Urogynaecology Update

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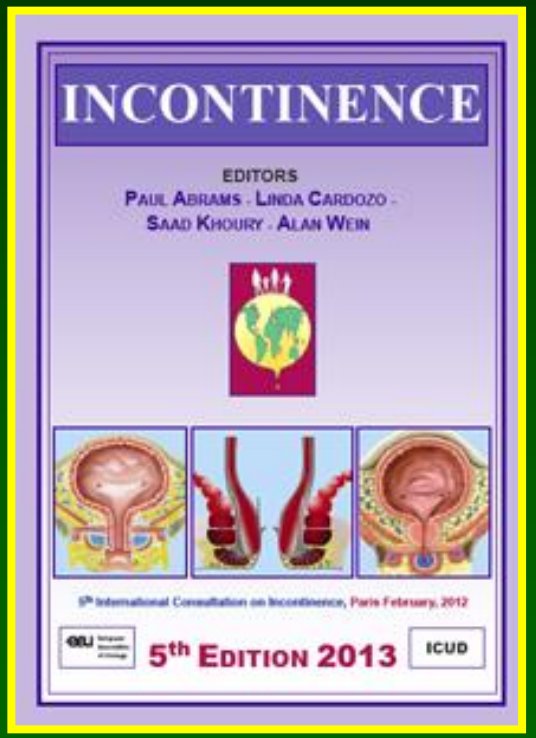
Disclosures: Allergan, Astellas, BMR, Pierre Fabre, Pfizer, Syner-Med


KING'S

What is Urogynaecology?

Diagnosis and treatment of female pelvic floor disorders

- Urinary incontinence
- Overactive bladder
- Pelvic organ prolapse
- Voiding difficulties
- Recurrent UTI
- Fistulae
- Sexual Dysfunction



Urogynaecology

- The Continent Club, later to become ICS founded in 1971
- IUGA founded in 1976
- Established as RCOG subspecialty in 1982
- First UK subspecialty training program established in 1992
- BSUG founded in 2001
- Recognised by American Board of Medical Subspecialties (female pelvic medicine and reconstructive surgery) in 2011

ICS

IUGA
international urogynecological association

BSUG
British Society of Urogynaecology

Prevalence

- Prevalence of urinary incontinence 12.8 - 46.0%

Botlero et al 2008

- Prolapse affects up to 50% of parous women

Hagen et al 2011

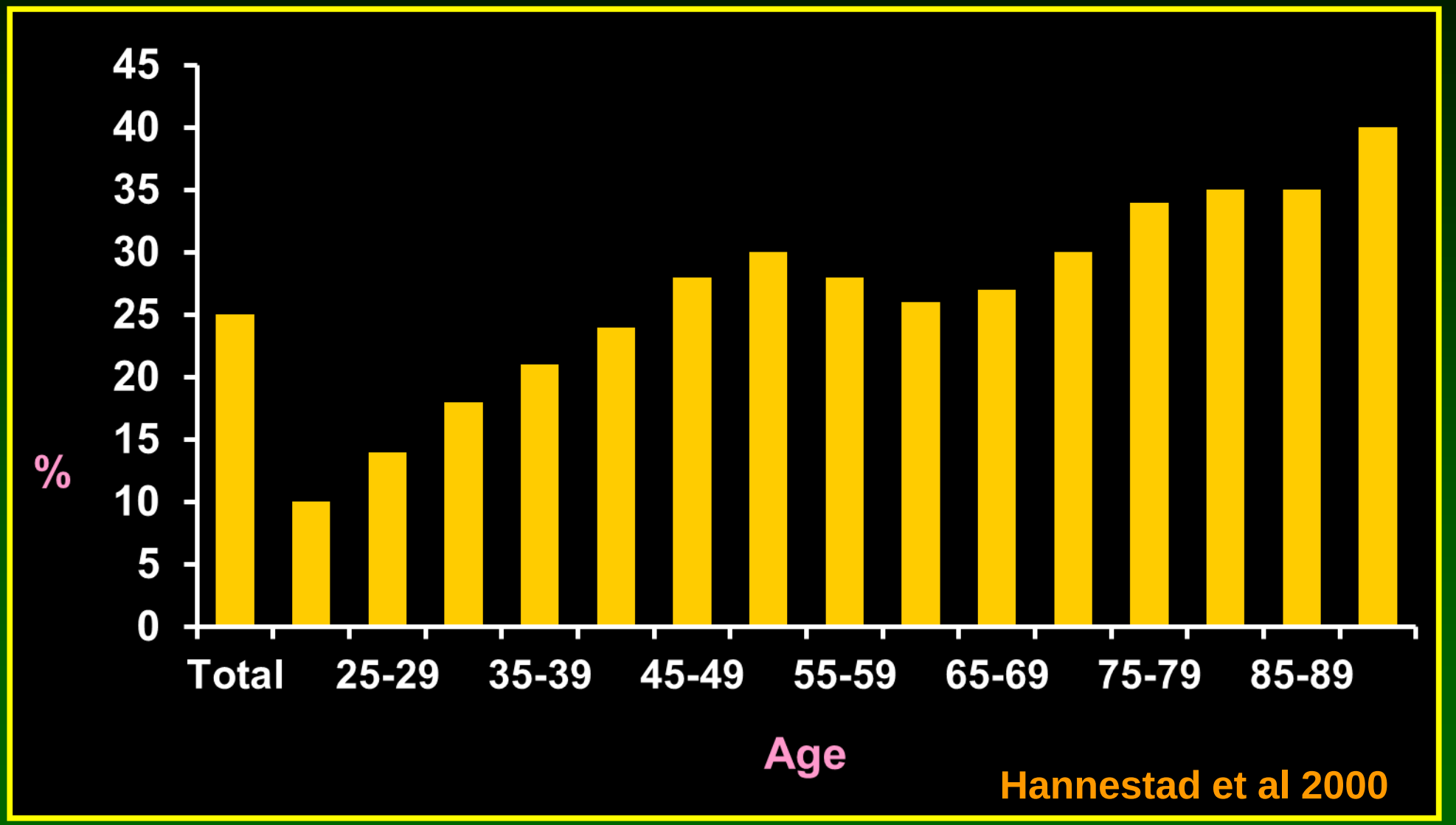
- 11.1% lifetime risk of operation for prolapse or incontinence with a re-operation rate of 29%

Olsen et al 1997

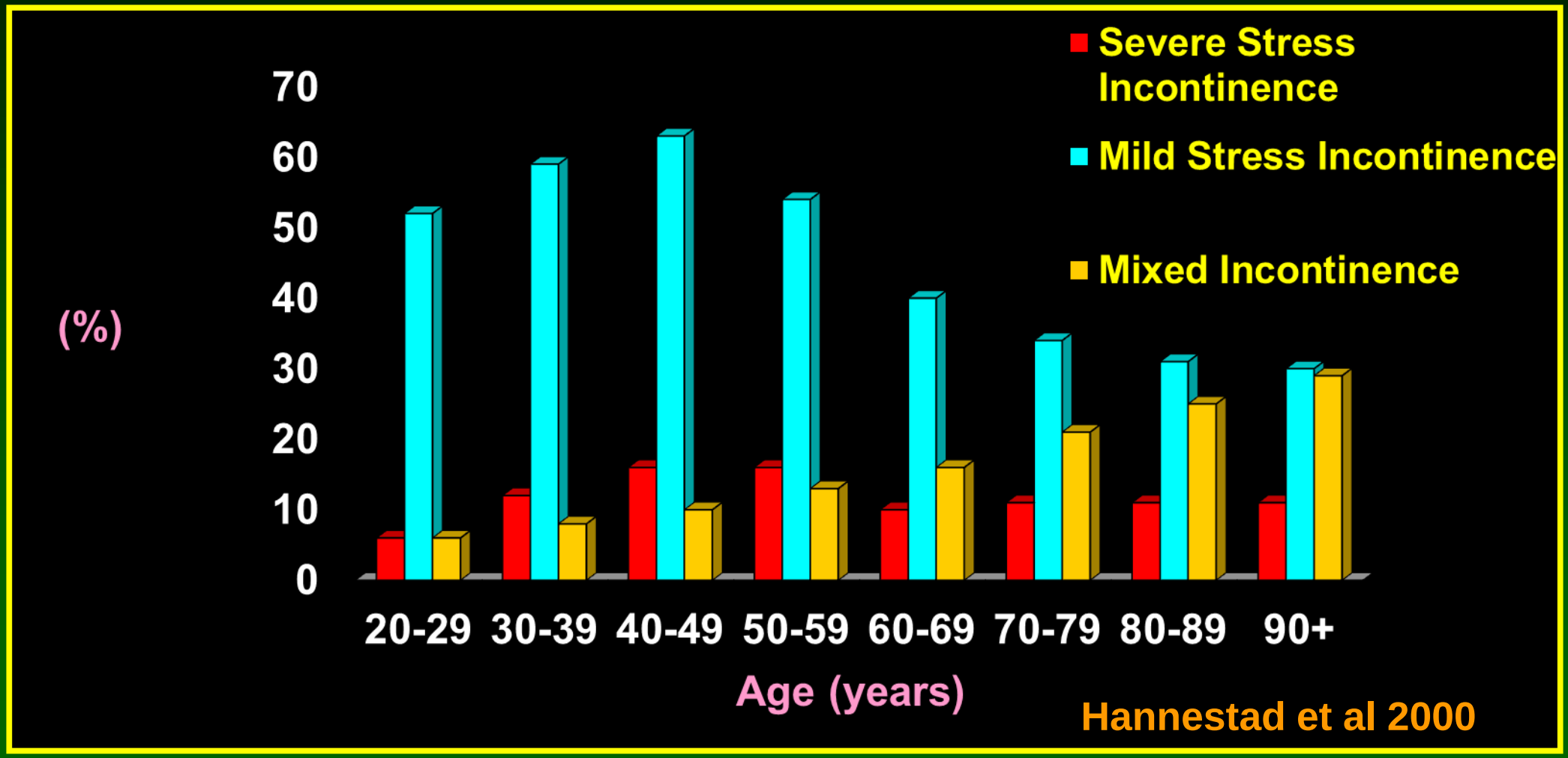
- Incidence of surgery 1.5 – 4.9 cases / 1000 women-yrs

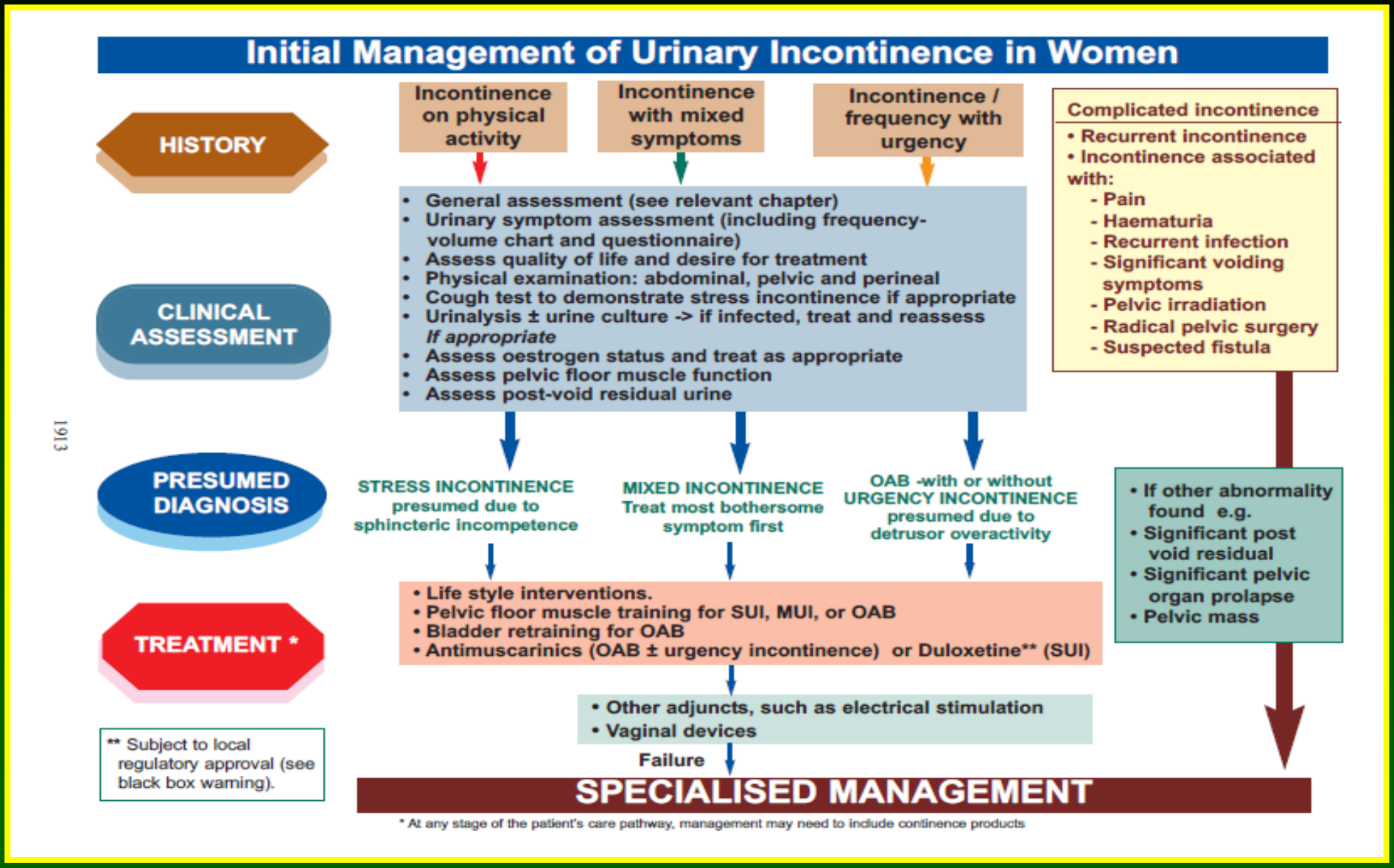
Jelovsek et al 2007

Prevalence of Incontinence

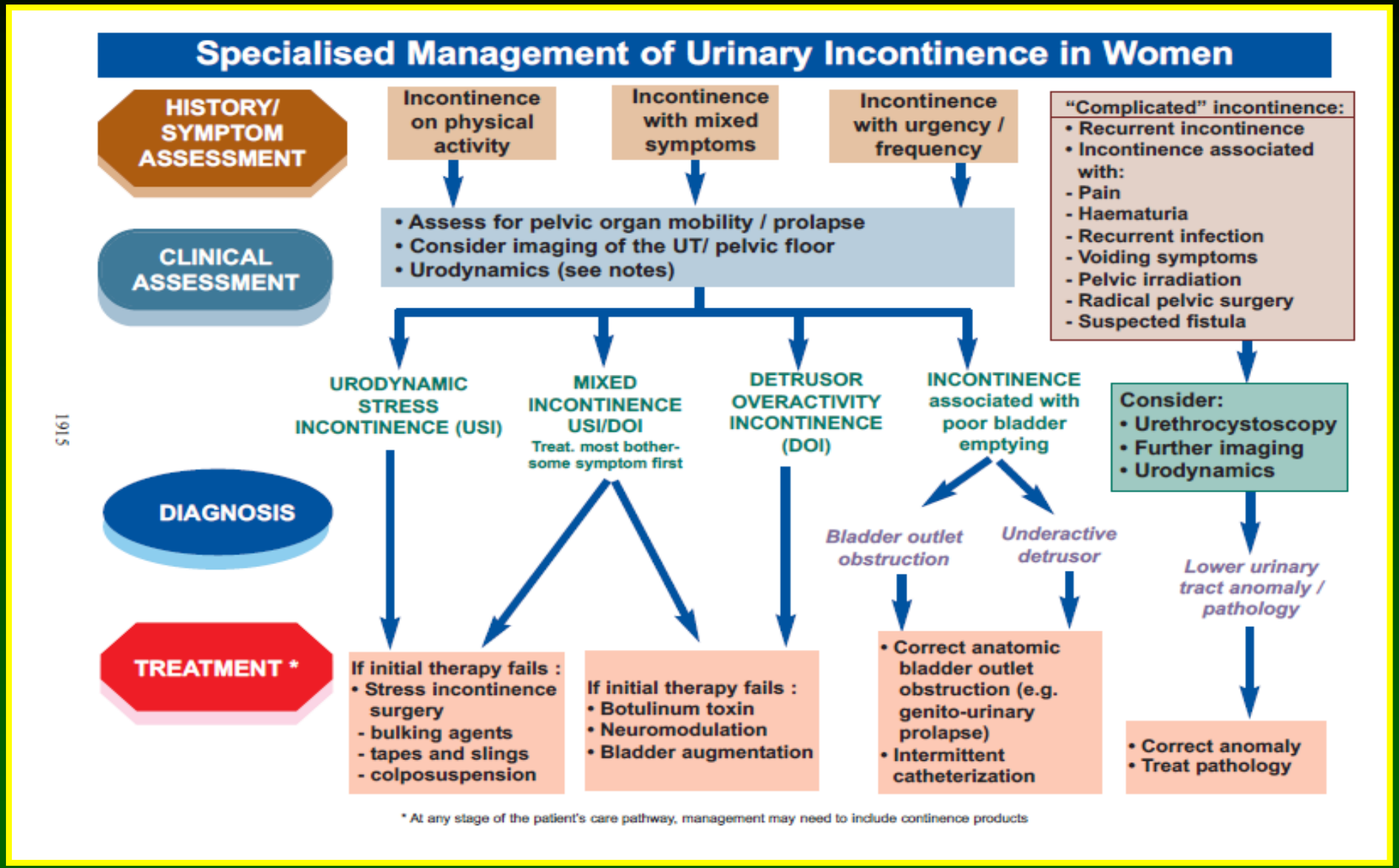


Prevalence of Incontinence





5th International Consultation on Incontinence 2013



5th International Consultation on Incontinence 2013

Stress Urinary Incontinence

Stress Urinary Incontinence and Urodynamic Stress Incontinence

- Complaint of involuntary loss of urine on effort or physical exertion or on sneezing or on coughing

