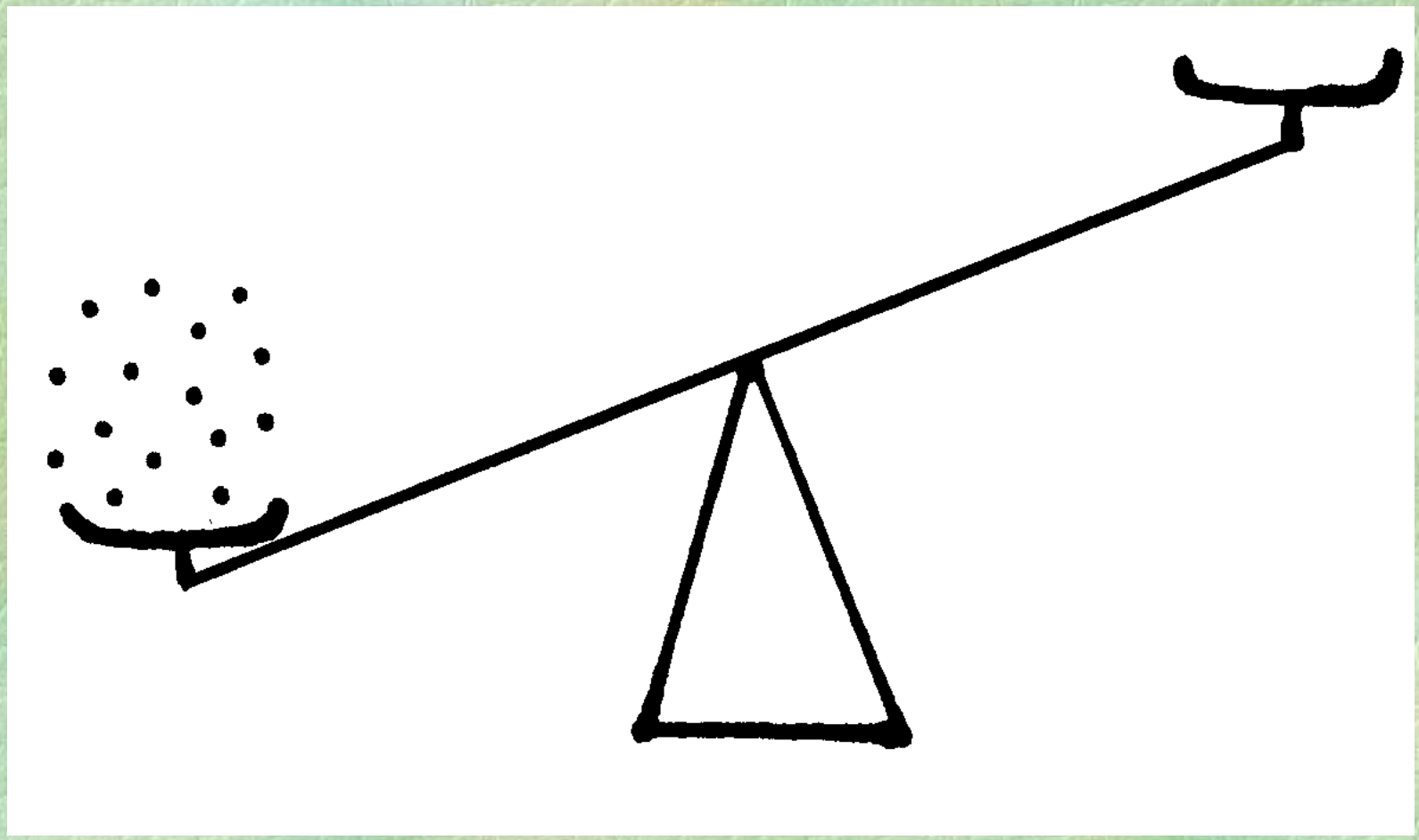
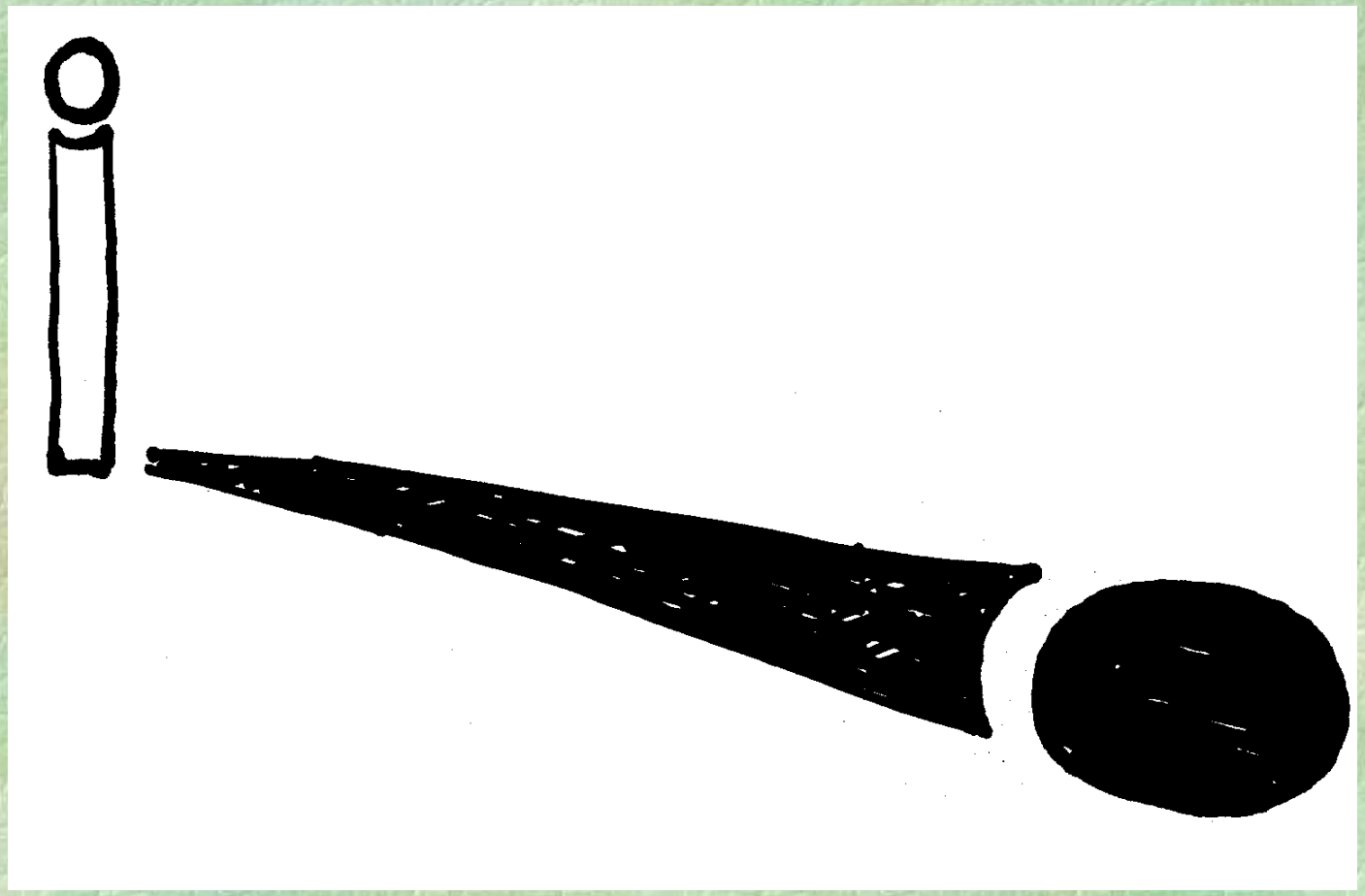

PEPPERMINT





Towards a perfect pelvis

Simon Emery

Causes of prolapse

- Neglect
- Neglect
- Neglect

prevention

- Awareness of pelvic floor
- Prepare before pregnancy
- Repair after pregnancy
- Avoid constipation

