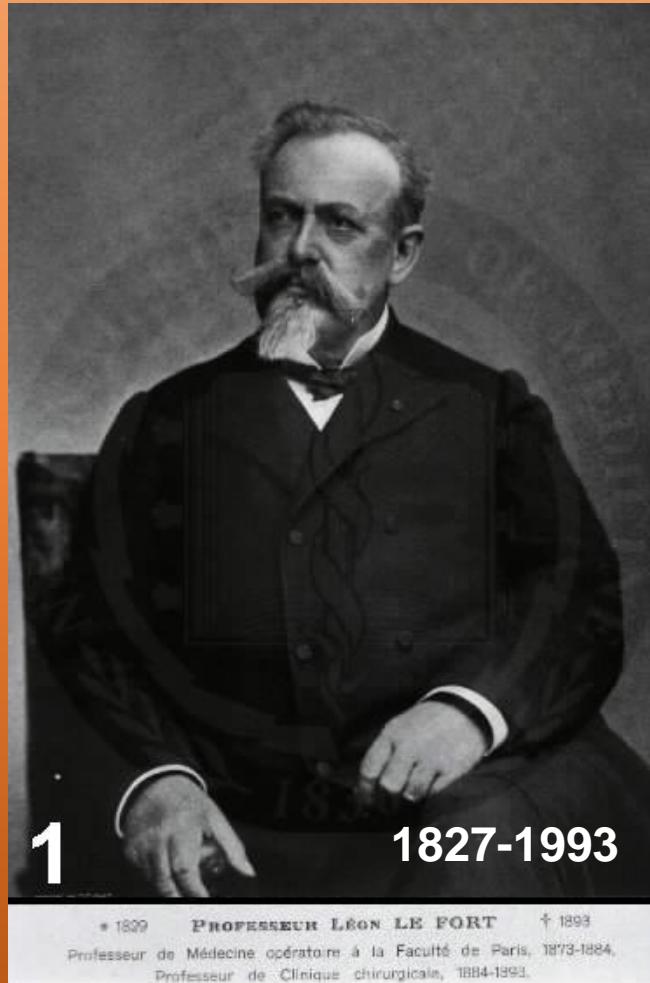
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Lefort



1877

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- 70% succes 1^e procedure

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(SSH, MM)

aanbevelingen

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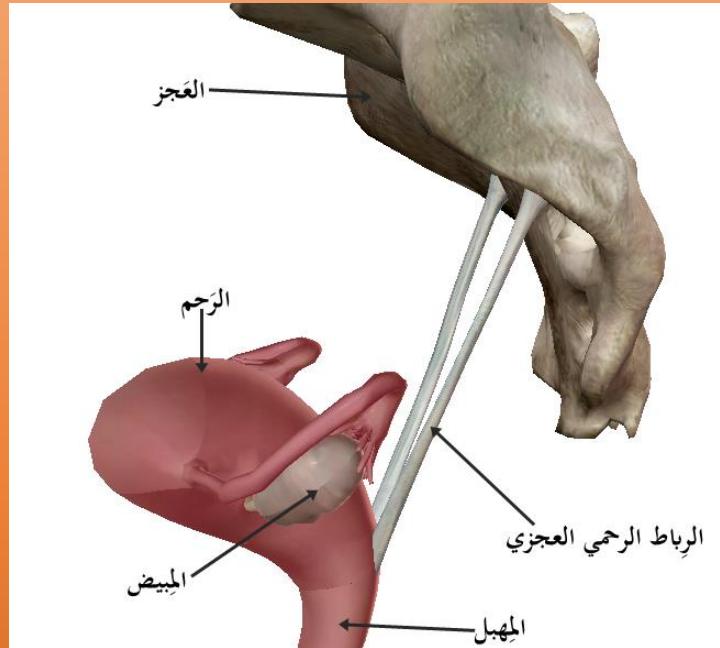
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liefst alleen in trial verband



Manchesterprocedure



- **Complicatie:** nabloeding, urineretentie, urine-incontinentie, letsel ureteren
- mogelijk cervixstenose
- **Nazorg:** tampon en catheter gedurende 1 dag, residu bepalen
- **Recidiefpercentage:** geen in apicale compartment, mogelijk tot 40% (anatomisch) in alle compartimenten (**cystocele**)

Ayhan A, et al. The Manchester operation for uterine prolaps. Int J Gyn Obstet 2006

De Boer et al. The effectiveness of surgical correction of uterine prolapse: cervical amputation with uterosacral ligament plication (modified manchester) versus vaginal hysterectomy with high uterosacral ligament plication. Int Urogyn J Pelvic Floor dysfunct 2009