- Involuntary leakage of urine during filling cystometry, associated with increased intra-abdominal pressure, in the absence of a detrusor contraction

Haylen et al 2010

Conservative management of SUI

- A trial of supervised pelvic floor muscle training (PFMT) of at least 3 months' duration should be offered as first-line treatment to women with stress or mixed UI

  NICE 2013

- PFMT is effective even for women with SUI due to ISD, decreasing incidence of positive cough test and increasing QoL and MUCP

  Lehmann et al 2015

- Internet-based PFMT programme or a PFMT programme sent by post provide significant improvements for women with SUI in symptoms and QoL at 1 and 2 years

  Sjöström et al 2015

Duloxetine

- Duloxetine reduces incontinence episode frequency by 60%

Cardozo et al 2004

- Not a first-line treatment

- May be offered as second-line therapy if:
  - women prefer pharmacological to surgical treatment
  - or are not suitable for surgical treatment

- If prescribed, women must be counselled about adverse effects

NICE 2013

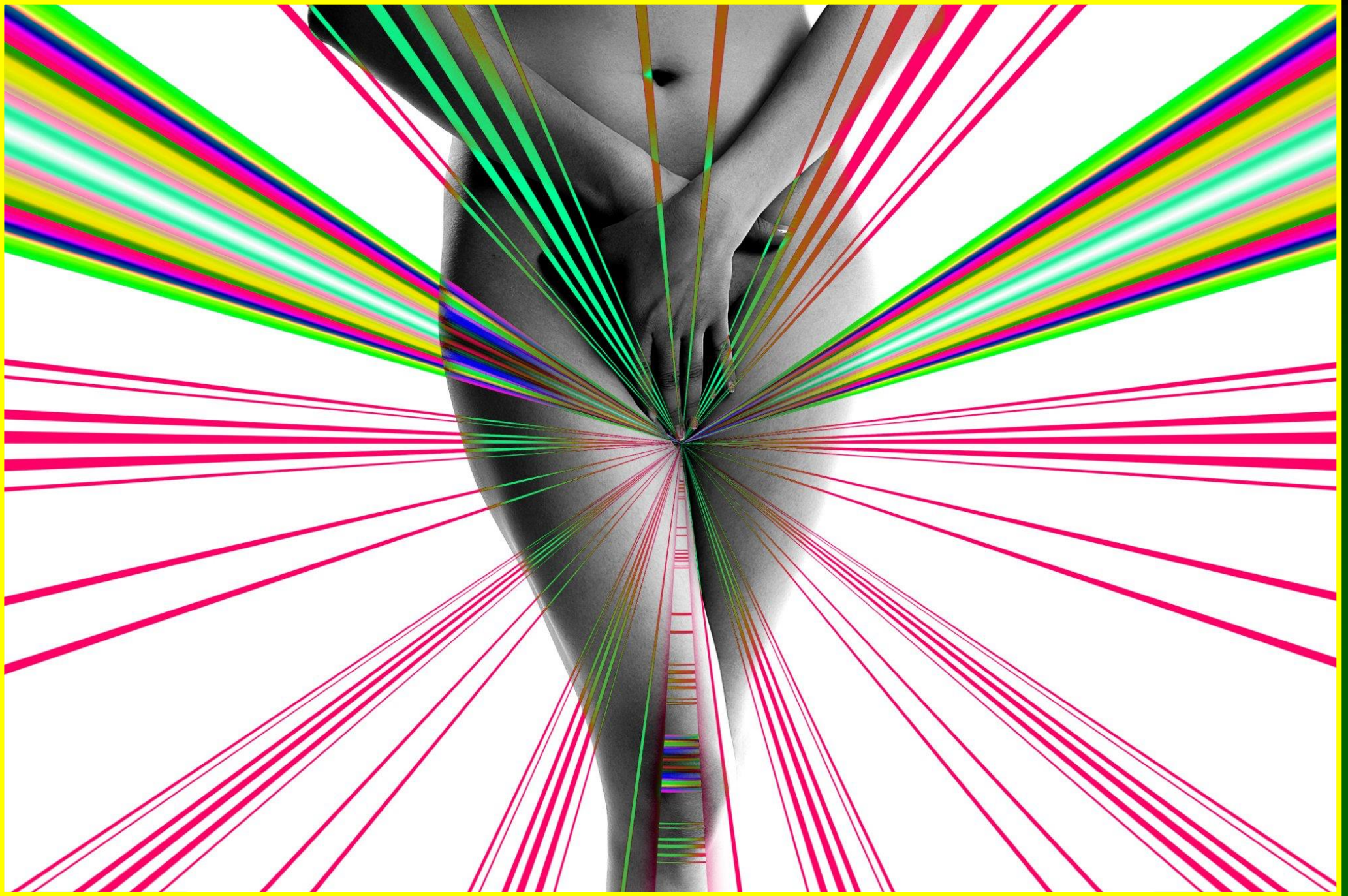
- High incidence of side effects, especially nausea, results in discontinuation in up to 68 % of patients

Duckett et al 2007

Oestrogens

- Oestrogen deficiency may be an aetiological factor in the development of urinary incontinence
- Evidence suggests that oestrogen used locally may improve incontinence with fewer voids, less frequency and urgency and no serious side effects
- Systemic administration may result in worsening of urinary incontinence

Cochrane Review 2012



Laser Treatment

- Microablative Fractional CO2 Laser (CO2-laser) therapy on vaginal pathophysiology
- 53 postmenopausal women completed the three sessions at monthly intervals
- Stress incontinence and scores on the ICIQ-FLUTS, ICIQ-UI SF, UDI-6 and KHQ decreased significantly

Pitsouni et al 2016

Laser Treatment

- **Er:Yag a non-ablative thermal effect developed to treat vaginal relaxation syndrome, vaginal atrophy, pelvic organ prolapse and stress urinary incontinence**
- **118 patients were randomised to either laser or sham treatment**
- **Statistically significant improvement ($p<0.0010$ in ICIQ-IU and PISQ12 scores in laser tx group)**

Lukanovic et al 2016

When is surgery appropriate ?

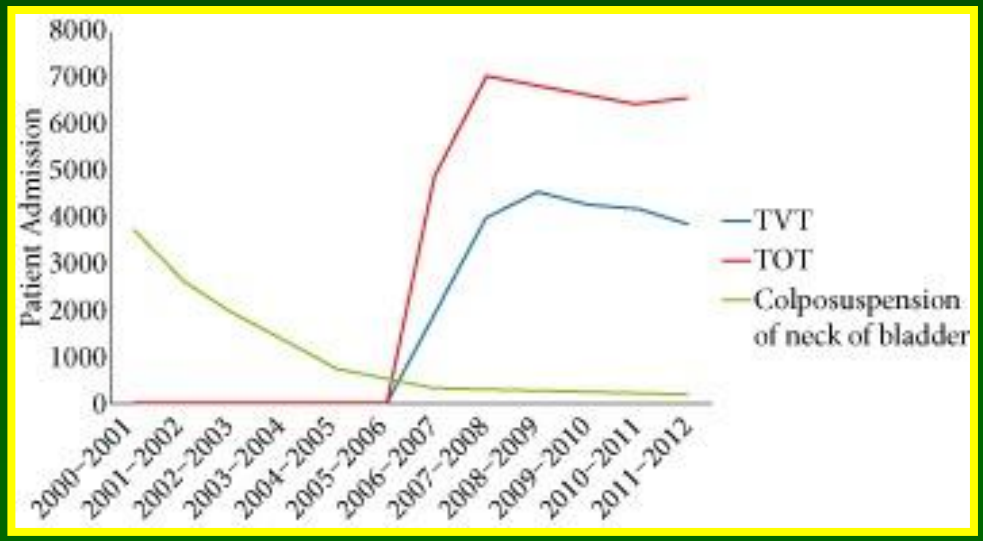
- Failed conservative or medical treatment
- Urodynamic stress incontinence
- Appropriate counselling for each operation
  - success and failure rates
  - potential complications
- Women who request surgical intervention and understand the possible consequences

Surgery for USI

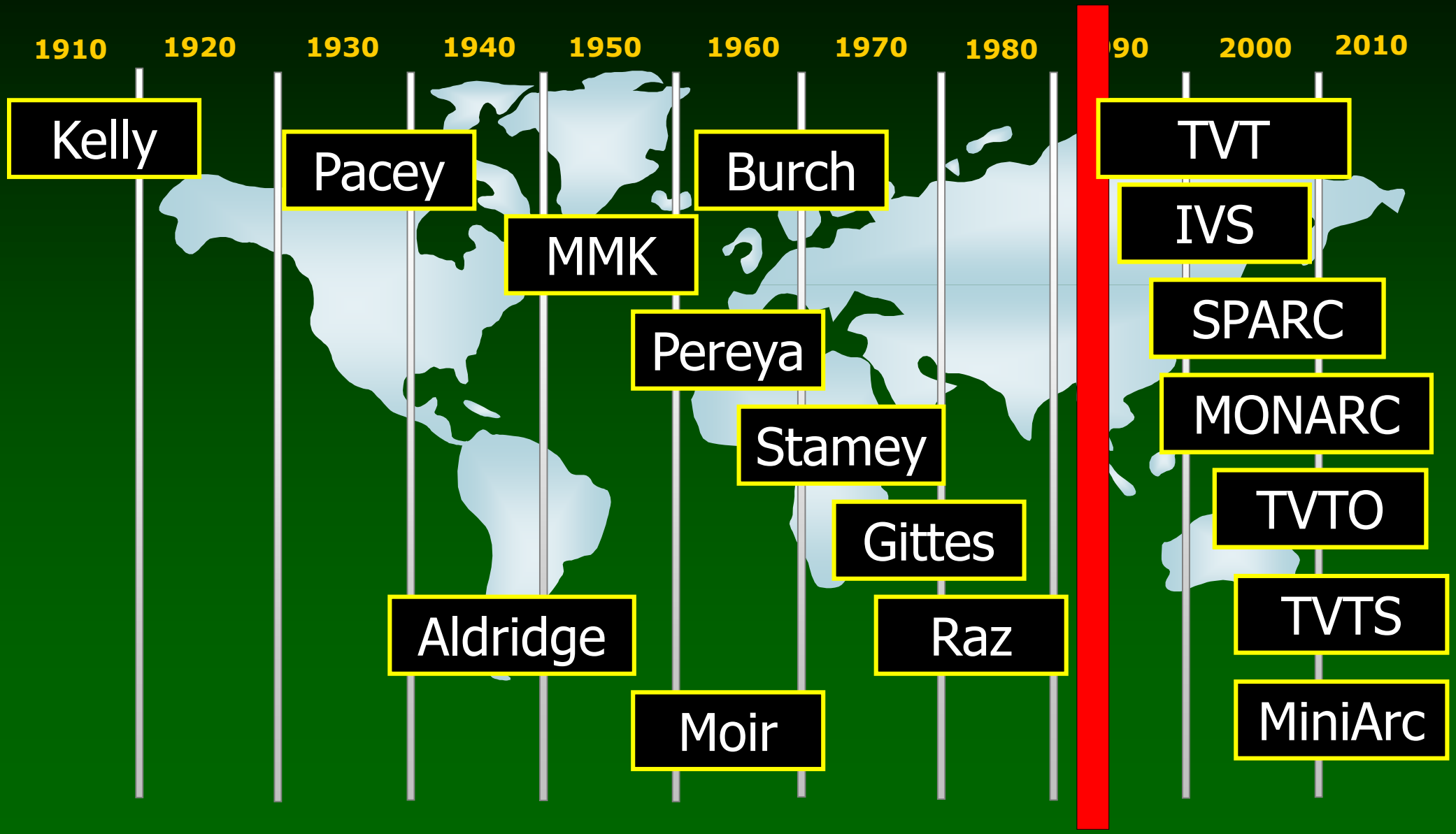
Hospital Episode Statistics data 2000-2012

- The number of procedures is increasing
- Shift in relative numbers of different procedures
- General increase of synthetic tapes
- ↓ Colposuspensions
- ↑Mid-urethral tapes

Withington et al 2014



Evolution of Continence Surgery



Colposuspension

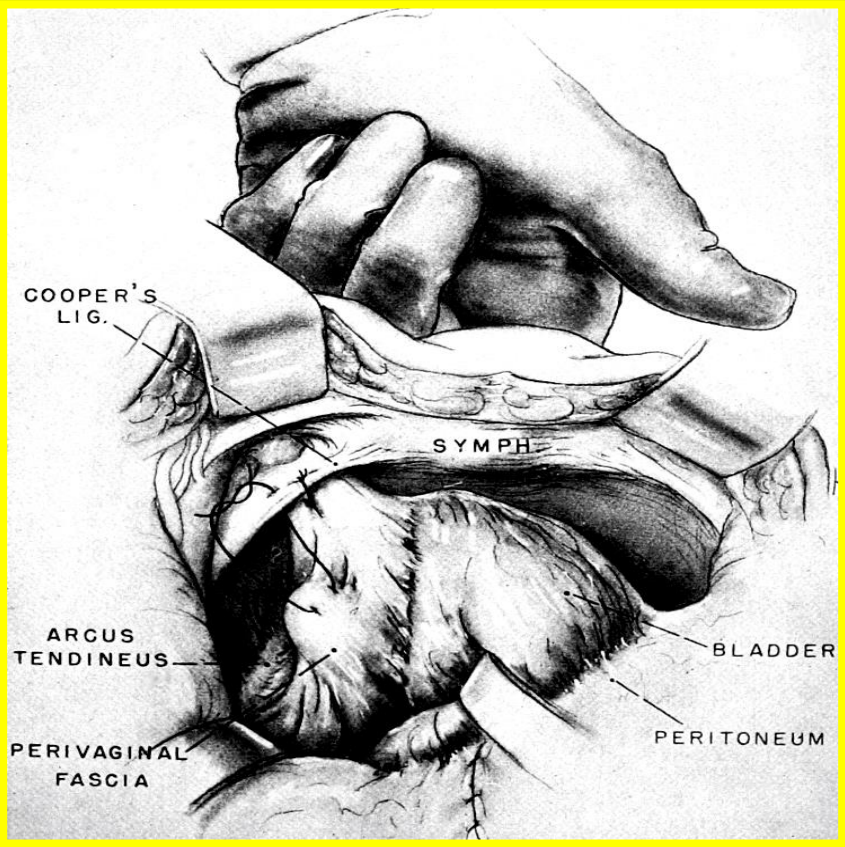
- Objective cure rates 59%- 100% (median 80%)
- Subjective cure rates 71%- 100% (median 88%)

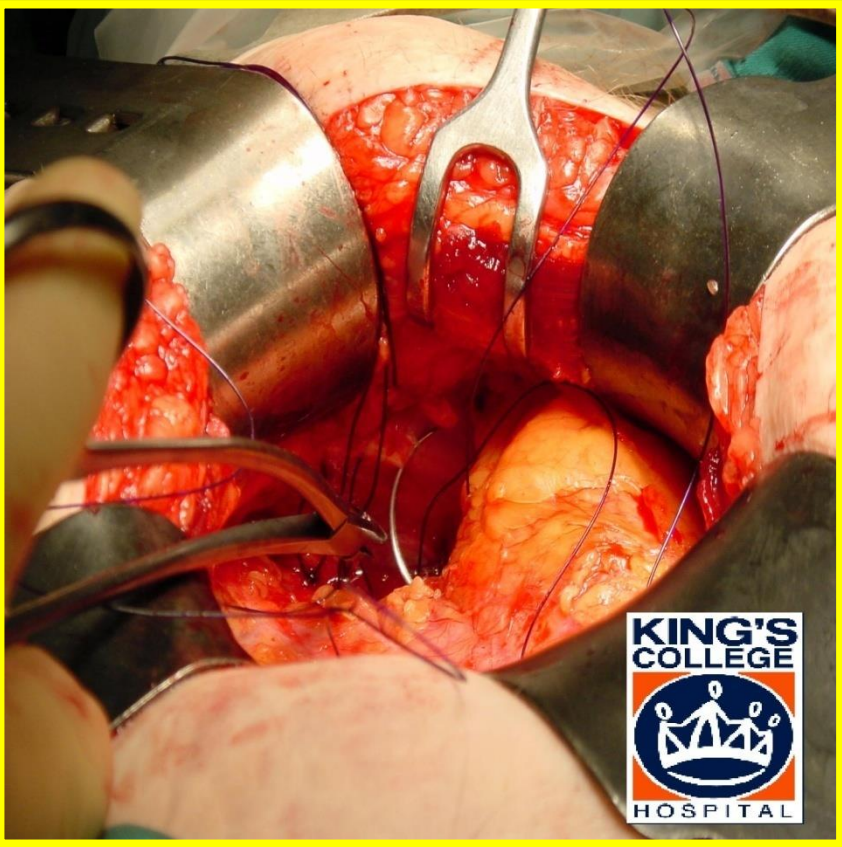
- Open colposuspension can be recommended as an effective treatment for primary or recurrent stress urinary incontinence, which has longevity (Grade A)

- It should be considered for women in whom an open abdominal procedure is required concurrently with surgery for SUI (Grade D)

5th ICI 2012

Colposuspension





Colposuspension: Laparoscopic or Open?