muscle

Fast and slow

Strength

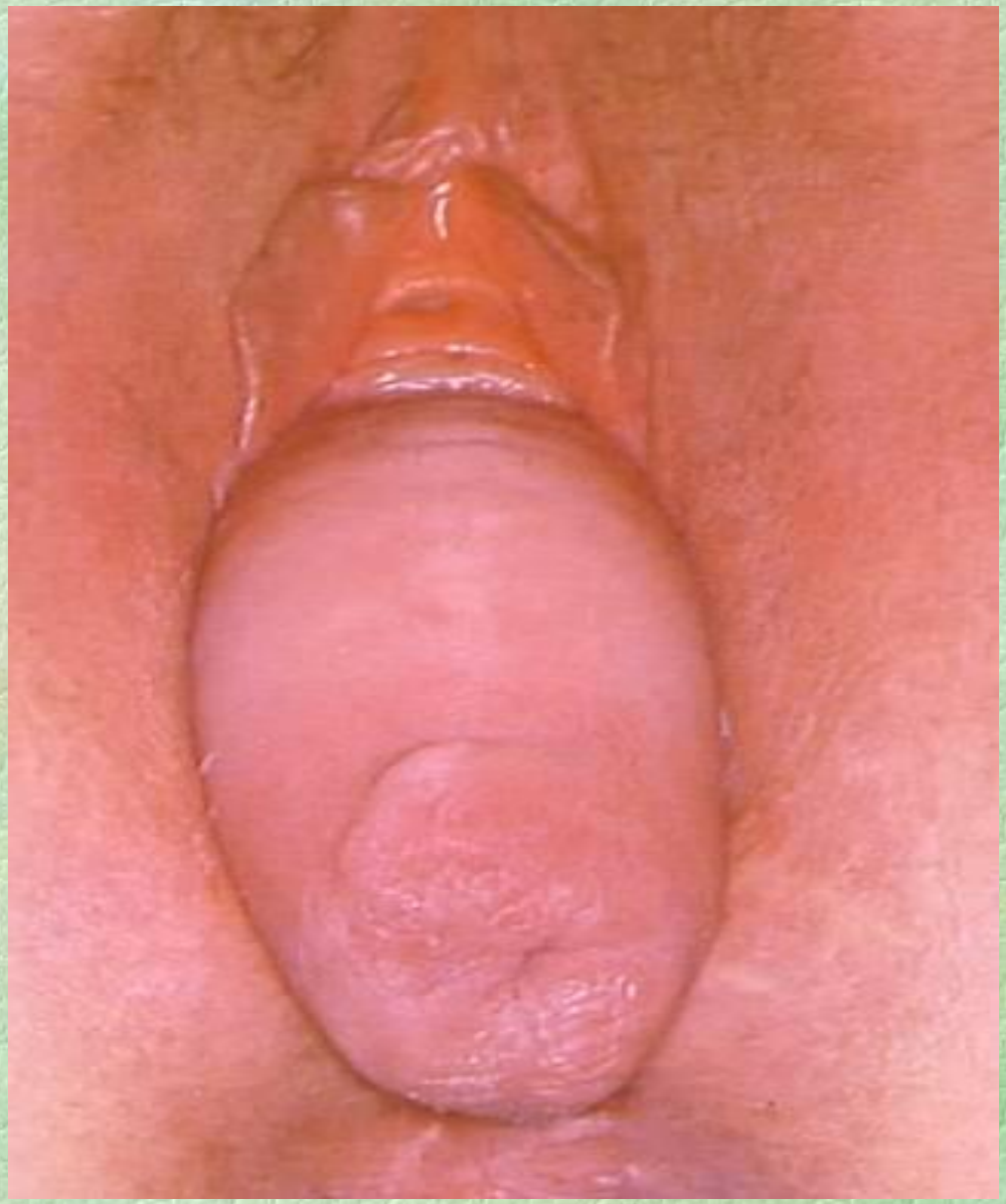
Relaxation

Examination of power

- Pelvic floor muscle
- strength,endurance and repetition of muscle contraction
- Modified Oxford grading system
- 0 - Nil
- 1 - Flicker
- 2 - Weak
- 3 - Moderate
- 4 - Good
- 5 - Strong

squeeze

- Squeeze
- Squeeze
- Squeeze



Bothered?

- Lump
- pain/dragging
- Leakage- urine/faeces
- Unable to empty- retention, constipation
- sex

Bladder or bowel

- Do you have difficulty completely emptying?
- Do you have to push the prolapse back with a finger to help empty?
- Do you suddenly get a strong urge to rush to the toilet?
- Do you start to leak before you make it to the toilet?
- Do you leak when you are physically active, cough, sneeze or have sex?

Sexual function

- Do you have a sex life at present?
- Do you avoid sexual activity because of prolapse?
- How does your prolapse affect your satisfaction with sexual activity?

How to diagnose

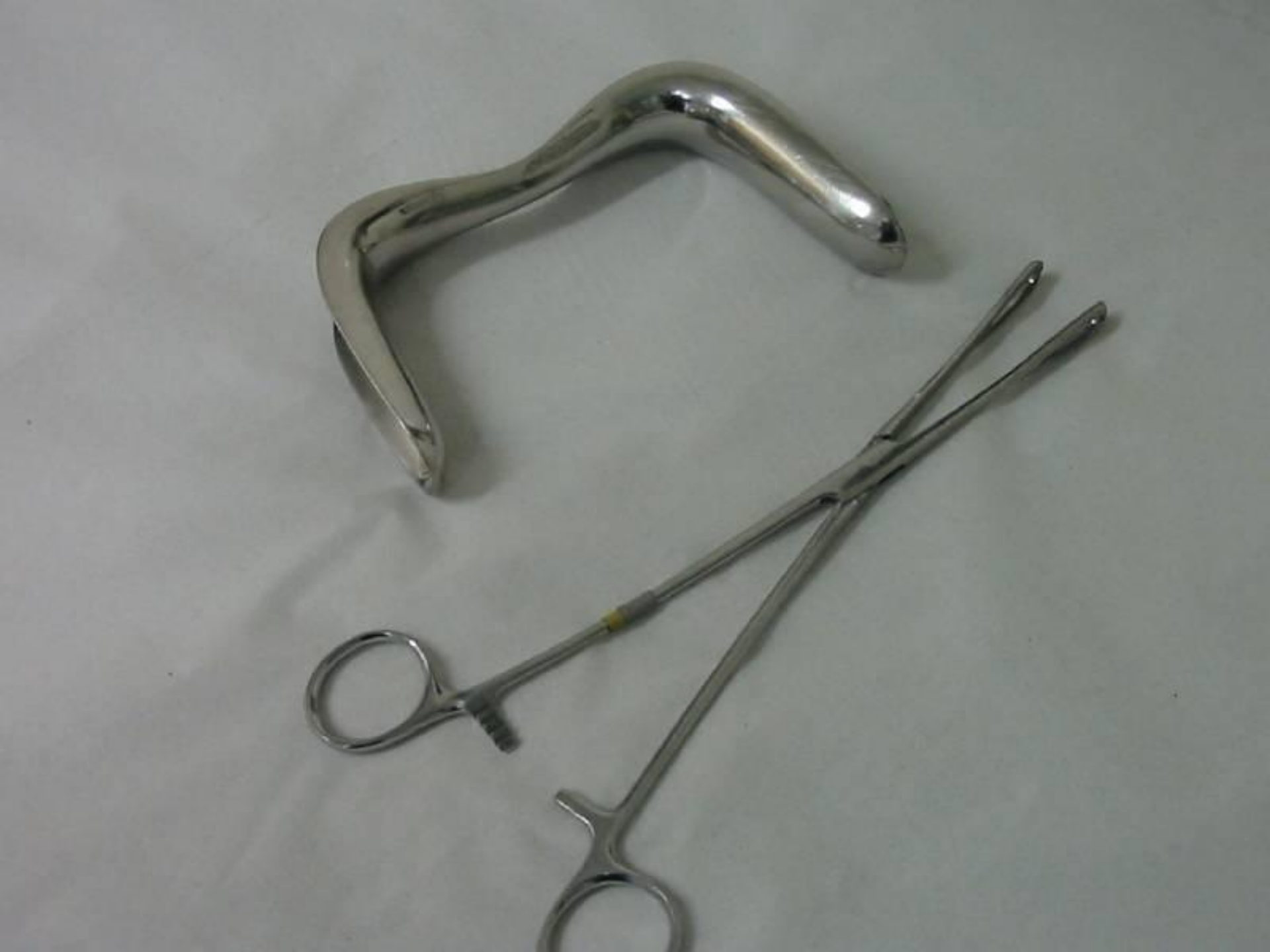
- Relaxed doctor and patient
- time
- good light
- Simms speculum
- sponge forceps
- rectal examination

The full range

- Urethrocoele
- cystocoele
- uterine/vault
- enterocoele
- rectocoele
- defecient perineum

- Vaginal length
- Perineal length
- Genital hiatus
- Vaginal squeeze
- Anal squeeze
- Anal canal length
- Perineal body volume
- Tissue flexibilty

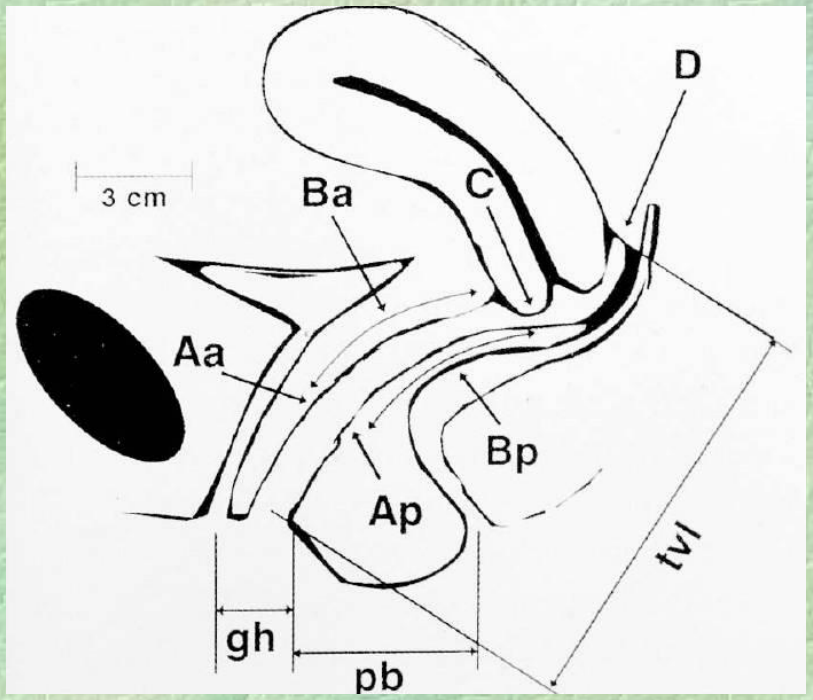

BODYGUARDS
Original
Powder Free
100
M
Latex Textured Medical Examination Gloves
Ortho-Gynest Cream



Prolapse interactive

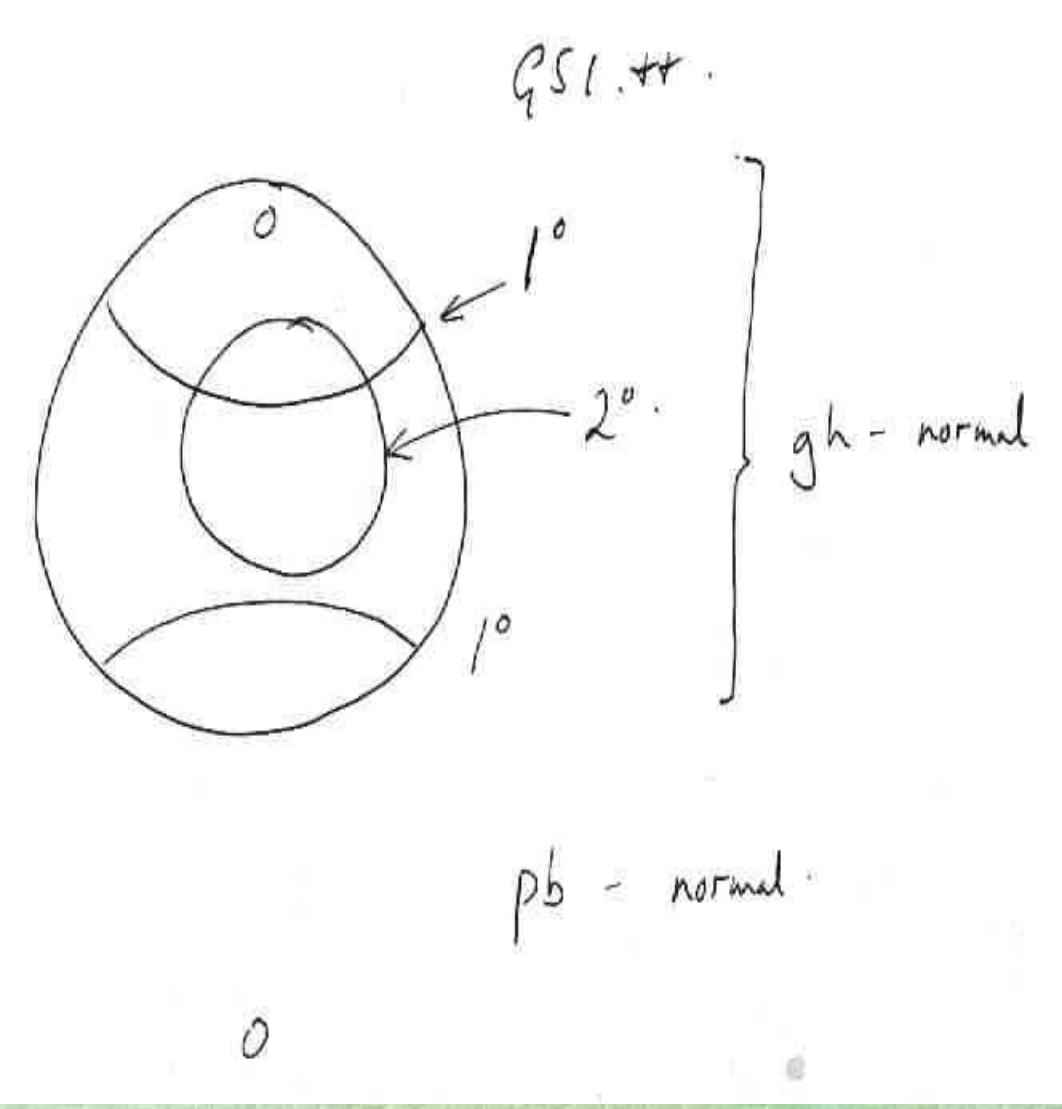
- Bard interactive software
  - www.bardurological.com/POP-Q

Pelvic organ prolapse



anterior wall **Aa**	anterior wall **Ba**	cervix or cuff **C**
genital hiatus **gh**	perineal body **pb**	total vaginal length **tvl**
posterior wall **Ap**	posterior wall **Bp**	posterior fornix **D**

Simplified description

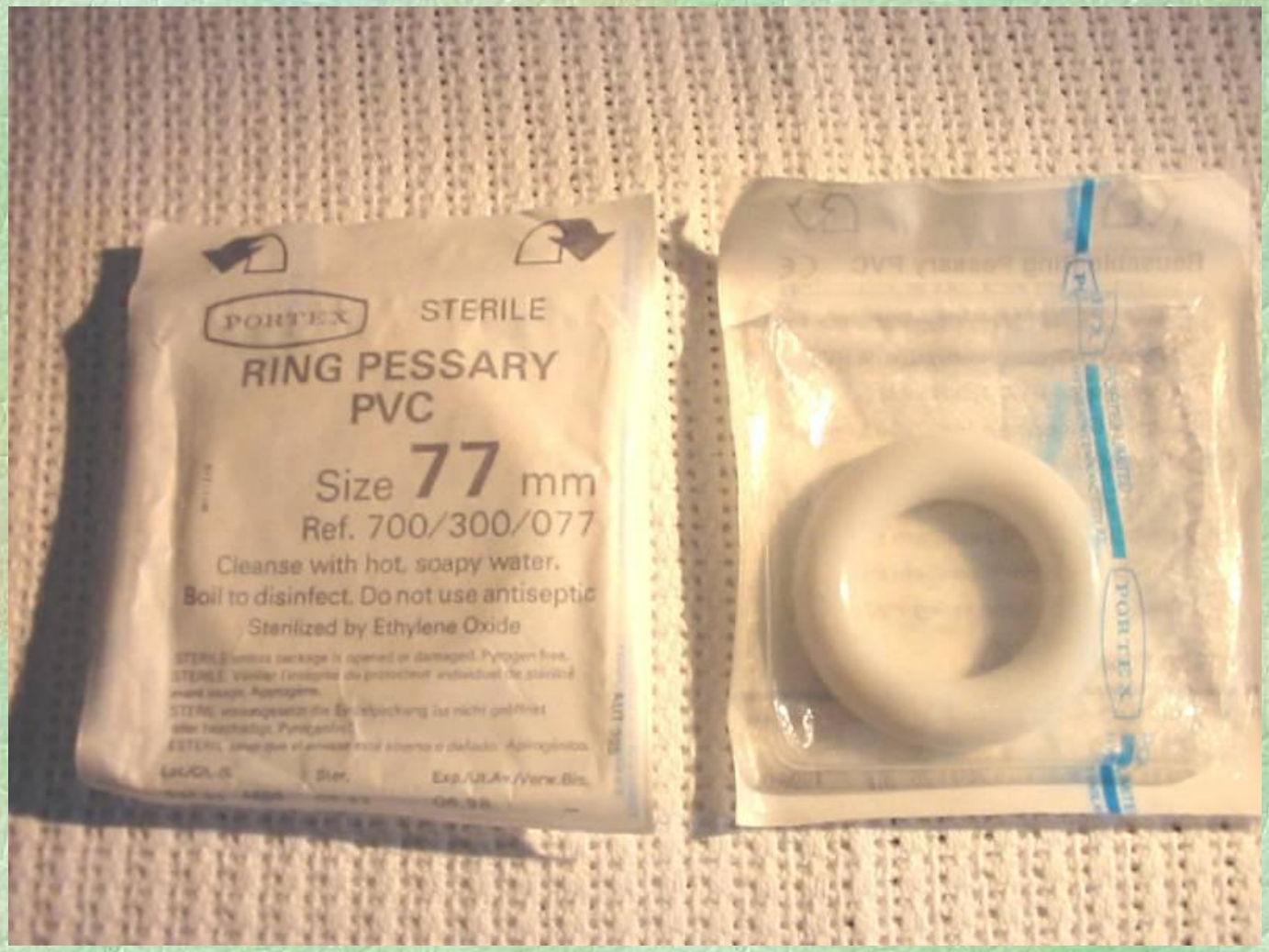


Does it matter?