- RCT: No difference in 3-5 years “cure” (72% vs 78%)

Lap colposuspension

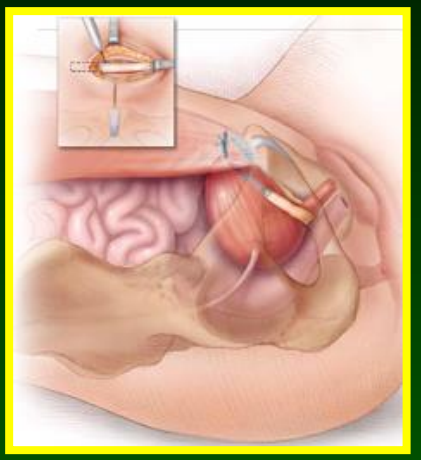
- ↓ blood loss
- ↓ pain
- Quicker return to activity
- Longer operation
- Not cost effective at 6 months post surgery compared to open

Carey et al 2006

Dumville et al, COLPO study group 2006

Traditional sling procedures

- Autologous rectus fascial sling is the most widely evaluated biological sling



- Traditonal sling procedures have a similar cure rate in comparison to open retropubic colposuspension, but the pattern of complications may vary

Rehman et al 2011

- Autologous fascial sling is recommended as an effective treatment for SUI which has longevity (Grade A)

5th ICI 2012

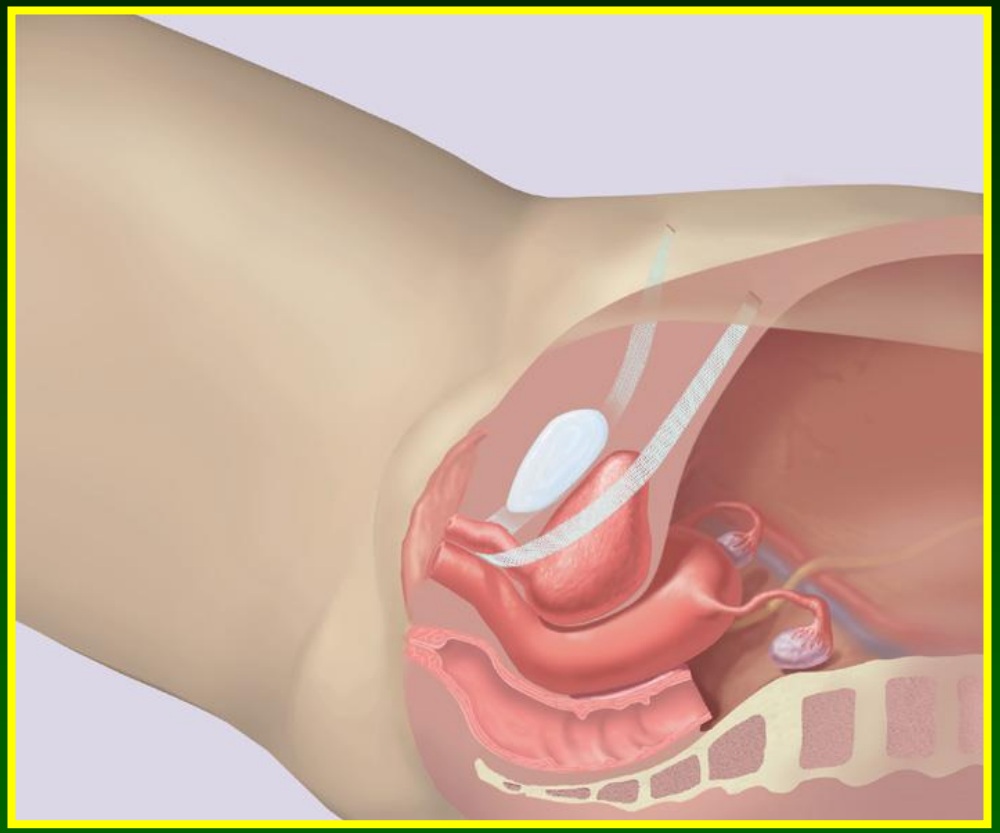
Tension free Vaginal Tape (TVT)

- Based on the ‘integral theory and concept of failure of the pubourethral ligament

  Petros and Ulmsten 1990

- Performed under local, regional or general anaesthetic

- Vaginal approach
- Macroporous (type 1) polypropylene mesh



TVT Results – 17 year data

- Only available from Scandinavia
- 3 centres: Jan 1995 – Oct 1996
- 58 of original 90 patients contacted

  93% objective cure

  79% subjective cure

  8% subjective improvement

  98% would recommend the operation

  2% asymptomatic late tape protrusion

Nilsson et al 2013

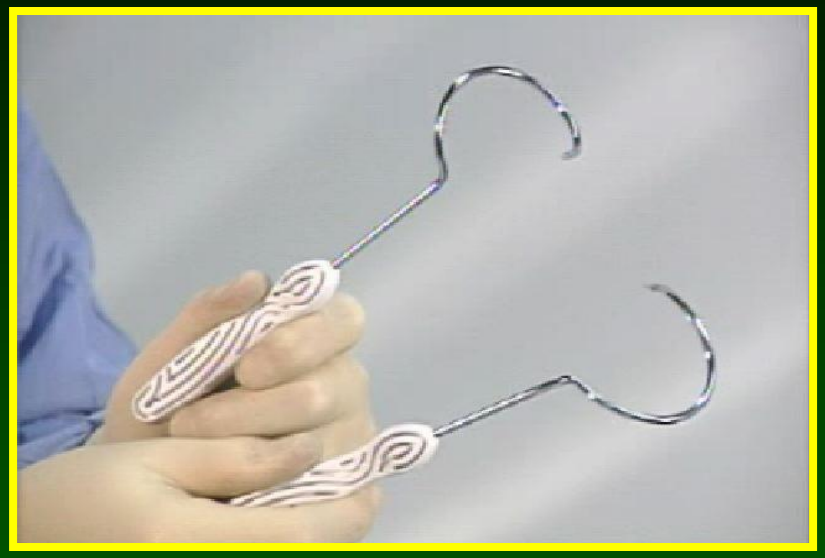
TVT vs Colposuspension

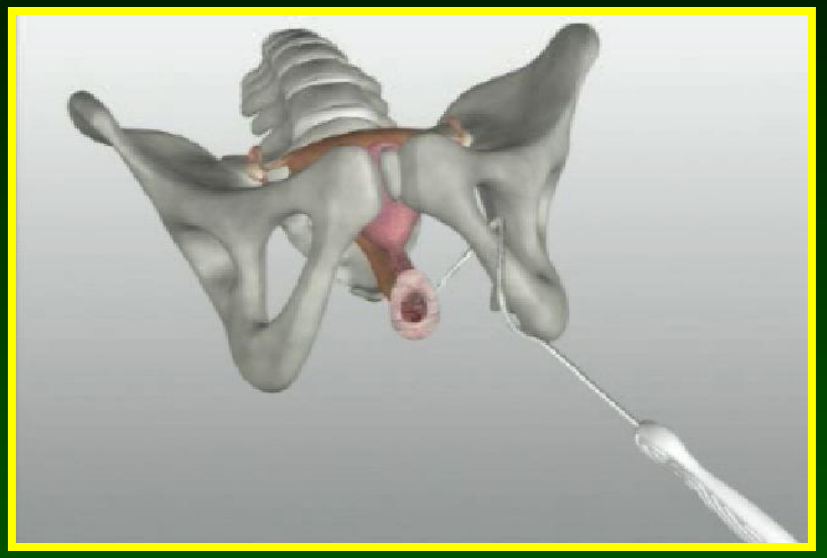
	TVT	Colpo
Negative Pad Test	81 %	90%
Urge Incontinence	1%	4%
No leakage	39%	46%
Patient satisfaction	91%	90%
Redo prolapse surgery	1.8%	7.5%

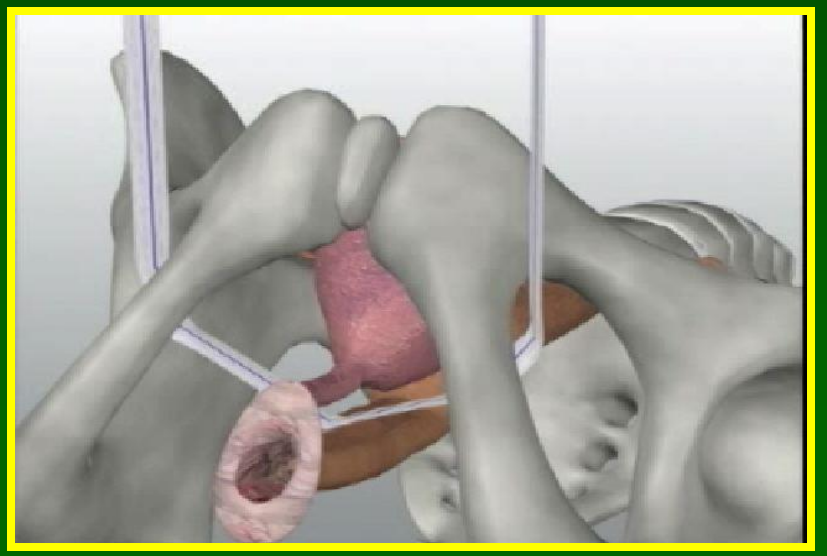
- QoL similar post op both groups
- Redo surgery for USI similar
- Tape related complications 6 patients TVT group
- No suture related complications colposuspension group

Ward and Hilton 2006

Transobturator tapes (TOT)







TOT

- Designed to avoid complications associated with retropubic route
- Insertion through the obturator muscle (outside-in)
- Under GA, regional block or LA
- Less operating time
- No cystoscopy required (?)

Delorme et al 2001

- Inside-out transobturator modification

de Leval et al 2003

- Cystoscopy considered in selected group

Sivanesan et al 2009

TVT Vs TOT/TVTO

Cochrane systematic review

- 55 RCTs, 8652 women

Similar cure rates for both

- Subjective cure (RR 0.98, 95% CI 0.95-1.00)
- Objective cure (RR 0.98, 95% CI 0.96-1.00)
- Repeat continence surgery (RR 1.26, 95%CI 0.81-1.95)

Complications

- Bladder perforation, blood loss, major vascular injury, operating time and hospital stay: ↑ for TVT
- Groin pain: ↓ for TVT
- Tape extrusion, de novo urgency: similar

Ford et al 2015

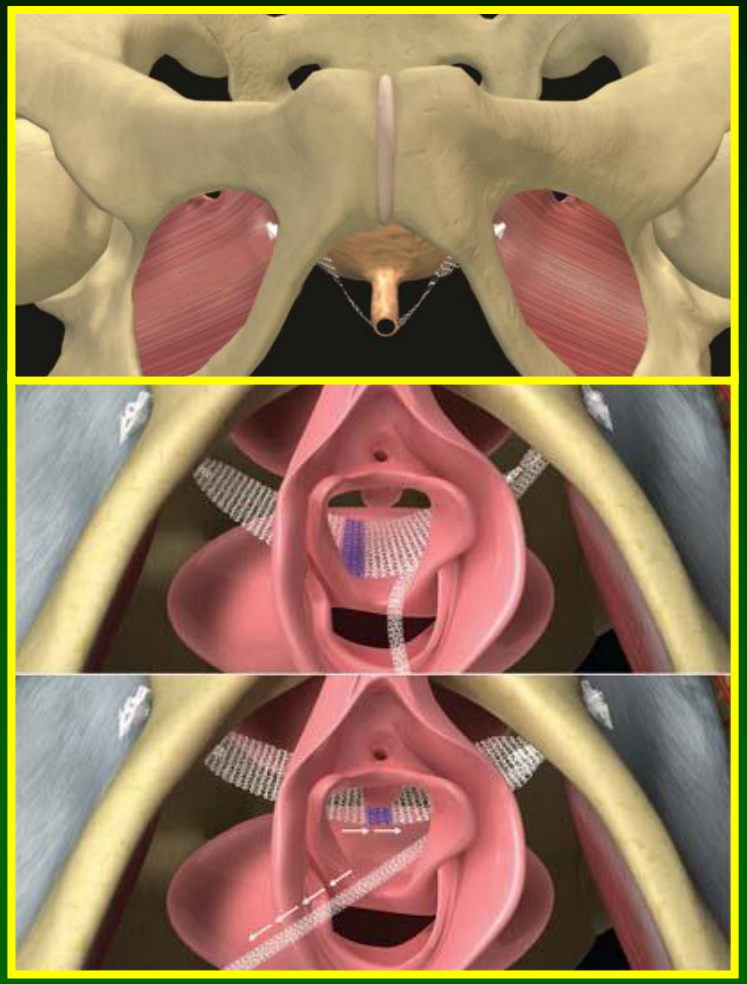
Mini-slings (single incision)

- Aim to reduce morbidity
- Less dissection
- Potential for outpatient insertion (without sedation)
- Promising results from case series with short follow-up

Meschia et al 2009

- Lower patient-reported and objective cure rates compared with SMUS

5th ICI 2012



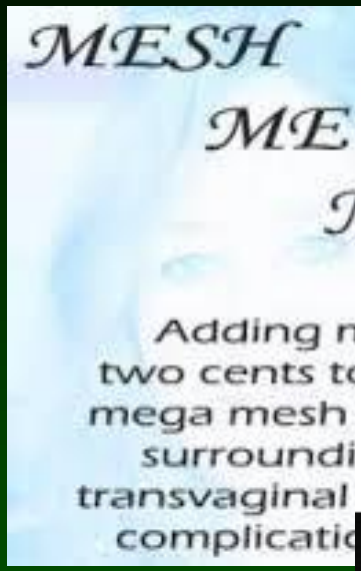
What do we do when a tape fails

Procedure	No.	Authors	Objective	Subjective
Repeat TVT	31	Liapis et al	77%	71%
Repeat TOT	29	Stav et al	-	48%
TVT shortening	14	Lo et al	71%	79%
TOT shortening	7	De Landsheere et al	-	43%
Bulking agents	23	Lee et al	-	35%
Open colpo	13	Giarenis et al	77%	85%
Laparoscopic colpo	14	De Cuyper et al	55%	93%
Adjustable sling	25	Schmid et al	84%	84%

Cochrane systematic review

- No robust evidence to recommend any of the different management strategies for stress incontinence after failed tape

Bakali et al 2013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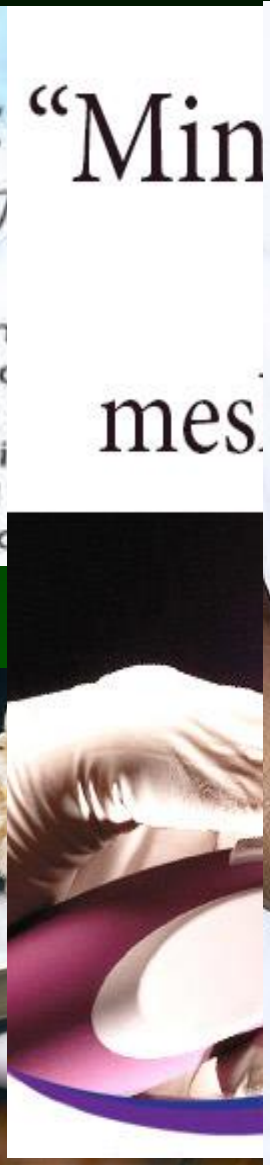
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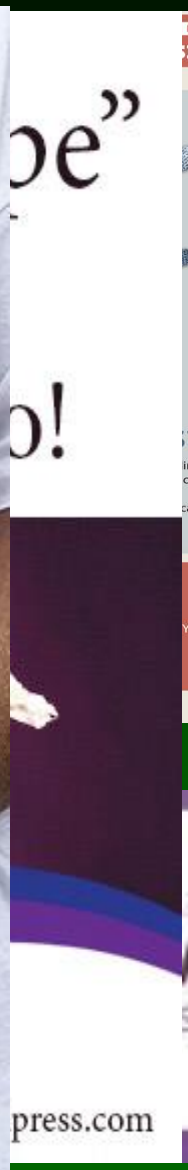
MESH
SURVIVORS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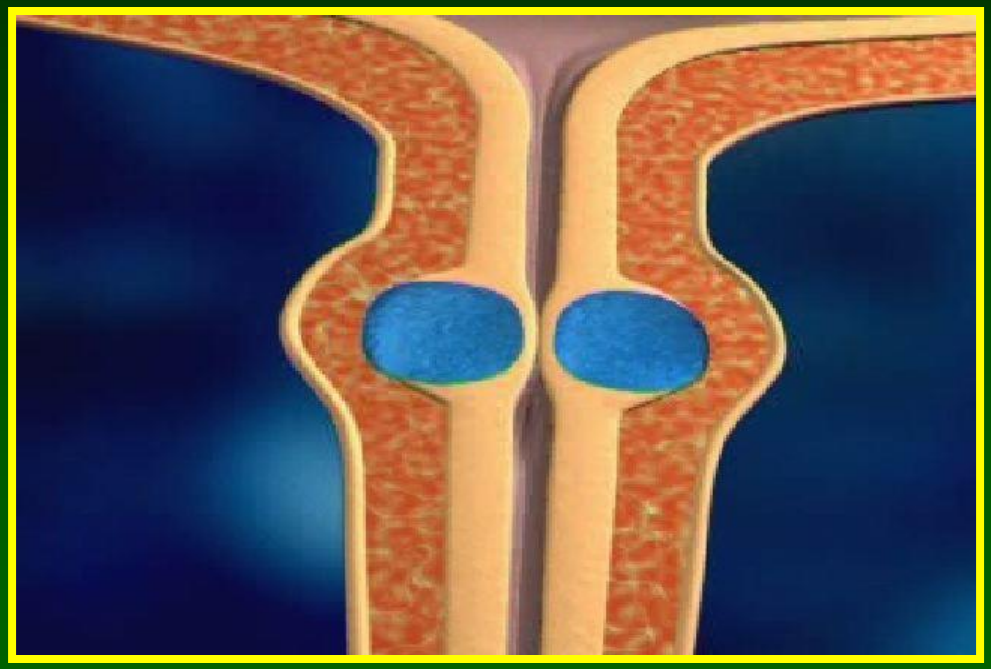
press.com


ICATIONS OF TRANSVAGINAL
H AND BLADDER SLINGS
USE
Nearly 300,000 women received transvaginal mesh implants in 2010, but in July 2011, the U.S. Food and Drug Administration (FDA) issued a public safety warning about these products.
!Rx
RISK
Although patients were assured that having transvaginal mesh inserted is a low-risk procedure, its complications can be life-changing. These complications led hundreds of women to file lawsuits against device manufacturers, claiming an insufficient amount of testing was performed and results evaluated before the devices came on the market. Mesh can begin to erode through vaginal walls or other organs. It may tighten or shift, causing it to protrude into the vaginal canal.
10%
Women who undergo transvaginal mesh surgery for prolapse that experience complications within the first year after surgery.
VAGINAL BLEEDING
URINARY INCONTINENCE
VAGINA SCARRING OR SHORTENING
VAGINAL DISCHARGE AND INFECTIONS
PERFORATION OF PELVIC ORGANS, BOWELS AND BLOOD VESSELS
EROSION, AND POSSIBLE EXPOSURE OR EXTRUSION, OF MESH THROUGH VAGINAL TISSUE
800-452-0949
facebook.com/drugsideeffects/


VT-NO!
Survivor Foundation

Periurethral Bulking Agents



Periurethral Bulking Agents

Advantages

- Minimally invasive
- May be performed under local anaesthesia
- May be performed in clinic setting
- Low morbidity
- Reduced incidence of voiding difficulties and ‘de novo’ detrusor overactivity
- Women with medical co-morbidity

Disadvantages

- Lower efficacy than mid urethral tapes and retropubic procedures
- Limited long-term studies
- Durability – may need to be repeated
- Effect of repeat procedures uncertain
- Treatment specific complications
- Cost

Periurethral bulking agents

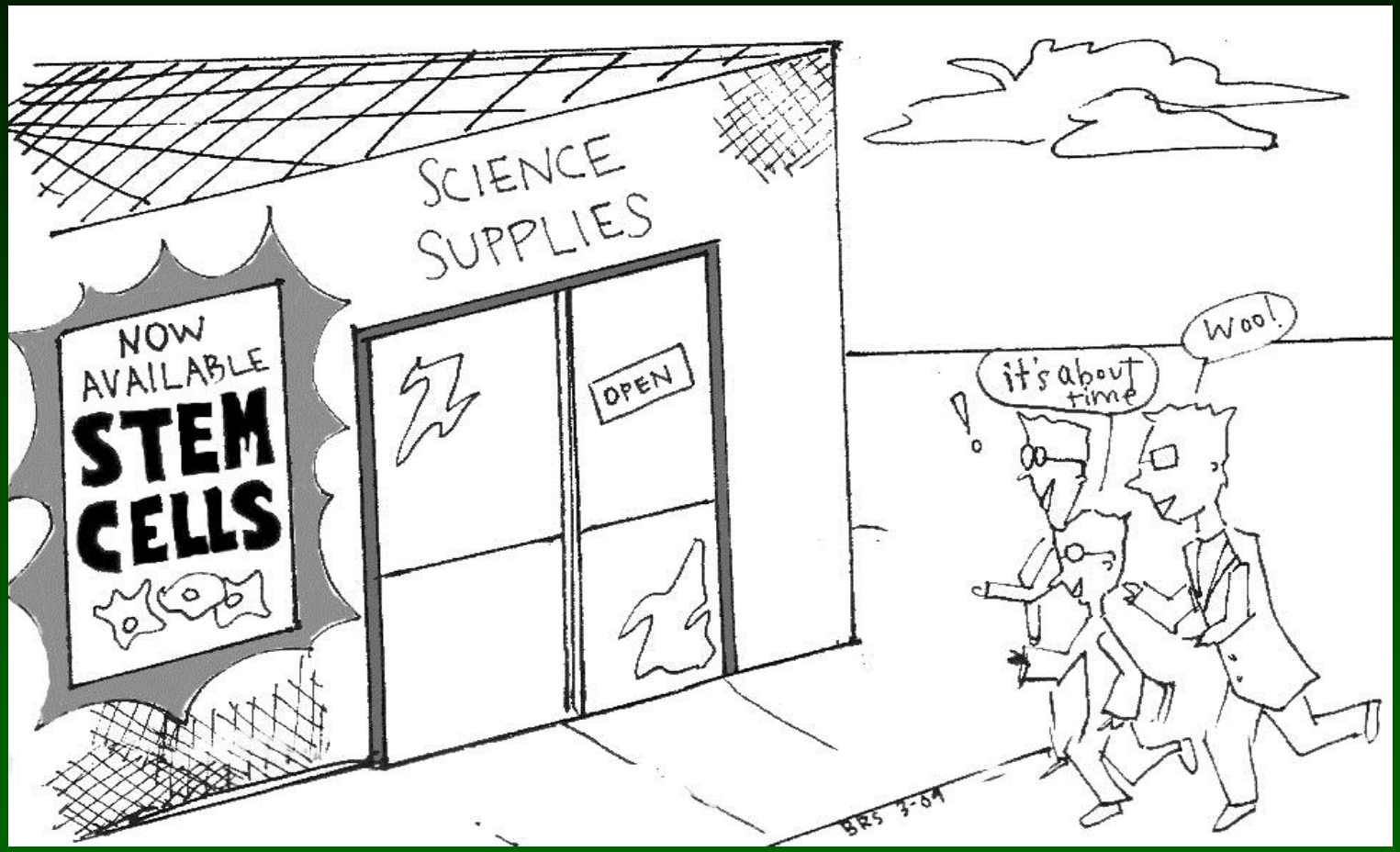
- Used for the past 30 years, more than 10 substances reported safe

- Cochrane review: 14 trials, 2004 women

  Insufficient evidence to guide practice as small trials of moderate quality with short-term follow-up

  Kirchin et al 2012

- No consensus regarding injection route, location for injection, volume of material, re-injection intervals


SCIENCE SUPPLIES
NOW AVAILABLE
STEM CELLS
OPEN
it's about time
Woo!
!
BRS 3-09

Which Operation? What evidence?

Colposuspension	TVT	TOT	Mini Sling	Bulking Agent
Durable	Durable	Medium term data	Ambulatory	Lower morbidity
Long term data	Long term data	Day case	Avoids retropubic space	Minimally invasive
Combine with abdominal surgery	Day case	Vaginal approach	Minimal data	Ambulatory
Cystocele	Vaginal approach	Avoids retropubic space	Short term results	ISD
Major surgery	Safe	Leg Pain	Failure	Lower efficacy
Rectocele	Bladder injury	Urethral injury		Cost
				Rpt Injections
				Failure

Overactive bladder syndrome

Overactive Bladder and Detrusor Overactivity

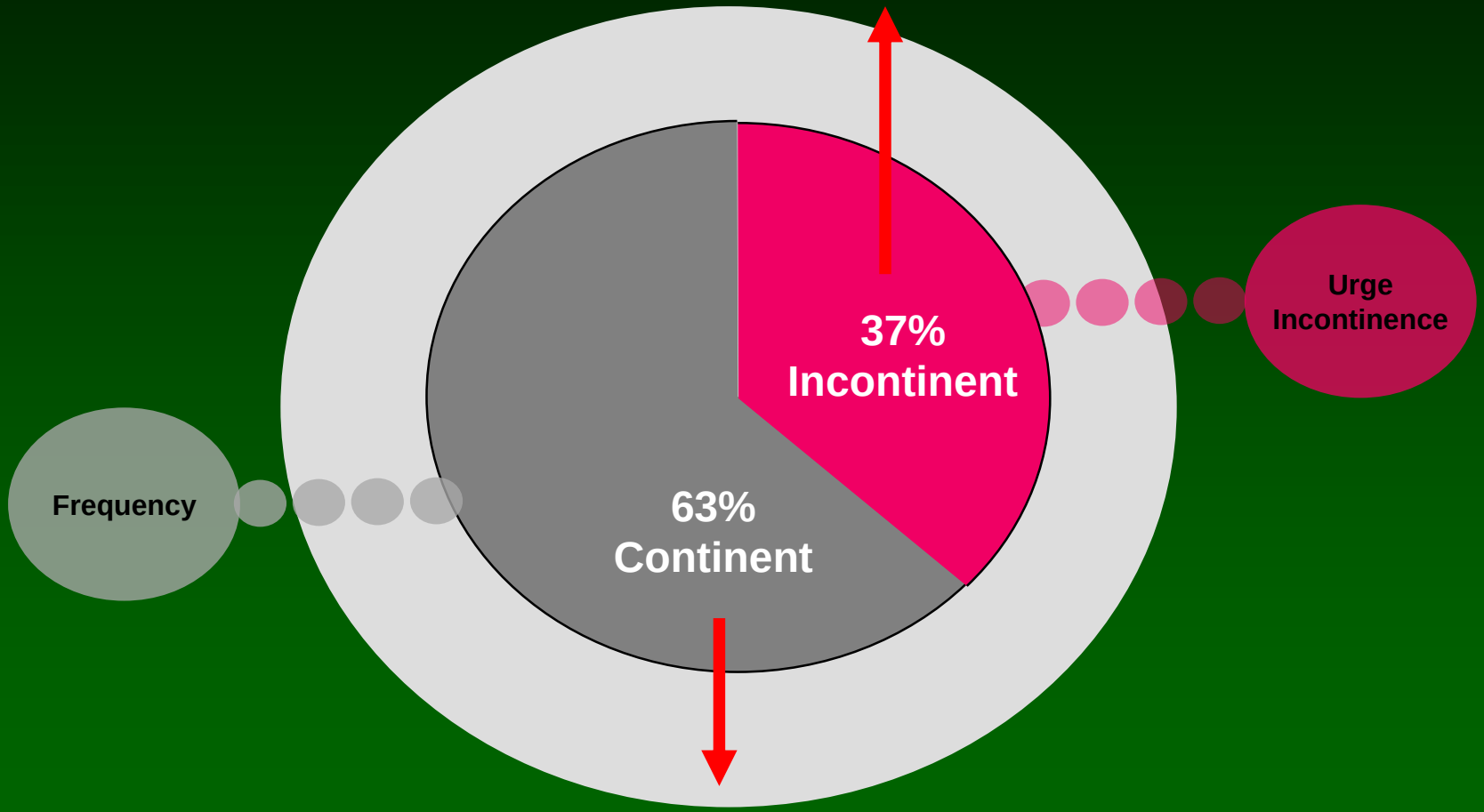
- Urinary urgency, usually accompanied by frequency and nocturia, with or without urgency urinary incontinence, in the absence of urinary tract infection or other obvious cause

- A urodynamic observation characterised by involuntary detrusor contractions during the filling phase which may be spontaneous or provoked

Haylen et al 2010

Urgency Drives the Symptoms of "OAB Wet" and "OAB Dry" Patients

12.2 million (6.1% of the US adult population)



21.2 million (10.4% of the US adult population)

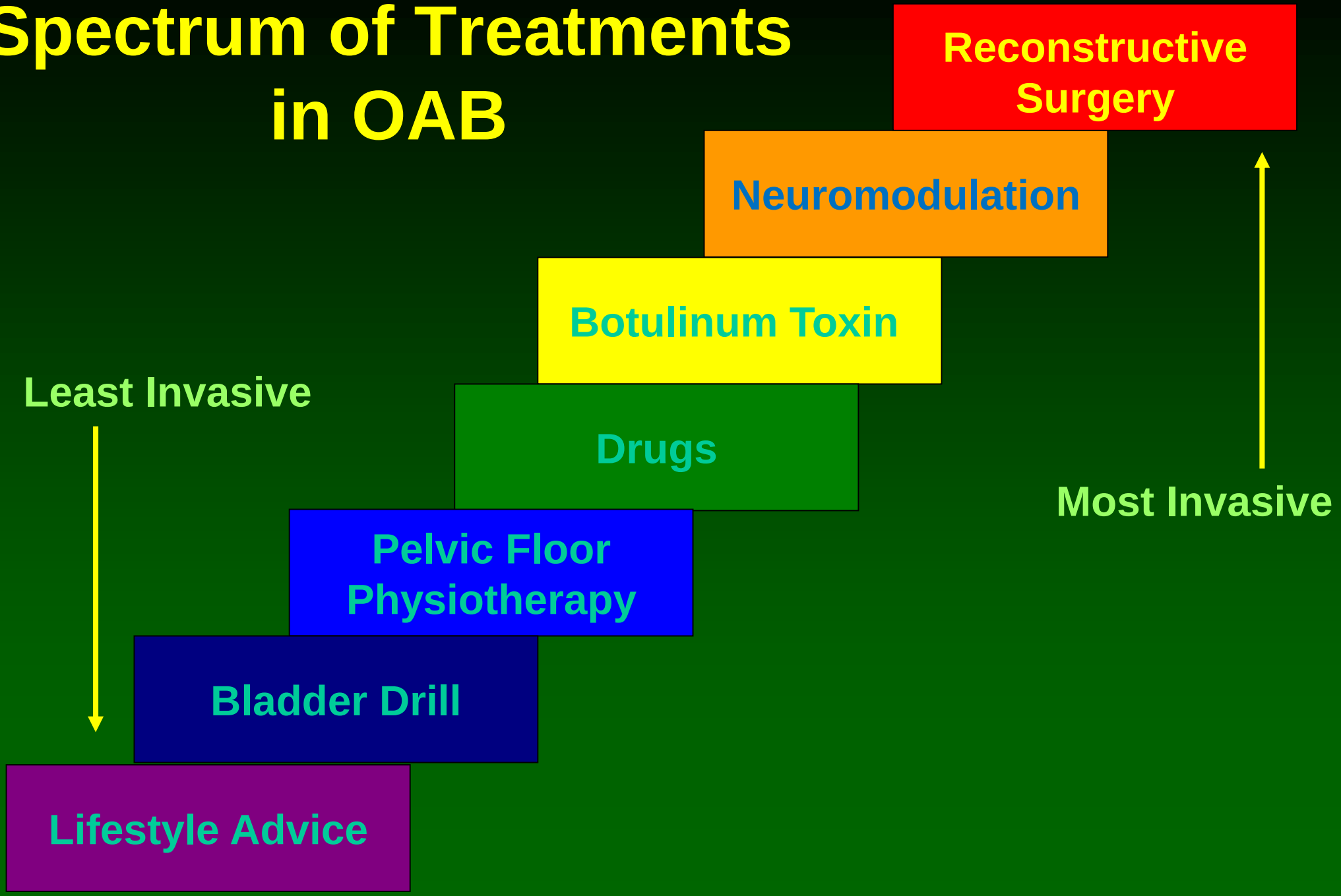
Stewart et al 2003

Prevalence of OAB

A prevalent condition	16.6% of the population in Europe aged 40 years and over suffer from OAB symptoms[1]
Under-diagnosed	Most sufferers in Europe do not seek medical attention or remain undiagnosed[2]
Undertreated	In Europe, only 27% of those with OAB who consult a doctor receive treatment[1]
Increases with age	30-40% of those aged 75 years and over in Europe suffer from OAB[1]
Significant burden	OAB sufferers in US reported 20% more physician visits and 138% more UTIs[3] Total direct cost = €3.9 billion/annum[4]