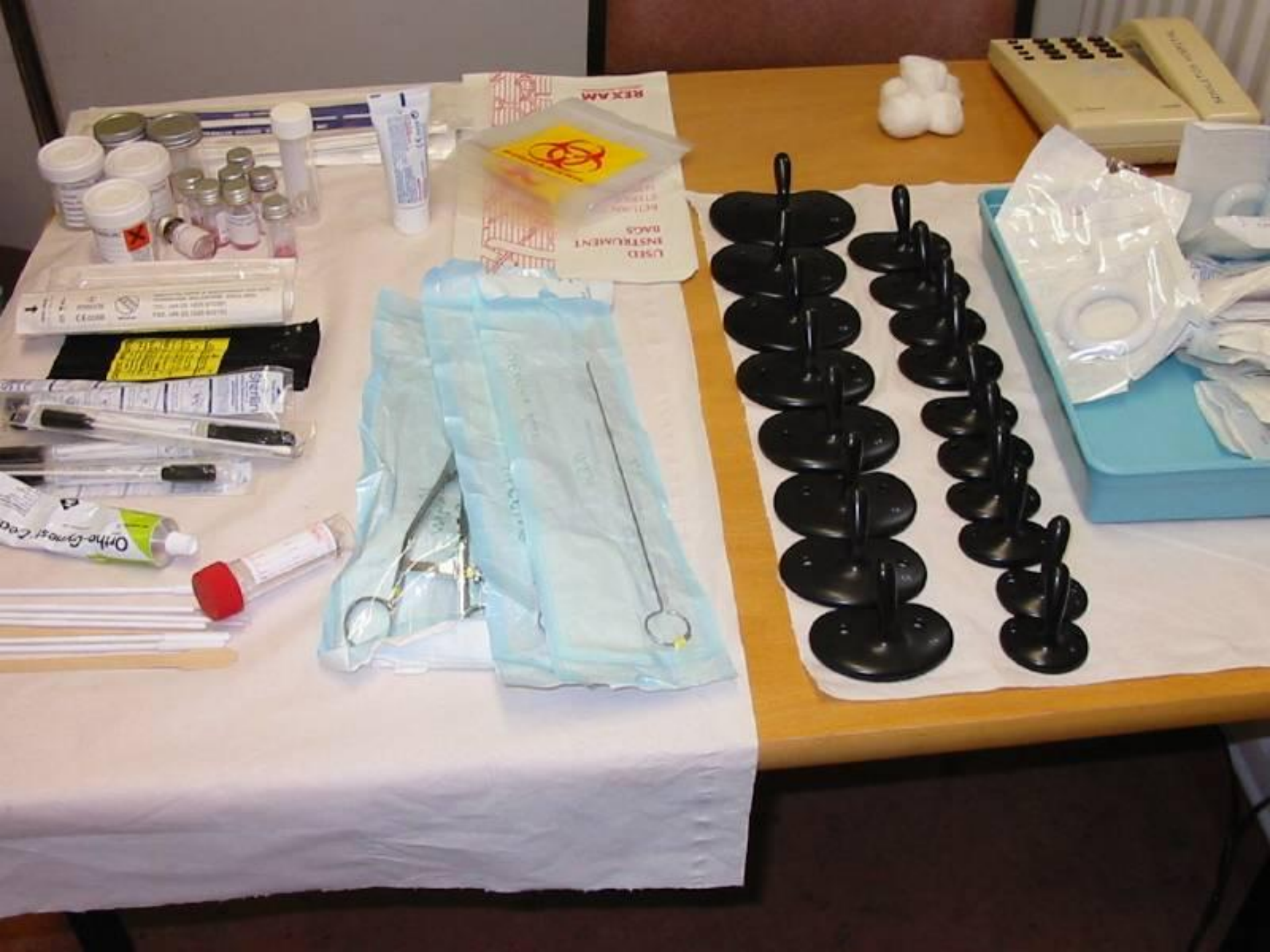
- Yes and no
- symptoms
  - urinary
  - bowel
  - sexual
  - general discomfort,lifestyle

To operate or not to operate

- Pelvic floor exercises
- Pessaries
- Oestrogen


PORTEX
STERILE
RING PESSARY
PVC
Size 77 mm
Ref. 700/300/077
Cleanse with hot, soapy water.
Boil to disinfect. Do not use antiseptic
Sterilized by Ethylene Oxide


22
12
11


REXAM
USED
INSTRUMENT
BAGS


EvaCare
Health Care Products for Women
MENTOR

Surgery old and new

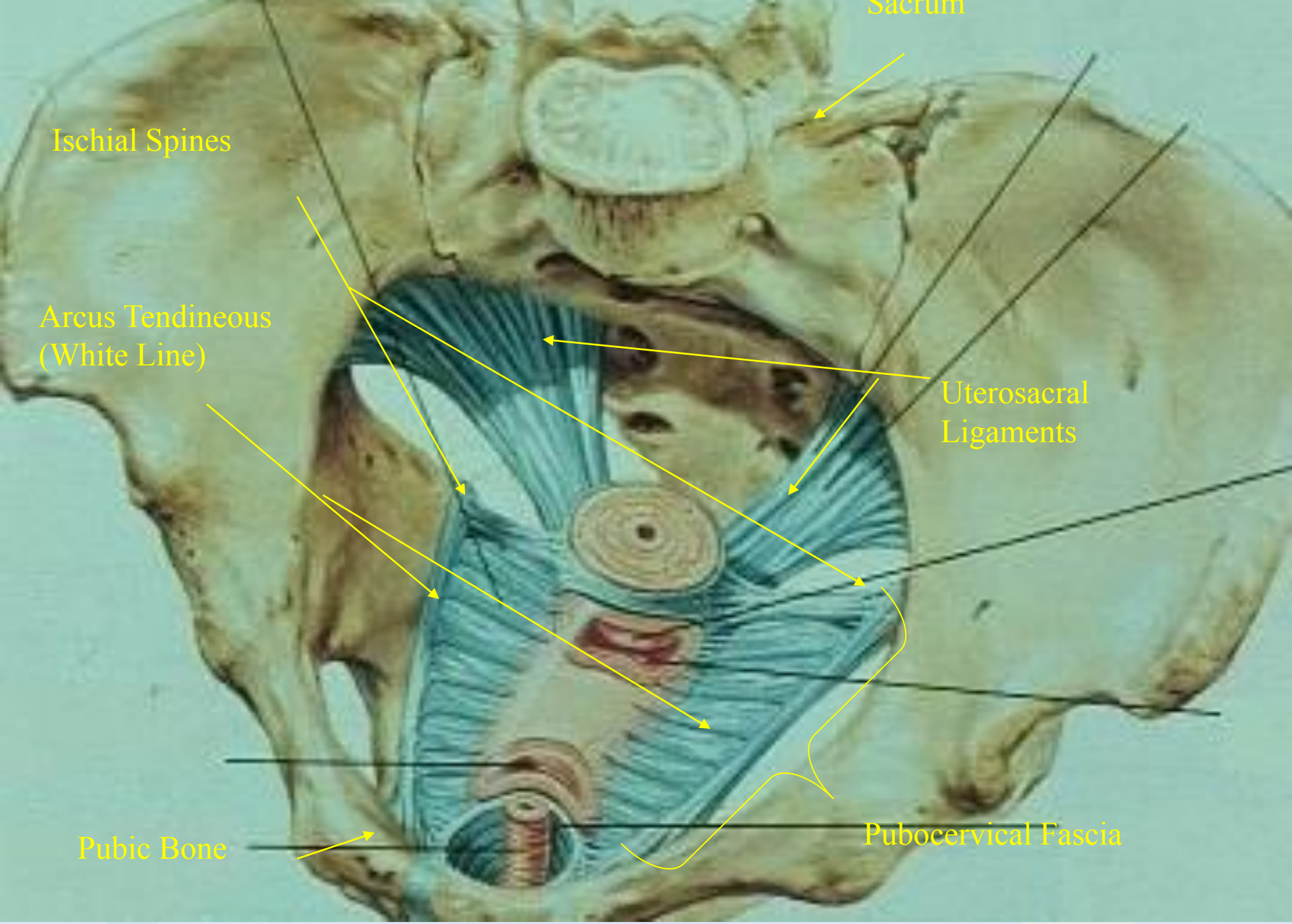
- Preserve vaginal length
- preserve sexual function
- preserve fertility
- avoid scarring