1. Milsom I, Abrams P, Cardozo L et al BJU Int 2001; 87(9):760-6
2. Goepel M, Hoffmann JA, Piro M et al Eur Urol 2002; 41(3):234-9
3. Wagner TH, Hu TW, Bentkover J et al Am J Manag Care 2002; 8: S598-607
4. Irwin et al BJU Int 2009; 103:202-9

Spectrum of Treatments in OAB



Lifestyle Intervention

Fluid intake, Caffeine, Tea, Coke, Wt reduction

- Significant reduction in U, F, and N with 25% reduction in fluid intake

  Hashim et al 2008
- Caffeine intake- independent (?dose dependent) risk factor for DO

  Myers et al 2000
- Tea (not coffee) epidemiologically associated with incontinence

  Hannested et al 2003
- Diet Coke and caffeine-free Diet Coke cause greater U and F than carbonated water or Classic Coke

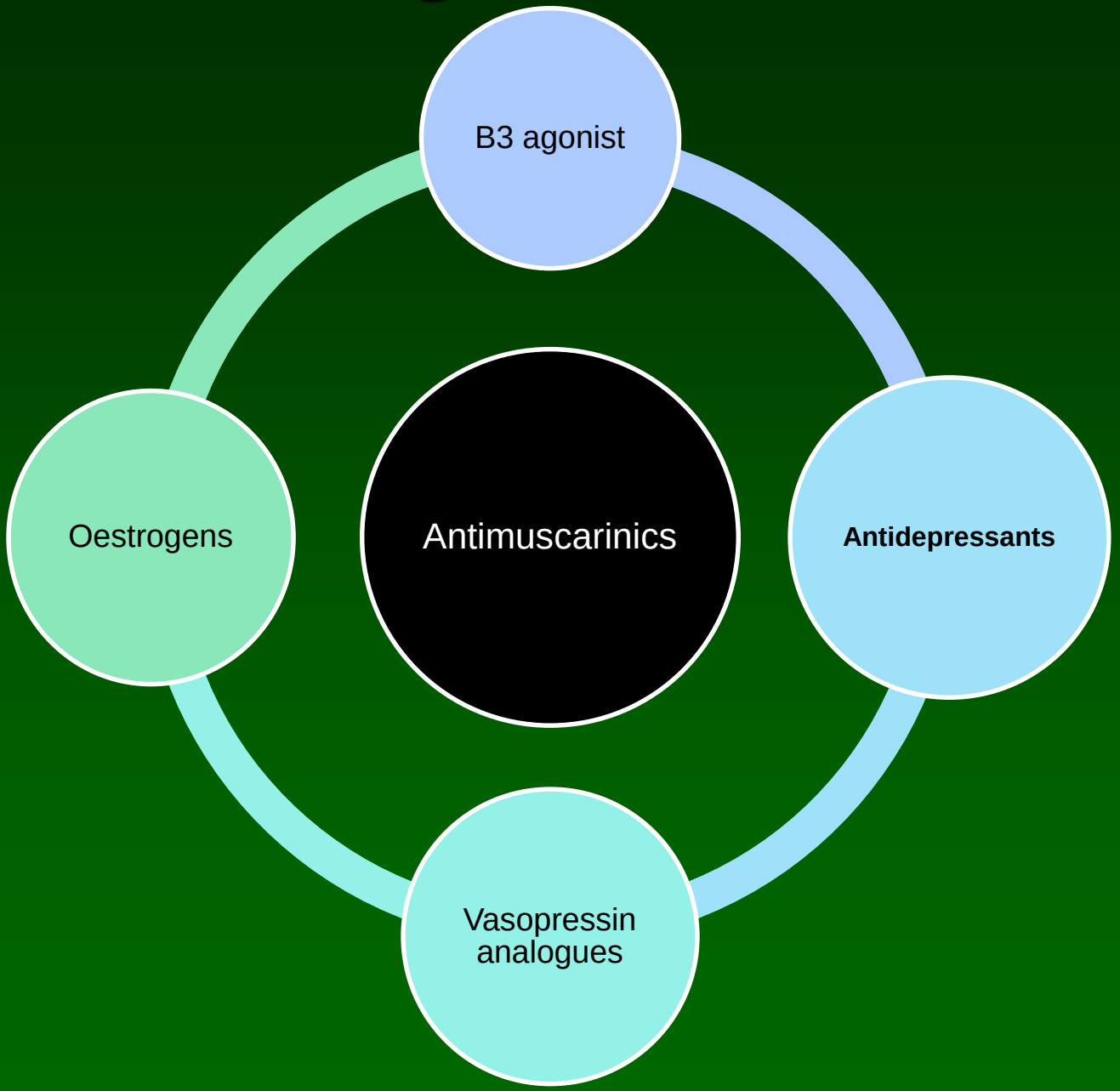
  Cartwright et al 2007
- Weight loss decreases incontinence in moderately and morbidly obese women (Grade A)

  5th ICI 2012
- Bladder retraining (BT) lasting ≥6 weeks should be offered as 1st line treatment for urgency or mixed urinary incontinence

  NICE 2013
- Tolterodine with BT appears to improve outcomes over drug alone for women with UUI (Grade B)

  5th ICI 2012

Drugs and OAB



Antimuscarinic Agents

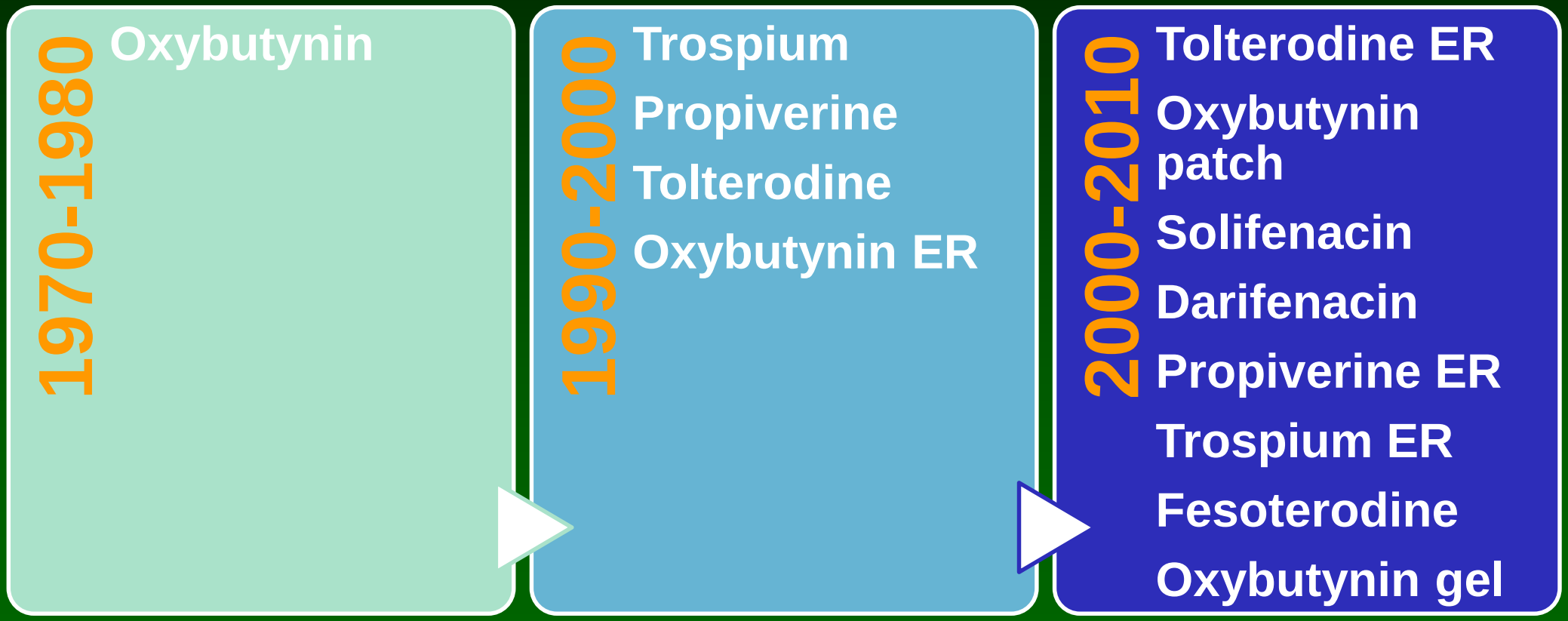
- After lifestyle changes, antimuscarinic agents are the most common and currently the most widely used therapy for OAB syndrome

  Andersson 2004

- Antimuscarinics
  - Reduce intra-vesical pressure
  - Increase compliance
  - Raise volume threshold for micturition
  - Reduce uninhibited contractions

  Abrams et al 2002

Evolution of antimuscarinic treatment



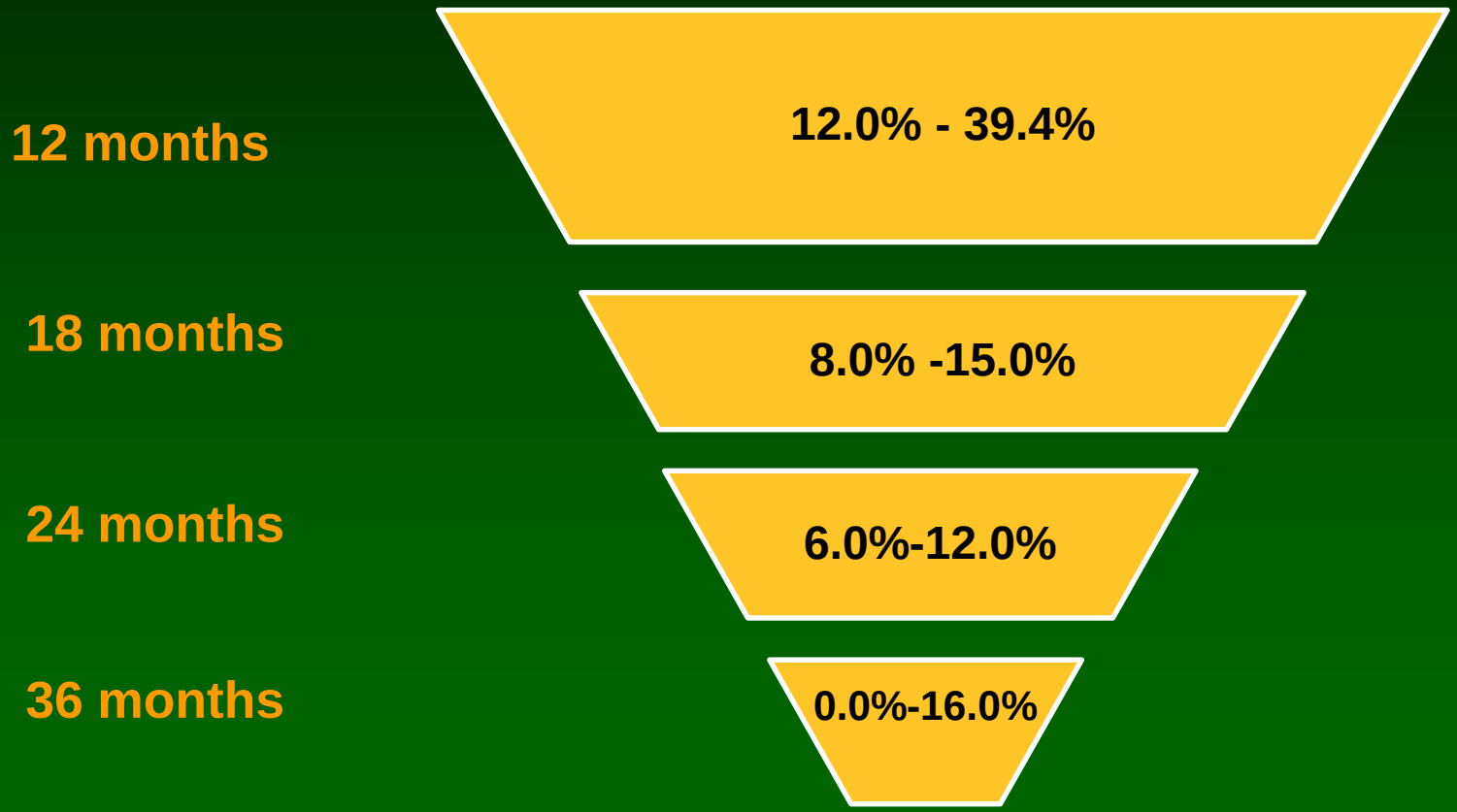
Anti-Muscarinic Side Effects

- Dry mouth
- Constipation
- Blurred vision
- Somnolence

Antimuscarinics: Persistence

Systematic review following PRISMA Guidelines

Inclusion of 14 studies, N=190,279 pts (mean age 69.5 yr)



Veenboer and Bosch 2014

Antimuscarinics: Cognitive Function

- Prospective population based cohort study
- Data from Adult Changes in Thought Study Group Health
- 3434 subjects ≥ 65 yrs
- Cumulative anticholinergic exposure measured using Total Standardised Daily Doses (TSDD)
- Outcomes: Dementia and Alzheimer's Disease
- Commonest classes of drug used

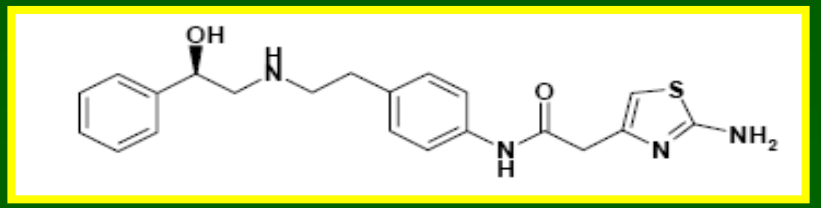
  Tricyclics Antihistamines Antimuscarinics
- Higher cumulative anticholinergic use associated with an increased risk of dementia

Gray et al 2015

β3 Agonists: Mirabegron

- First in class selective β3 adrenoreceptor agonist causes relaxation of bladder smooth muscle

- Recommended for OAB:
  - where antimuscarinic drugs are contraindicated
  - Or clinically ineffective
  - Or have unacceptable side effects



NICE 2013

Mirabegron and the Elderly

- Does not add to anticholinergic load
- Low incidence of CNS adverse events
- Suitable in “frail, elderly, complex” patients
- Improved benefit-to-risk ratio in these patients compared to anticholinergics

Wagg et al 2016

5th International Consultation on Incontinence

Drug	Level of evidence	Grade of recommendation
Darifenacin	1	A
Oxybutynin	1	A
Propiverine	1	A
Solifenacin	1	A
Tolterodine	1	A
Fesoterodine	1	A
Trospium	1	A
Mirabegron	1	A

5th International Consultation on Incontinence 2013

Desmopressin

- Synthetic vasopressin analogue
- Used for nocturia and enuresis in children

  Norgaard et al 1989
- Also effective for nocturia in adults

  Mattiasson et al 2002
- Useful as a ‘designer drug’ in daytime incontinence

  Robinson et al 2004
- Risk of water retention and hyponatraemia

  Robson et al 1996; Schwab and Ruder 1997
- Serum sodium should be measured before and after a few days of treatment in the elderly

  Rembratt et al 2003

Antidepressants

- May have a role in detrusor overactivity

  Martin and Schiff 1984; Lose et al 1989

- Imipramine has complex pharmacological effects:
  Systemic anticholinergic actions