Surgical failures

- Minimal RCT data
- Short term 20% after 1 yr
- longer term 50% after 5yrs

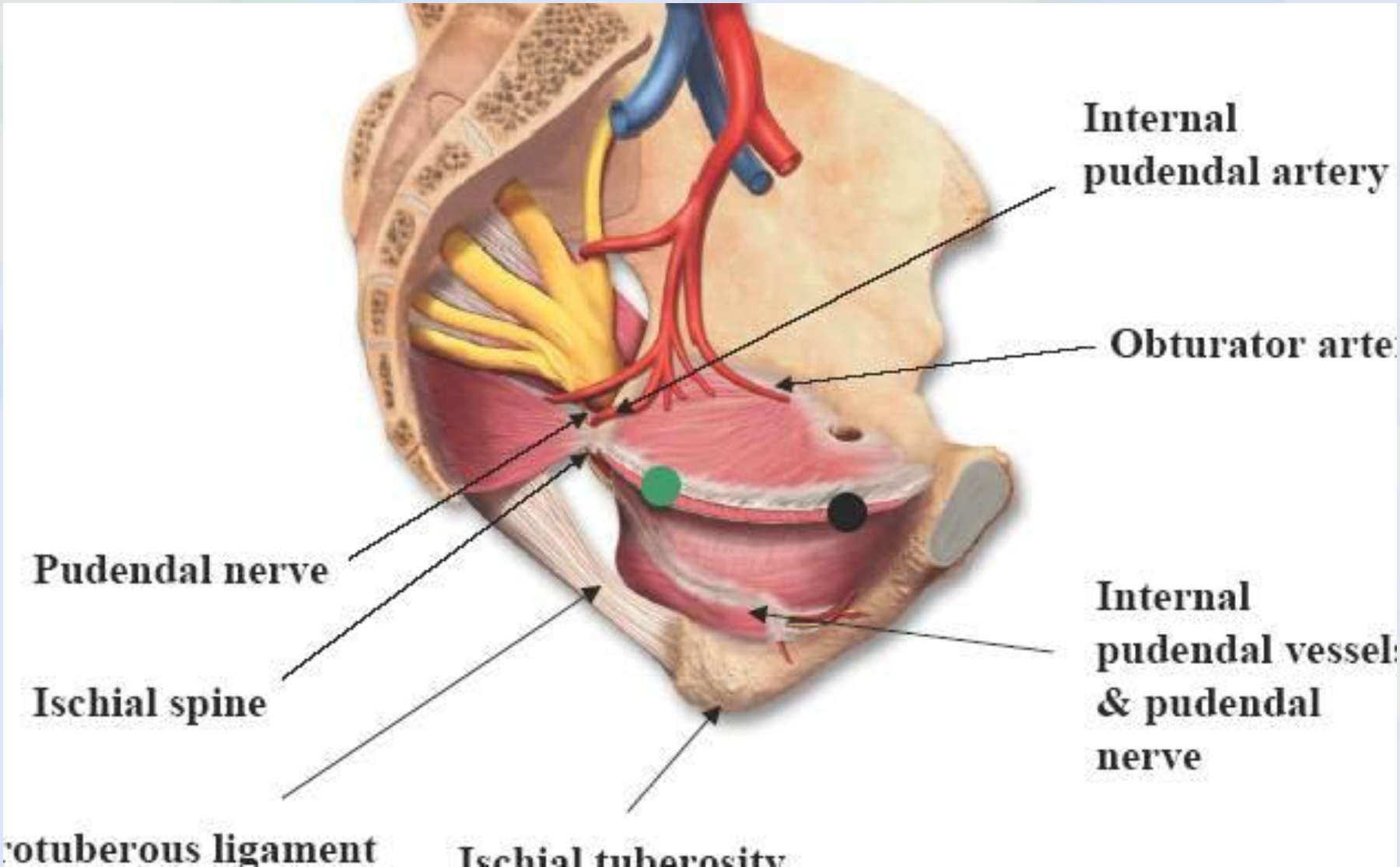
anatomy

- Complex
- 3D
- Variable with age and atrophy
- Distorted by prolapse
  - Fascial planes
  - Muscle
  - Ligaments
  - Vessels and nerves
  - Bone



Retzky S , Rogers R M: Clinical Symposia: Urinary Incontinence in Women Vol 47 No 3 CIBA 1995

Anterior Placement Anatomic Path



Mesh

My route to mesh and beyond

1978 Aldridge sling

MMK

Stamey

Burch

autologous sling

long free

short free

TVT

Obturator slings

- Vaginal hysterectomy uterosacral plication
- Anterior and posterior repairs
- Autologous sacrocolpopexy(pelvicol)
- IVS
- Sacrospinous fixation
- Bridge repairs
- Free collagen/soft mesh
- Supported mesh-Prolift 2005

dilemmas

- Finding the tissue planes
- Vaginal closure techniques
- Optimal uterine position
- Enhanced strength of repairs may hasten occurrence of other defects.
- Constipation
- Perineal body
- Patient selection ethics of innovation
- Independent audit

dawn of a new era?

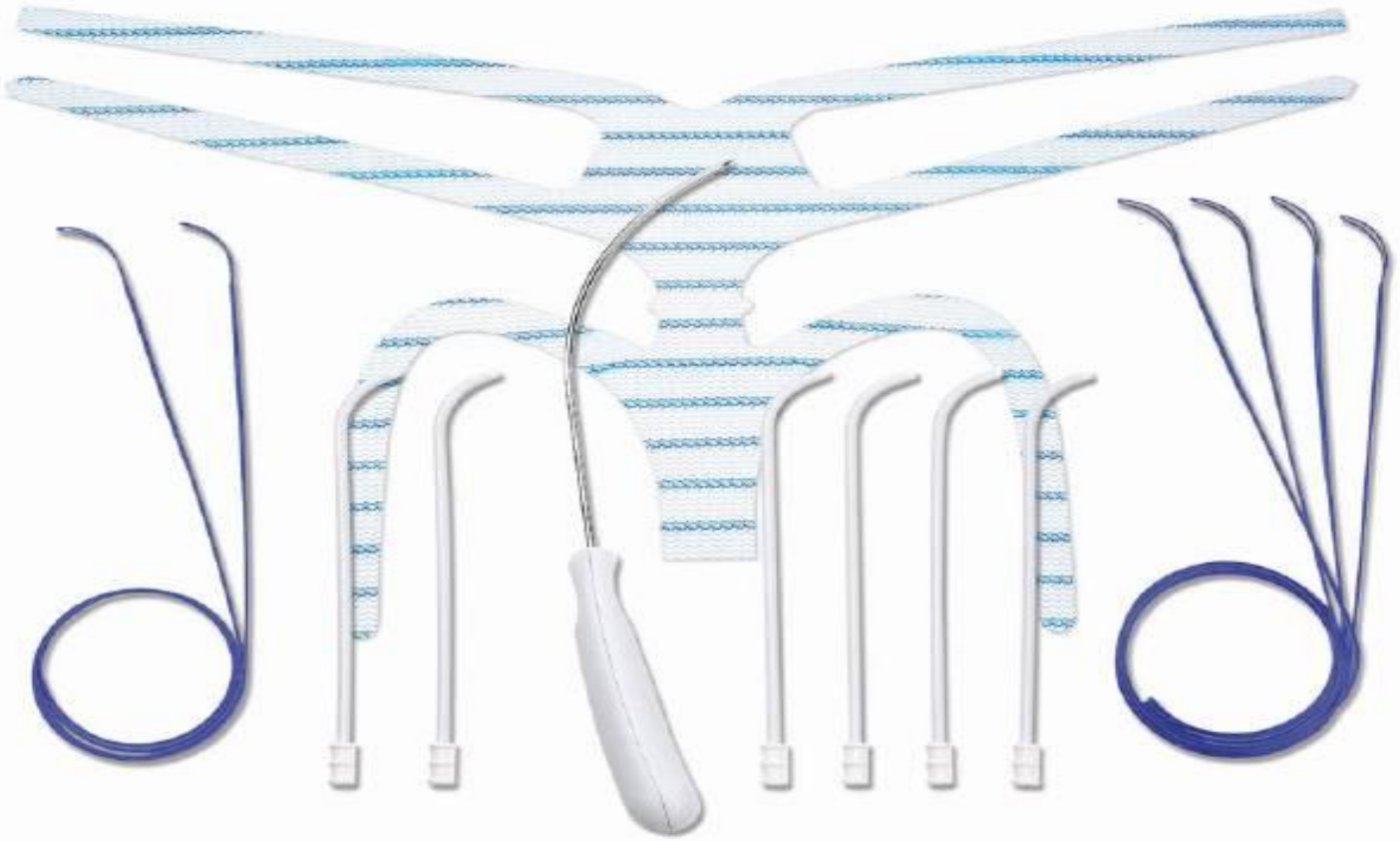
- Yes but go cautiously 2008
- Gynaecare discontinue all mesh kits 2012
- What is next?
  - Fascial repairs
  - Biological implants, autologous tissue engineering
  - Softer, wider spaced, simpler fixation meshes?

Jack Vettriano “the singing butler” 1998

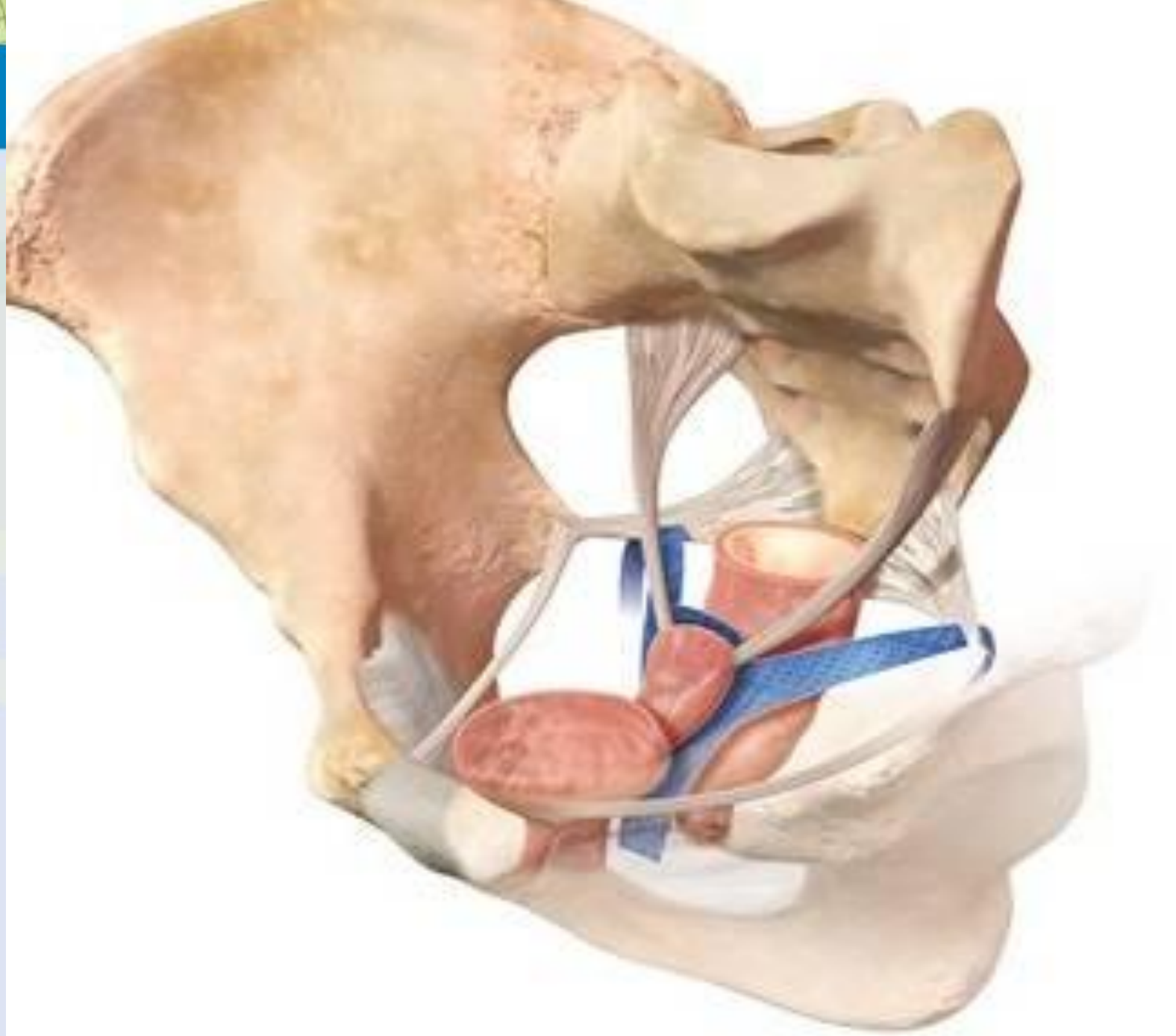
Sheffield prolapse questionaire

- 8 domains
- by prolapse we mean a lump coming down into the vagina.
- Each question is linked to bothersomeness index vis
  - » never
  - » occasionally
  - » most of the time
  - » all of the time

The TOTAL Repair Kit



Posterior



General questions

- How long have you been aware of prolapse?
- Does your prolapse interfere with activity?
- Overall, how much does your prolapse interfere with your enjoyment of life?
- How would you feel if you had to spend the rest of your life with this prolapse?

Prolapse symptoms

- Are you aware of a lump?
- Does the lump come out of the vagina?
- Difficulty keeping a tampon in?
- soreness in your vagina?
- Dragging pain in your lower abdomen?
- Do you suffer from low back pain?

Sexual function

- Do you have a sex life at present?
- Do you avoid sexual activity because of prolapse?
- How does your prolapse affect your satisfaction with sexual activity?
- How often do you have sexual intercourse?

Faecal function

- Do you feel that you can not completely empty your bowel?
- Do you have to insert a finger into your back passage or vagina to help empty your bowel?
- Do you have the urge to open your bowels but are unable to pass a motion?
- Do you have to rush to get there in time?
- Does stool leak before your get to the toilet?

bladder

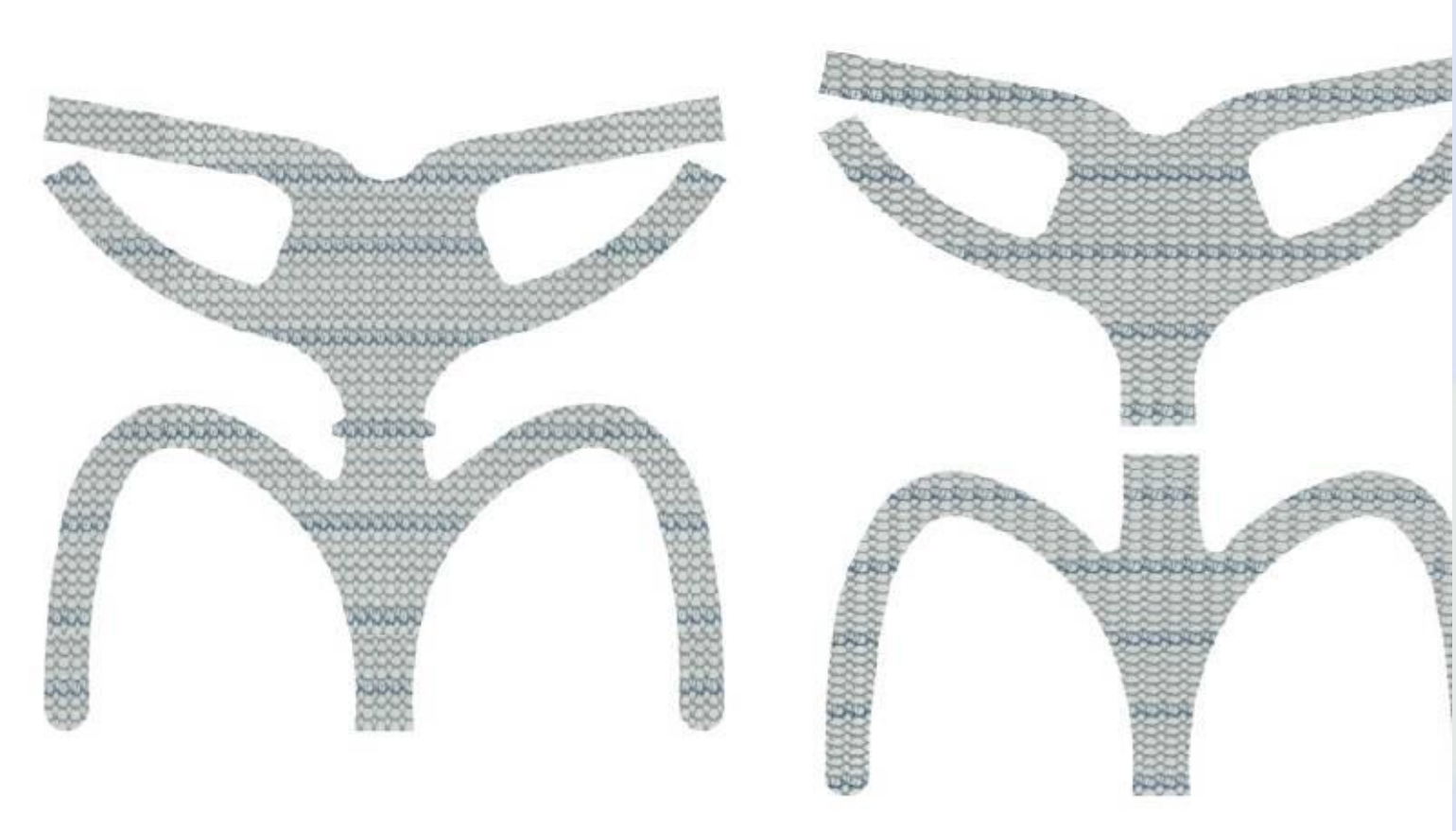
- Do you have difficulty completely emptying your bladder?
- do you have to push the prolapse back with a finger to help empty your bladder?
- do you suddenly get a strong urge to rush to the toilet to urinate?
- Does urine start to leak before you make it to the toilet?
- Does urine leak when you are physically active,cough or sneeze?

Pessaries

- How to choose
- size matters
- who changes
- when change
- check speculum exam for erosions

Inco-stop device

Next Generation
Pelvic Floor repair



Gynecare PROLIFT* Pelvic Floor Repair Systems

Mesh talk UKCS 08

Simon Emery

swansea

Content

- My journey
- Published data re mesh from Ethicon+ WSSG
  - Per-operative complications
  - Post-operative complications
- Nice consultation
- Observations
- Questions otiose quietus