  Baldessarini 1985

- Blockade of the re-uptake of serotonin and noradrenaline

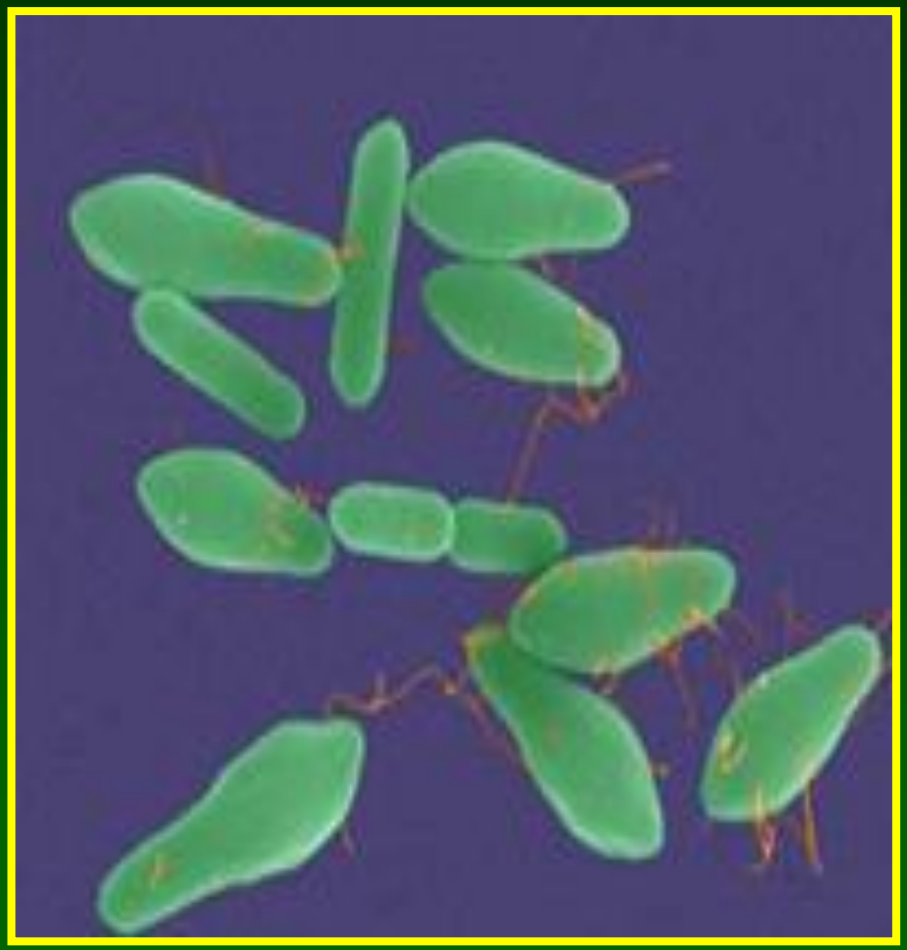
  Maggi et al 1989

- Mode of action in detrusor overactivity not been established

  Hunsballe and Djurhuus 2001

- Use not supported by evidence based trials

Botulinum Toxin



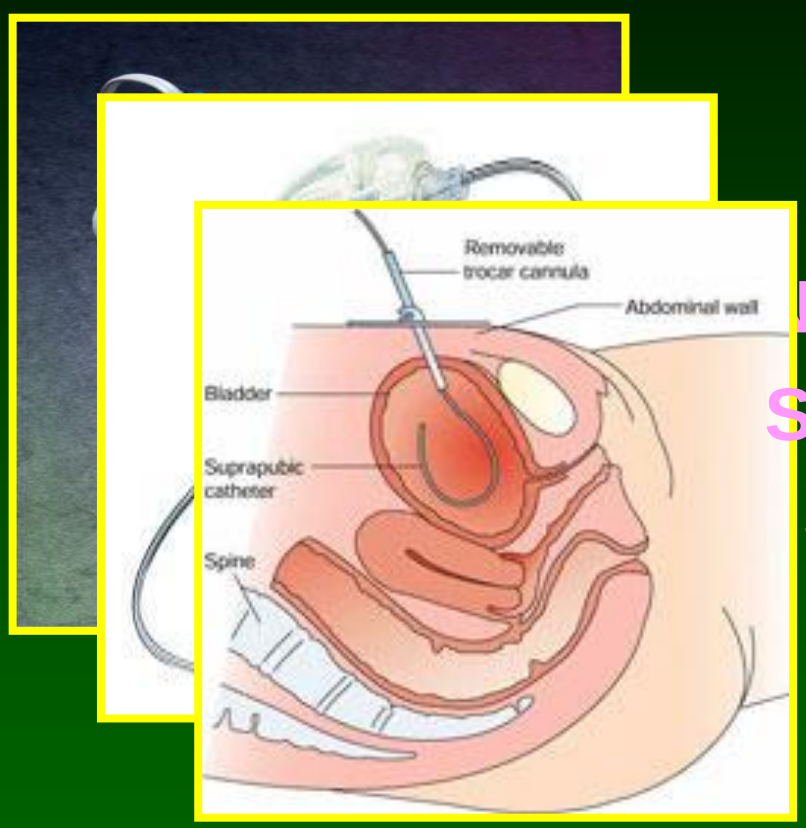
Botulinum toxin: Systematic Review and Meta-analysis

- 8 publications including six RCTs (n=1,320)
- Botox vs placebo (12 weeks)

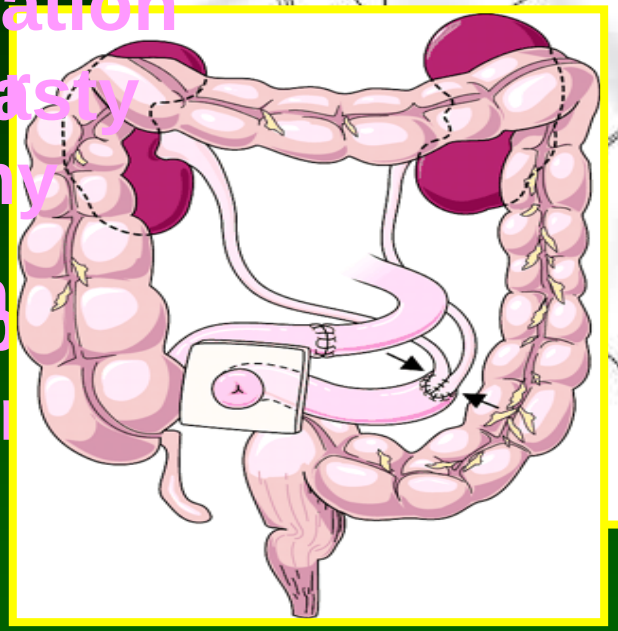
	Placebo	Botox	p
Incontinence episodes per 24 h	-1.0	-2.8	<0.01
Cured of incontinence	8.0%	29.2%	<0.01
Micturitions per 24 h	-0.9	-1.6	<0.01
Volume per void, ml	+7.4	+44.3	<0.01
Post void residual	+2.0	+32.8	<0.01
UTI	5.9%	19.7%	<0.01
CISC	0.5%	8.4%	<0.01

Cui et al 2015

When Drugs Fail

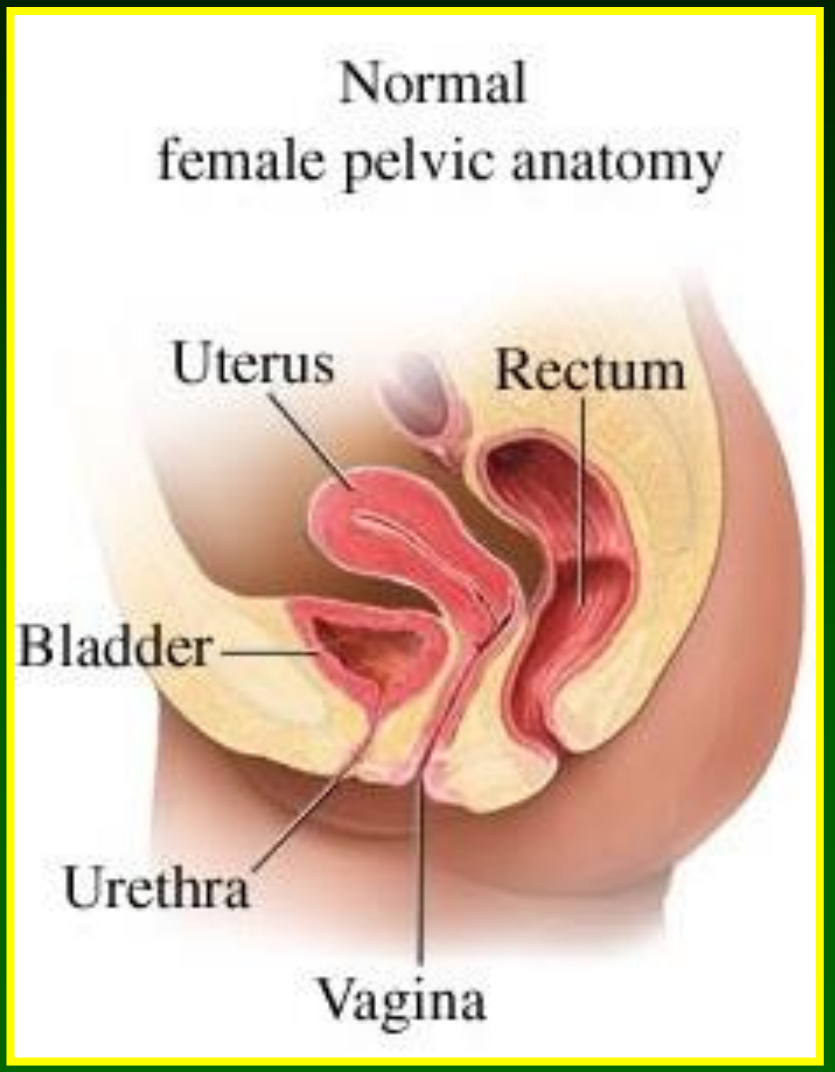


- Augmentation Cystoplasty
- Detrusor Myectomy
- Urinary Diversion
- Suprapubic Catheter



Pelvic Organ Prolapse

- Herniation of the uterus, bladder or rectum into the vagina
- Secondary to weakness of the vaginal wall or supports of the uterus
- Significant impact on QoL



Pelvic Organ Prolapse

- POP prevalence based on examination: 30% - 40%

  Samuelsson et al 1999

  Hendrix et al 2002

- Sensation of mass bulging into the vagina: 6% - 8%

  Lawrence et al 2008

  Tegerstedt et al 2005

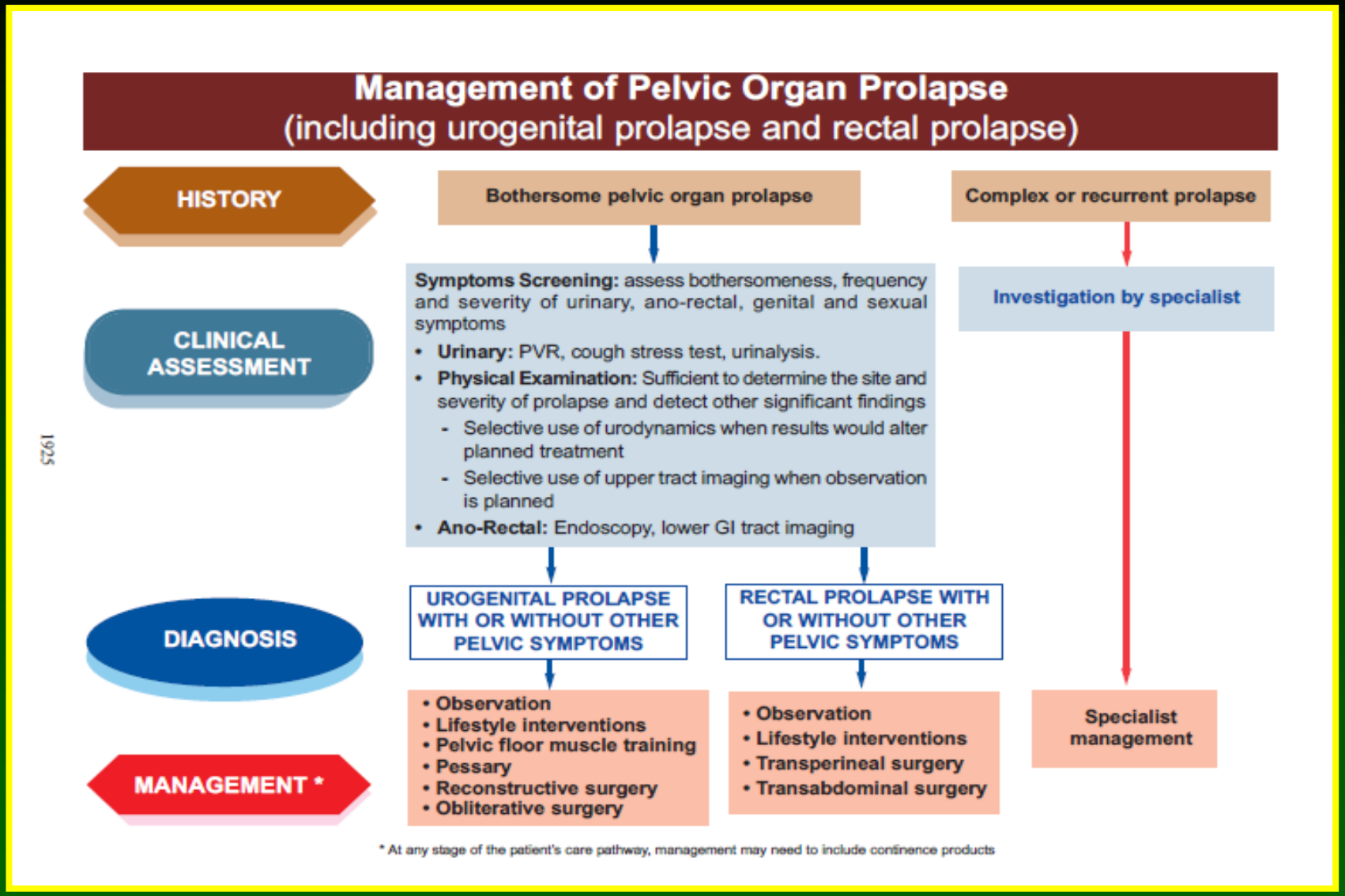
- POP may seriously influence the physical, psychological & social wellbeing of individuals

  Digesu et al 2005

- Lifetime risk for POP surgery: 10% - 20%

  Abdel-Fattah et al 2011

  Smith et al 2010



5th ICI Recommendations 2013

Prolapse: Aims of Treatment

- Improve Quality of Life
- Individualise management depending upon presenting symptoms and life-style
- General Aims
  - Relieve symptoms/QoL
  - Maintain or restore bladder/bowel function
  - Maintain (or improve) sexual function

Don’t jump straight in to surgery

- Pelvic floor muscle training
- Perineometer (biofeedback)
- Electrical stimulation
- Avoid unnecessary lifting
- Curtail high-impact training
- Manage constipation
- Vaginal pessaries
- Weight Loss

Vaginal pessaries

Ideal for women who:

- **Are unfit for surgery**
- **On the waiting list for surgery**
- **Do not wish to undergo surgery**

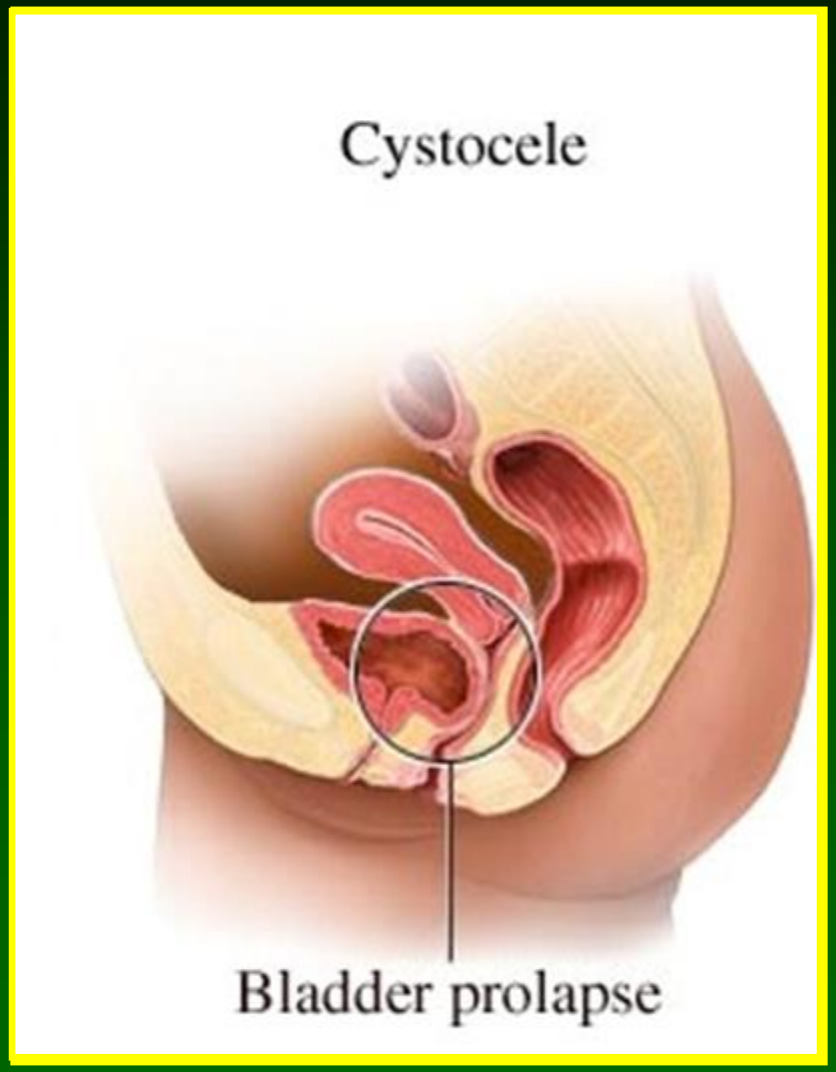
Prospective evaluation of 554 patients with symptomatic prolapse