My route to mesh

1978 Aldridge sling

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Obturator slings

- Vaginal hysterectomy uterosacral plication
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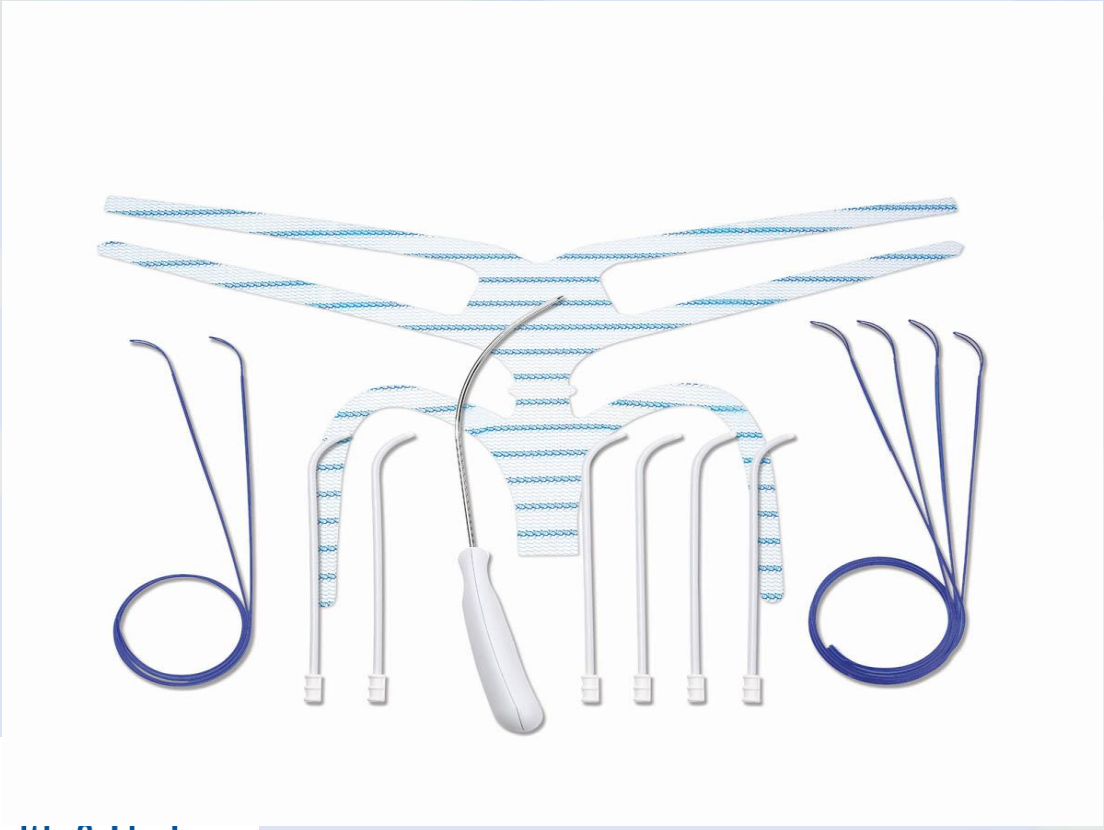
- Sacrospinous fixation
- Bridge repairs
- Free collagen/soft mesh
- Supported mesh-Prolift 2005

GYNECARE PROLIFT* Pelvic Floor Repair System Data

ETHICON Women's Health & Urology, The Netherlands



ETHICON
Women's Health & Urology

Published data

26 studies

3158 patients

plus west of Scotland study

Cure and failure rates are provided as defined by authors. Statistical analysis of the cure and failure rates is not possible due to different scales used by authors (i.e. POP-Q, Baden Walker Scale, Subjective Scales).

Summary	Range	Median WSSG
Number of patients available for follow up	23 – 687	85 289
Follow up (months)	1.6 – 13.9	5 3-22
Cured or improved (as defined by authors)	81% - 100% (>90% in 19 studies) (<90% in 5 studies)	94.2 95
Recurrence rate or unsatisfactory results (not-operated compartments excluded)	0 – 19% (<6% in 14 studies) (<10% in 4 studies) (>10% in 4 studies)	5.5 7.3

Per-operative Complications

Number of studies: 24

number of patients: 3296

Per op complications n 3296	Range	Median	WSSG
Bladder Perforation	0 – 5.3%	1	1.6
Neurological Injury	0	-	
Haemorrhage	0 – 3.3%	0	2
Vaginal Perforation	0 – 1.8%	0	
Urethral Injury	0 – 1.5%	0	
Rectal injury	0 – 1.6%	0	1.1
Bladder injury	0 – 1.3%	0	
Haematoma	0 – 4%	0.8	1

Post-operative Complications

Number of studies: 25

number of patients: 3322

Post op complications n 3322	Range	Median	WSSG
Urinary tract Infection	0 – 11.8%	0	2.4
Wound Infection	0 – 0.4%	0	
De Novo SUI	0 – 9.7%	4.1	4.8
De Novo Urge	0 – 11%	0	
Pain	0 – 34.7%	1.7	5.2
Erosion	0 – 12.3%	5.3	10
Dyspareunia	2.8 – 6.3%	4.2	4.5
Fistula	0 – 2.2%	0	
Abscess	0 – 3.9%	0	0.7 1 necr fas 1 systemic
Cellulitis	0 – 0.15%	0	
Retention	0 – 26.9%	0	9

NICE consultation closed for comments mar 08 guidance due june 08

- Mesh may be more efficacious than traditional methods
- Risk of significant morbidity
- Alert clinical governance committee
- Full consent
- Audit/research
- Difficult surgery-need special training

dilemmas

- Finding the tissue planes
- Vaginal closure techniques
- Optimal uterine position
- Enhanced strength of repairs may hasten occurrence of other defects.
- Constipation
- Perineal body
- Patient selection ethics of innovation
- Independent audit

dawn of a new era?

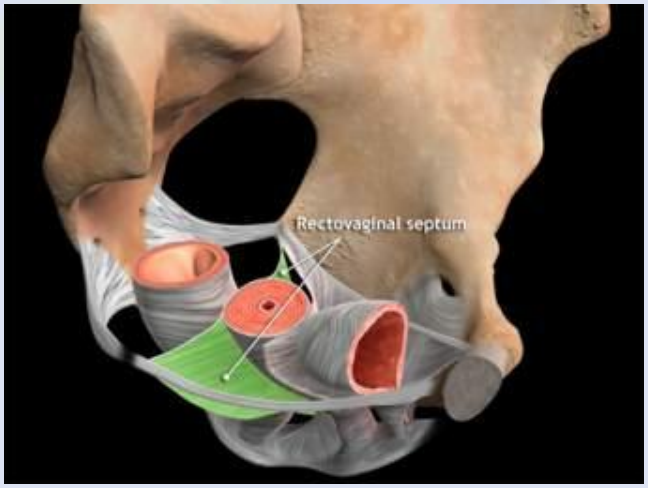
- Yes but go cautiously
- Thank you

Goal document:	Provide an overview of GYNECARE PROLIFT publications from the years 2004, 2005, 2006 and 2007
Used databases:	Pubmed, Medline, Google, ETHICON Women's Health & Urology library
Mesh headings:	GYNECARE Prolift, Transvaginal Mesh, TVM, Polypropylene, Synthetic Implants, Pelvic Organ Prolapse, Vaginal Surgery
Included:	Publications in which GYNECARE PROLIFT or Trans Vaginal Mesh, as described by the French TVM group, is discussed
Excluded:	Publications in which GYNECARE GYNEMESH or GYNEMESH Soft is discussed

Broad Mesh

- Provide coverage from ATFP to ATFP
  natural boundaries of the pelvic floor
  prevent or restore lateral defects

- Provide lateral contact with the ATFP
  for strong fixation of the mesh



- As much tension-free placement as possible to prevent symptomatic shrinkage
  to avoid postoperative pain and dyspareunia as much as possible

Fatton et al 2006 (1), Flam 2007 (6), Berrocal et al 2004, (27), Reisenauer et al 2006 (29), Gustilo (30)

Non-absorbable Mesh

- The non-absorbable mesh is the gold standard in parietal hernia repair
  absorbable meshes tend to show worse long-term results
- Monofilament
  multifilament meshes tend to show high erosion and infection rates
- Macro porous
  for optimal tissue in growth and passage of macrophages
- Lightweight and soft
  for improvement of tolerance

Berrocal et al 2004 (27)

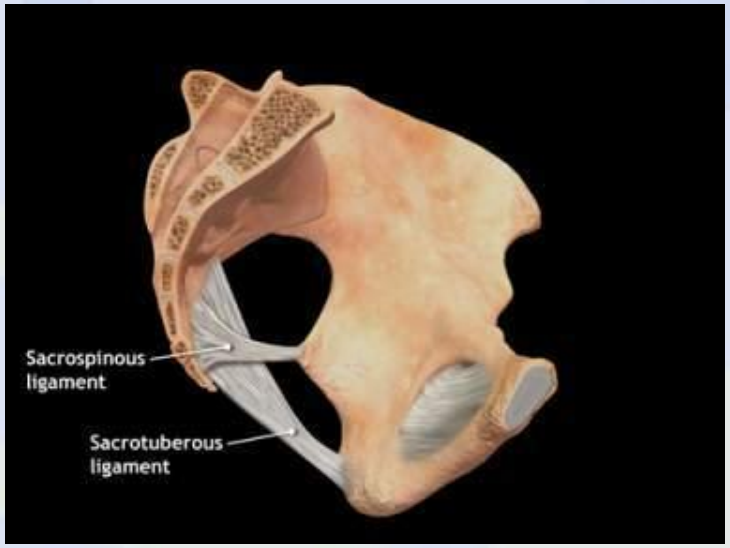
Risk Factors for erosion/exposure

- Concomitant hysterectomy
- Use of T-incisions
- Pulling mesh arms through tissue without use of cannulas
- Too superficial placement of the mesh

Fatton et al 2006 (1), Collinet et al 2005 (4), Berrocal et al 2004 (27), Debodinance et al 2007 (28)

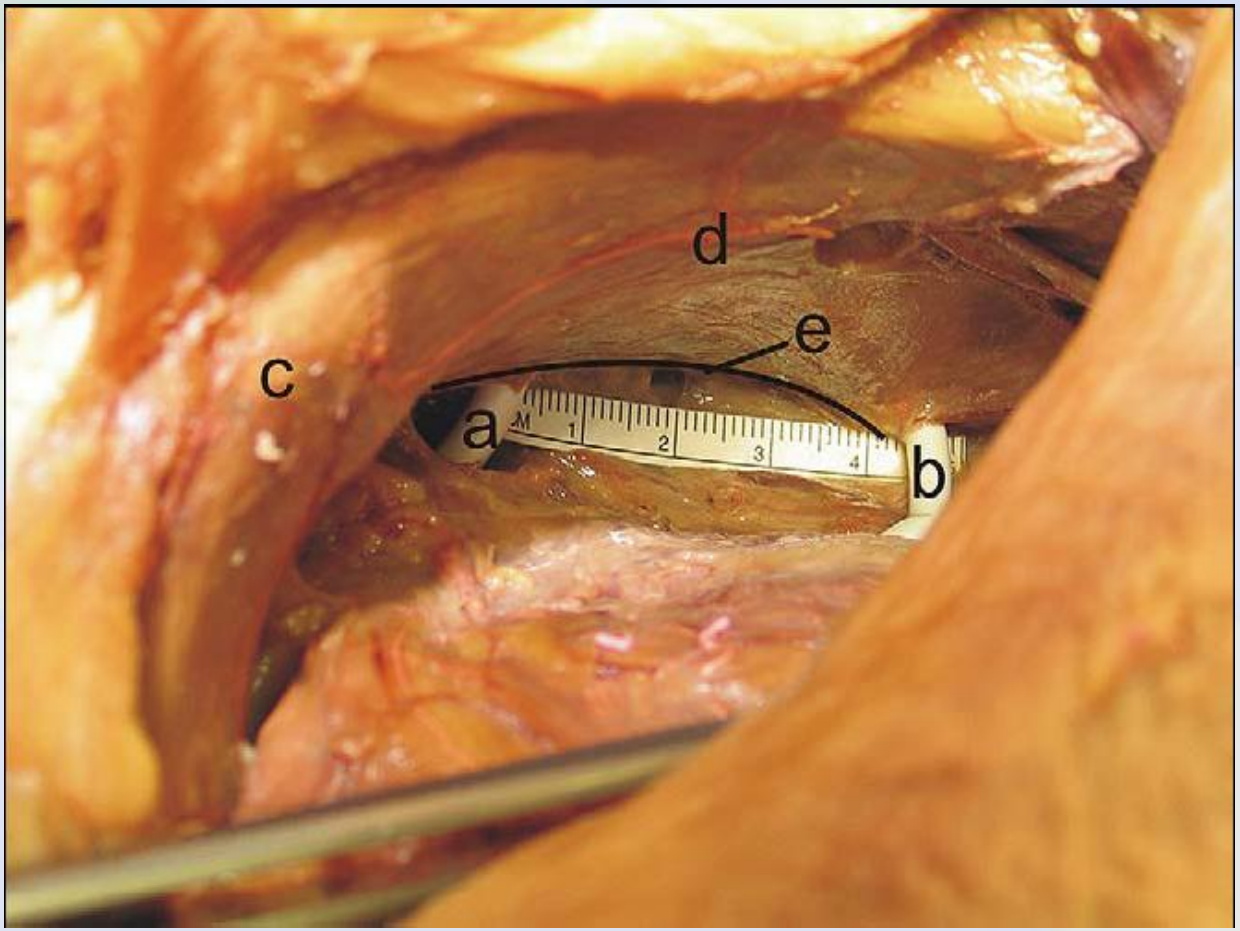
Sacro-spinal Fixation

- For adequate anchoring of the mesh



Berrocal et al 2004 (27), Gustilo (30)

Anatomical Considerations



Mean Distances From the Two Anterior TVM Trocars to Anatomic Structures

Anatomic Structure	**Anterior Superior Trocar Mean Distance in cm**	**Anterior Inferior Trocar Mean Distance in cm**
VAN Obturatorius	3.2 – 3.5	-
Spina Ischiadica	-	2.0 – 2.2
VAN Pudendus	-	1.7 – 2.1

According to Reisenauer et al (29)

ATFP	0.3 (0.2–0.4)	0.3 (0.2–0.5)
Ischial spine	4.7 (4.2–5.2)	2.7 (2.1–3.3)
Obturator canal from perineal approach	2.5 (2.2–2.8)	2.7 (2.2–3.2)
Obturator canal from Space of Retzius	3.9 (3.5–4.2)	3.0 (2.5–3.4)
Medial branch of obturator vessel	0.8 (0.6–1.0)	0.7 (0.4–1.1)
Bladder	0.7 (0.5–0.9)	1.3 (0.8–1.9)
Ureter (at bladder insertion)	2.5 (2.0–2.9)	2.2 (1.8–2.6)

According to Gustilo et al (30)

Mean Distances From the Posterior TVM Trocar to Anatomic Structures

Anatomic Structure	**Mean Distance in cm**
Minimal distance cannula to Pudendal Nerve	0.5 – 1cm

According to Reisenauer et al (29)

Sacrospinous ligament	0.1 (0.0–0.1)
Rectum	0.8 (0.6–1.0)
External anal sphincter	2.3 (2.0–2.6)
Inferior rectal vessel	0.9 (0.7–1.1)
Pudendal vessels exiting from Alcock's canal	2.6 (2.3–3.0)
Ischial spine	2.5 (1.9–3.1)
Coccyx	3.5 (2.7–4.2)

According to Gustilo et al (30)

Recommendations:

1 Perforate sacrospinous ligament at 2-2.5cm from ischial spine

2 Follow Prolift protocol

3 Know anatomic landmarks

Reisenauer et al (29), Gustilo et al (30), Mokrzycki et al (35)

Reference List

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2 **Operative Therapie des Prolaps – Pro-LiftTM-Beckenbodenrekonstruktion:**
Eine retrospektive Analyse an 32 Patientinnen der Abteilung für Gynäkologie und Geburtshilfe des Hanusch-Krankenhauses.
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4 **Transvaginal mesh technique for pelvic organ prolapse repair: mesh exposure management and risk factors.**
Collinet P, Belot F, Debodinance P, Ha Duc E, Lucot JP, Cosson M.
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7 **Proliftmesh (Gynecare) for pelvic organ prolapse. Surgical treatment using the TVM group technique**

Cosson M, Caquant F, Collinet P, Rosenthal C, Clave H, Debodinance P, Garbin O, Berrocal J, Villet R, Jacquetin B.

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8 **Transvaginal mesh repair of pelvic organ prolapse with Prolift technique: one year outcomes**

Fatton B, Boda C, Debodinance P, Amblard J, Jacquetin B

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9 **Medium term outcome of Prolift for vaginal prolapse**

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10 **Advanced mesh implants for vaginal pelvic floor reconstruction: report of 150 Prolift operations**

Neuman M, Friedman, M

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11 **Collaborative study in the correction of the female genital prolapse with Gynemesh Prolene Soft through the Prolift system anchorage**

Sola V, Ubertazzi E, Ricci P, Pardo J

Abstract International Uro Gynecological Association Congress, Cancun June 2006

12 **A multicenter retrospective study on transvaginal mesh repair of genital prolapse with the Prolift system**

Meschia M, Spreafico L, Ambrogi V, Perrone A, DeMatteis G, Migliorini P

Abstract International Continence Society 35th annual meeting Montreal September 2005.

13 **The use of Prolift in the surgical treatment of pelvic organ prolapse**

Manchana T, Han HC, Lee LC

Abstract International Uro Gynecological Association Congress, Cancun June 2006

14 **Efficacy of Prolift system in the treatment of pelvic floor disorders: experience after first hundred cases**

Rechberger T, Futyma K, Adamiak A, Gogacz M, Skorupski P, Tomaszewski J

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15 **Functional and anatomical outcome of prolapse repair surgery using Prolift mesh at 6 months**

Roberts CH, Nnochiri A, Rostom N, Barnick C

Abstract International Uro Gynecological Association Congress, Cancun June 2006

16 **The use of Prolift in the surgical treatment of pelvic organ prolapse**

Han H, Manchana T, Lee

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17 **Objective and subjective results on tension free vaginal mesh procedure (Prolift) for pelvic organ prolapse**

Withagen M, Milani F, Kluivers K, Van den Akker S, Vierhout M

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19 **Genital floor repair using polypropylene meshes: a comparative study**

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20 **One year anatomical outcome (POP-Q) of Pelvic Organ Prolapse after syrgery with Prolift prosthesis vs collagen prosthesis (Pelvicol) vs hysterectomy with cassical anterior colporphy: prospective study**

Valentim-Lourenco AVL, Henriques AH, Bernardino MB, Ribeirinho ALR, Calhaz-Jorge CCJ

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22 **Anatomical and functional assessment of vaginal prolapse treatment in women undergoing transvaginal synthetic mesh implantation (Gynecare Prolift)**

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25 **Transvaginal Mesh (TVM): an innovative approach to placing synthetic mesh transvaginally for surgical correction of pelvic support defects – peri operative safety results**

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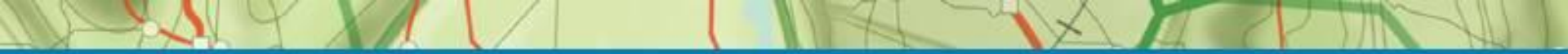

Appendix

Complications included:	All complications that are mentioned in more than two publications
Complications excluded:	All complications that are mentioned in not more than two publications
Excluded complications:	Anaemia, fever, excessive bleeding, blood transfusion, defecation difficulties, embolism, synechia, granuloma
Additional notes:	If a percentage represents only one patient in a series, this is noted by: 'n=1'
	If an author has conflicts of interest, as stated in the article, this is noted
	If a study was funded by ETHICON, as stated in the article, this is noted
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