359 opted for pessary vs 195 for surgery

One year after both groups had similar improvements in; urinary symptoms, bowel symptoms, sexual function and QoL

Abdool et al 2011

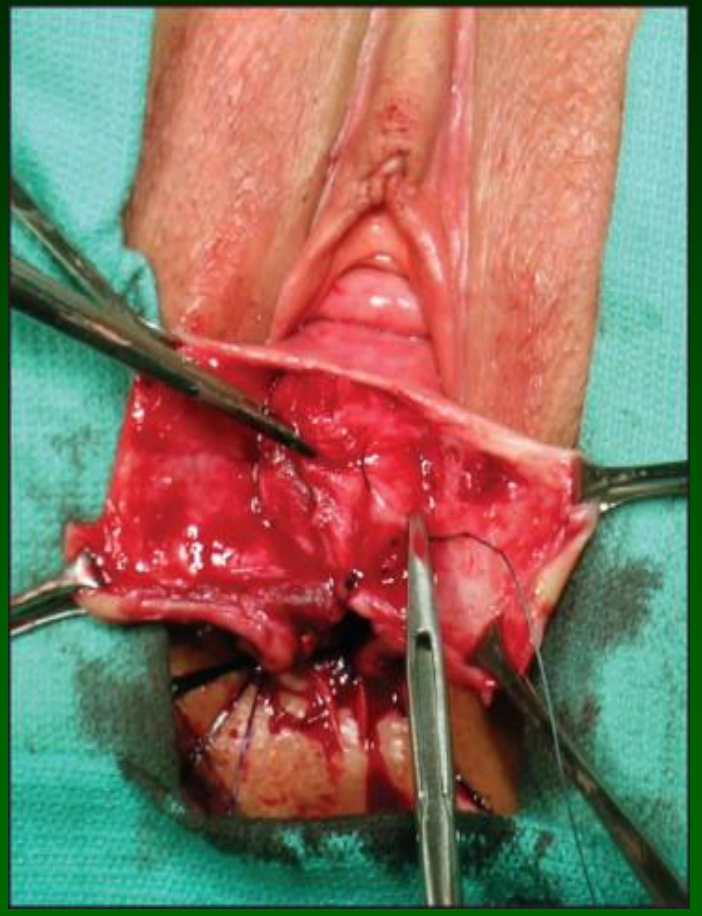
Anterior compartment prolapse



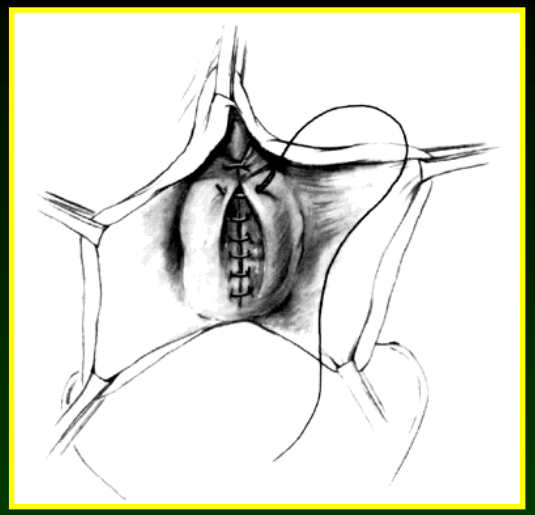
Anterior compartment prolapse

Procedures

- Anterior colporrhaphy
  - +/- prosthetic augmentation
- Paravaginal Repair
  - Abdominal
  - Vaginal
- Colposuspension



Anterior Repair



- First described by Kelly in 1913
- Previous studies claim success rates in management of cystocele 80-100%

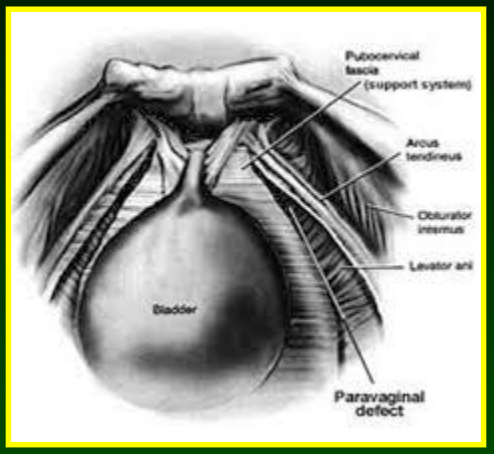
Stanton et al 1982

- More recent studies report much lower ‘success rates’ between 42 – 58%

Weber et al 2001
Nyugen et al 2008

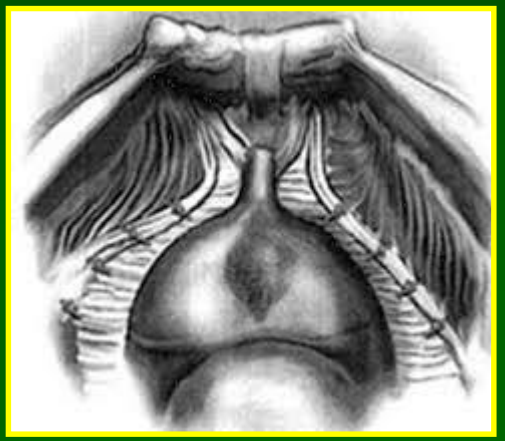
Paravaginal repair

- Similar effectiveness of abdominal or vaginal approach
- Laparoscopic: less favourable outcome



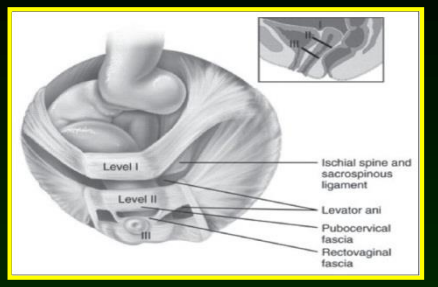
Hosni et al 2013

- Abdominal paravaginal repair: similar outcomes with anterior repair with polyglactin 910 mesh
- BUT longer operating time



Minassian et al 2014

Apical support with anterior compartment prolapse



- Importance of Level I (apical) support

DeLancey et al 1992

- Simulated apical support (during examination) eliminates anterior prolapse in 55% of women

Lowder et al 2008

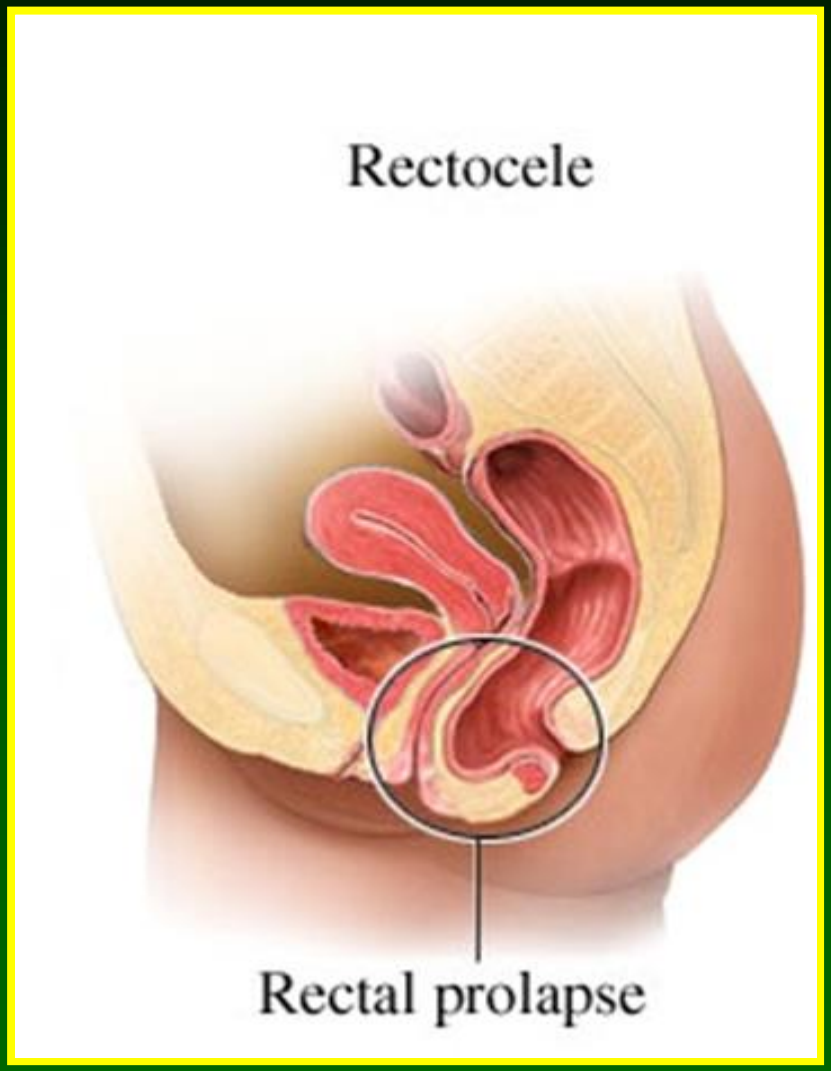
- 53% of the observed variation in anterior compartment support may be explained by apical support (MRI)

Summers et al 2006

- Reoperation rate significantly reduced when a concomitant apical suspension procedure performed (11.6% vs 20.2% at 10 years, $p<0.01$)

Eilber et al 2013

Posterior compartment prolapse



Posterior Repair

- First described by Simon 1867

Maher et al 2004

Success/Recurrence rates

- 86%-93% success rate
- 7-14% reoccurrence within 1yr of repair

Posterior colporraphy vs site-specific repair

- No difference in anatomical or functional outcomes

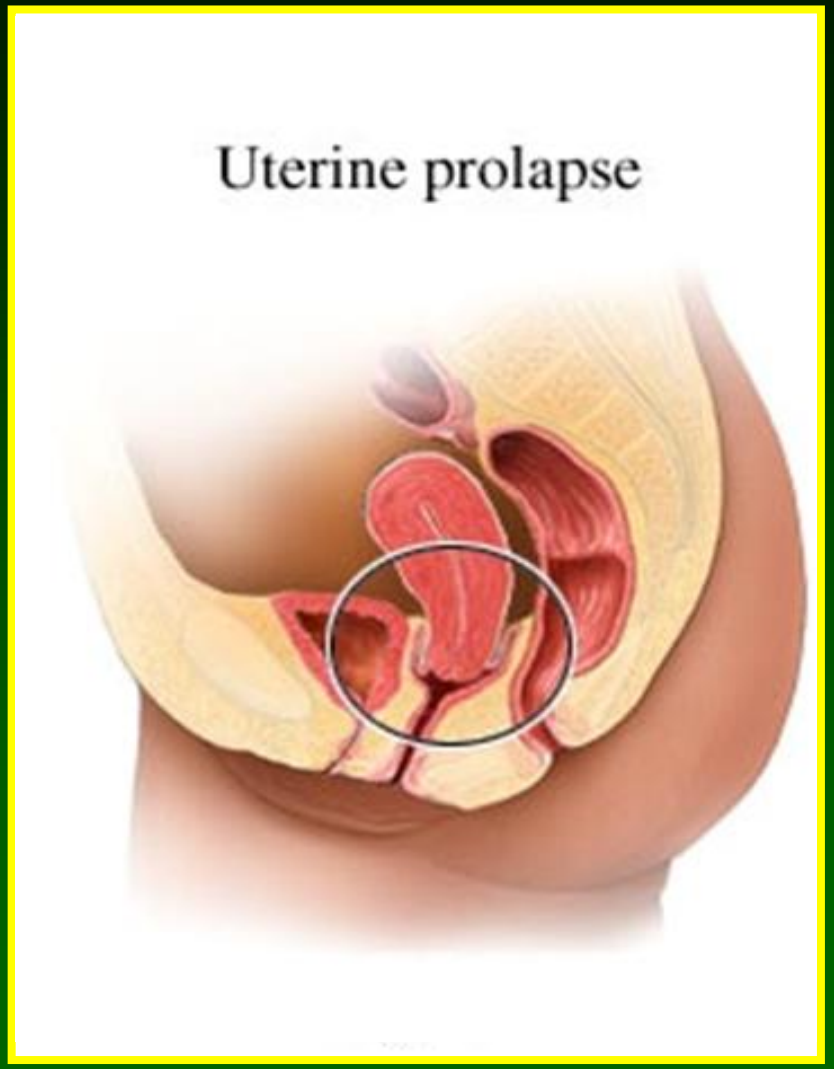
Paraiso et al 2006

Native tissue repair vs mesh augmentation

- No difference in outcomes

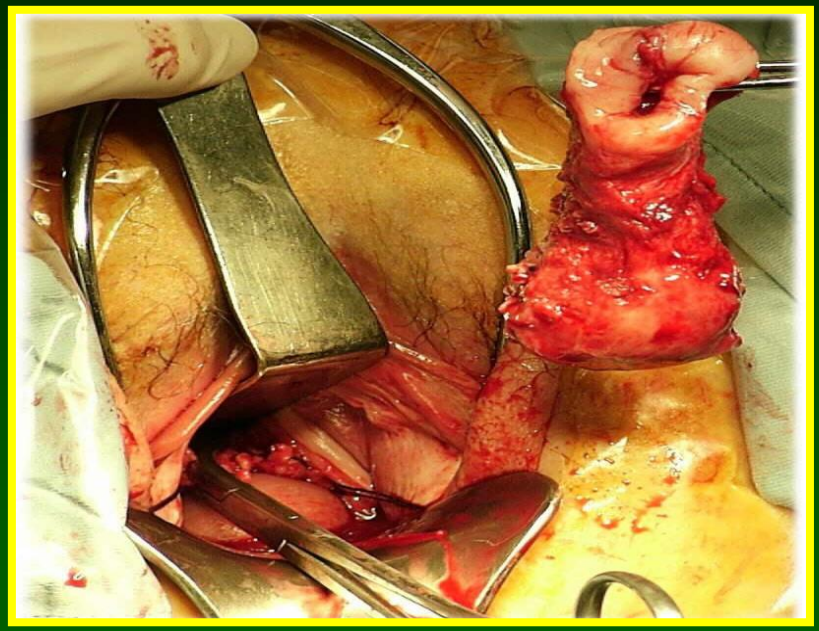
Paraiso et al 2006
Sung et al 2012

Uterine prolapse



Vaginal Hysterectomy

- "Definitive" treatment of uterine prolapse
- Traditionally been considered to be the "gold standard"



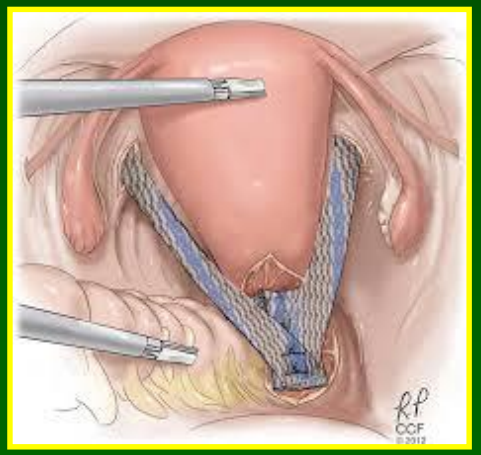
Uterine Preservation

Vaginal procedures

- Manchester repair
- Uterosacral ligament suspension
- Sacrospinous hysteropexy

Abdominal (open or laparoscopic) procedures

- Sacrohysteropexy
- Uterosacral plication
- Round ligament plication



Hysterectomy vs Uterine preservation

VH vs Sacrospinous hysteropexy (SSH)

- RCT, 66 women
- 12 months: ↑rate of apical recurrences (21% vs 3%) after SSH
- Similar functional outcomes and QoL

Dietz et al 2010

VH vs SSH

- RCT, 208 women
- At 12 months: similar anatomical/functional outcome, QoL

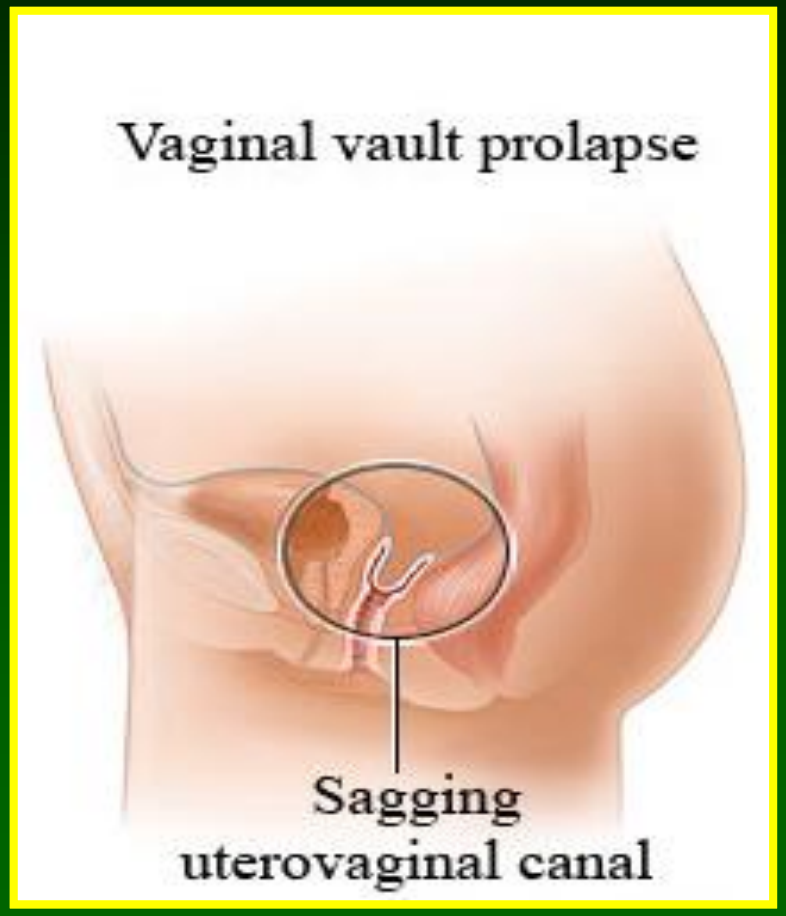
Detollenaere et al 2015

VH vs Laparoscopic sacrohysteropexy (LSH)

- Pilot RCT, 72 women
- 12 months: better apical support, more vaginal repairs after LSH
- Similar functional outcome, re-operation for apical prolapse

Rahmanou et al 2015

Post Hysterectomy Vaginal Vault Prolapse (PHVP)

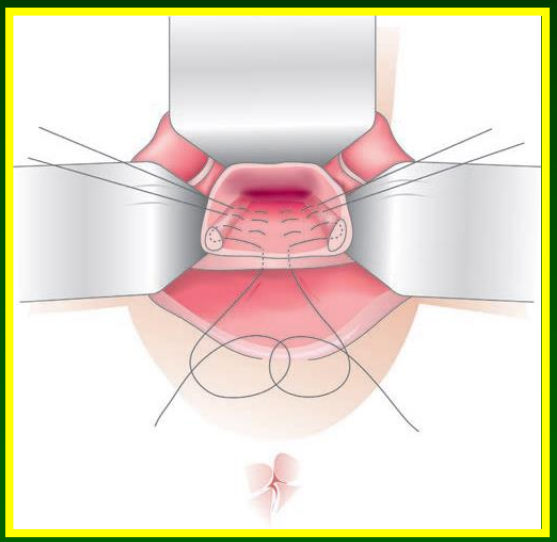


- Descent of the apex of the vagina (vaginal vault or cuff scar after hysterectomy)
- Frequency of PHVP requiring surgery 6-8%

Aigmueller et al 2010

Prevention of Vaginal Vault Prolapse

- McCall's culdoplasty at the time of vaginal hysterectomy (Grade B)
- Suturing the cardinal and uterosacral ligaments to the vaginal cuff at the time of vaginal / abdominal hysterectomy (Grade B)
- Sacrospinous fixation at the time of vaginal hysterectomy to be considered when the vault descends to the introitus during closure (Grade C)

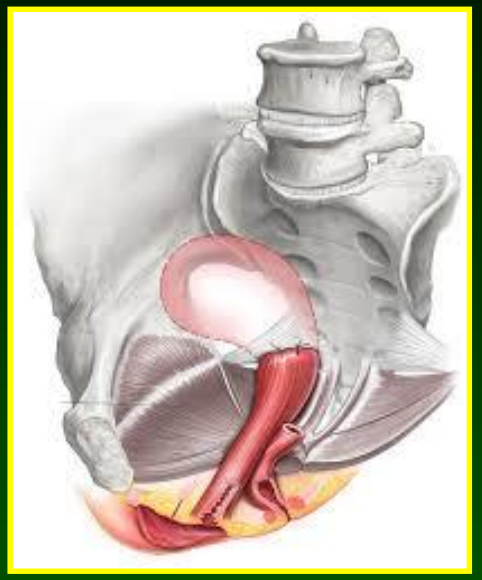


RCOG 2015

Vault Prolapse

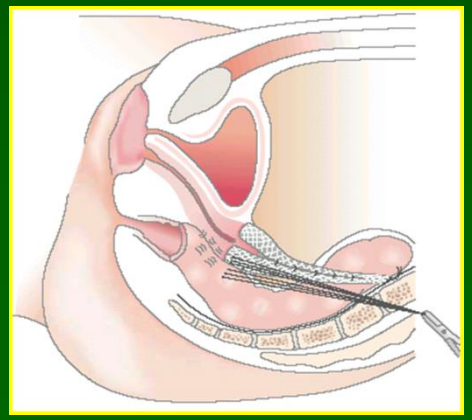
Vaginal operations

- Sacrospinous Ligament Fixation (SSLF)
- Uterosacral ligament suspension (ULS)
- Iliococcygeus fixation (ICF)
- Mesh repair



Abdominal approach (open / laparoscopic / robotic)

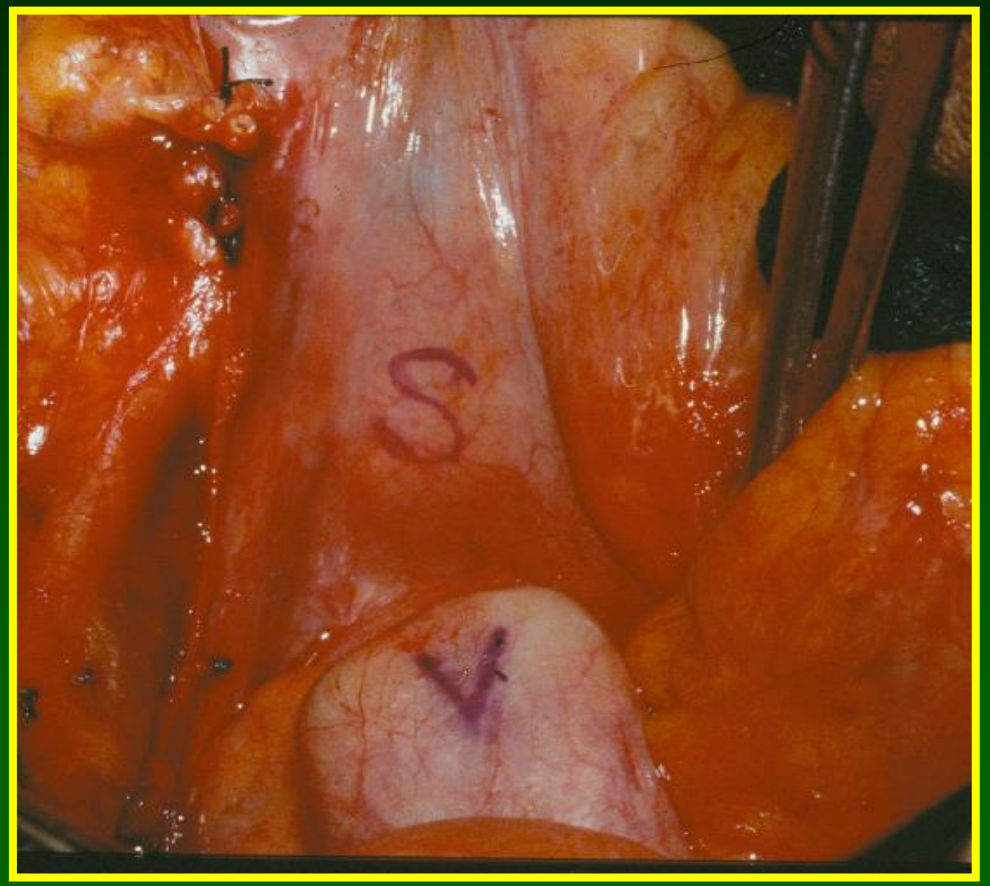
- Sacrocolpopexy (SCP)



Sacrocolpopexy

Why Abdominal?

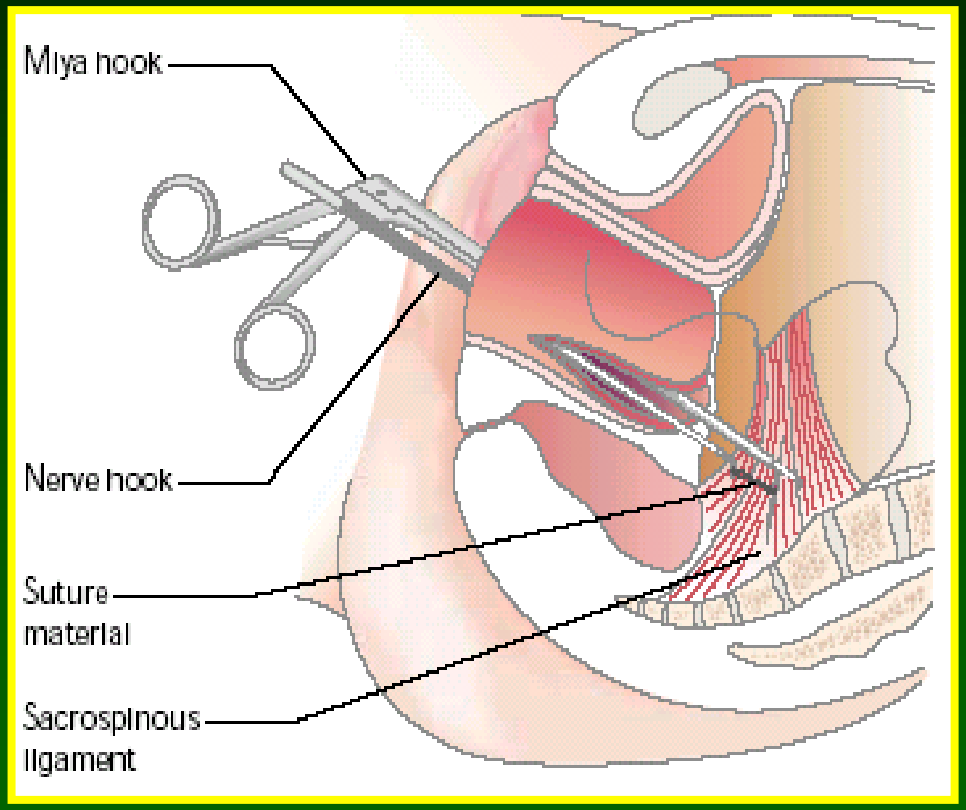
- ***'Pulling up'*** **preserves vaginal length and reduces dyspareunia**
- ***'Closing off'*** **distorts and narrows the vagina**



Sacrospinous Ligament Fixation

Technique

- Suspension of vaginal vault to sacrospinous ligament
- Unilateral or bilateral
- Impossible to perform without tension if vagina is shortened from previous surgery



Cochrane Review: Urogenital Prolapse

Apical repair

- Sacrocolpopexy associated with lower recurrent vault prolapse (RR 0.23) and dyspareunia (RR 0.39) than SSLF
- Vaginal SSLF quicker, cheaper and allows quicker recovery
- Addition of continence procedures may reduce post op incontinence but needs to be balanced against cost effectiveness and adverse effects

Maher et al 2013

Obliterative surgery: Colpocleisis

Indication

- Elderly / frail women with stage 3 or 4 POP who do not wish to preserve sexual function

Advantages

- Quick
- Less e
  mork
- Succ st 100%

ald et al 2005

- Assc gh patient
  satis

Glavind et al 2005
Wheeler et al 2005

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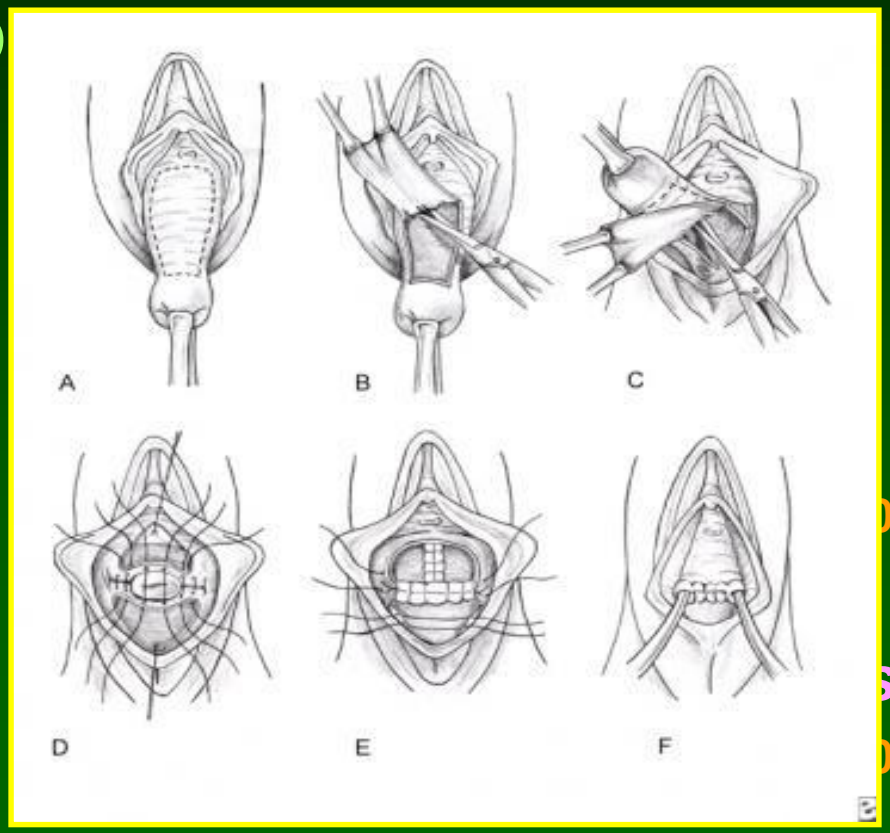

Precedent for Using Mesh
Abdominal Hernia Surgery

- Meta-analysis by EU Hernia Trialists Collaboration
- 4005 patients undergoing open groin hernia repair

MESH		NON MESH
recurrence rate	Vs	recurrence rate
1.4%	(P<0.001)	4.4%

Br J Surg 2000

Rationale for vaginal mesh?

- Low to moderate quality evidence showing advantages to using transvaginal permanent mesh compared to native tissue repair
- 19% of women are aware of prolapse after native tissue repair compared to 10% - 15% after permanent mesh repair
- 38% rate of recurrent prolapse on examination after a native tissue repair compared to 11% - 20% after permanent mesh repair

Cochrane Review 2015

Is Identical Support Required for All?

MESH – What do we mean?

Surgical removal of mesh

- Case series: 104 procedures
- Main indications:
  - Erosion 42% (44/104)
  - infection 29% (30/104)
- Mesh related complications frequently occur >2 years post-op: 56% (58/104)
- Complications can occur even 8 years post-op

Marcus-Braun et al 2010

NICE Guidelines

NICE National Institute for Health and Care Excellence

Prior to mesh repair clinicians should:

- Inform the clinical governance leads
- Ensure patient understanding of uncertainty about long-term results
- Inform patients about risk of complications
  - Sexual dysfunction
  - Vaginal erosion
  - Potential for additional procedures
- Provide clear written information
- Audit and review clinical outcomes of mesh repairs

www.NICE.org.uk/ IPG267

NICE Guidelines

NICE National Institute for Health and Care Excellence

Surgical training

- Special expertise in the surgical management of POP
- Specific training is required when trocar introducer systems are used

Future research should address

- Outcome of different repair methods and mesh types
- Evidence about long-term outcomes
- Patient-reported outcomes: QoL, sexual function

www.NICE.org.uk/ IPG267

Conclusion

- Urogynaecology is an evolving specialty aiming to improve quality of life for women with bladder, bowel and sexual problems
- Detailed history, appropriate examination and investigations are vital to make the correct diagnosis and formulate the best management plan for the patient
- Conservative measures should be attempted first where possible and there are a number of medical and surgical therapies in the armamentarium of a Urogynaecologist

UKCS Belfast 2016