

W18: Improving Continence Before and After Radical Prostatectomy

Workshop Chair: Jose E Batista, Spain

07 October 2015 10:30 - 12:00

Start	End	Topic	Speakers
10:30	10:45	Introduction. Anatomical and functional concepts of male continence.	Jose E Batista
10:45	10:55	Preoperative physiotherapy: New evidence	Anaïs Bassas
10:55	11:05	Factors from surgical technique	Argimiro Collado
11:05	11:20	Diagnostic workup: How and when	Jose E Batista
11:20	11:35	Postoperative physiotherapy	Kari Bo
11:35	11:50	Review of surgical techniques for incontinence and contracture. Effect of radiotherapy	Argimiro Collado
11:50	12:00	Difficult cases. Questions	All

Aims of course/workshop

Despite surgical improvement, radical prostatectomy isn't free of complications, urinary incontinence remaining the most important. When salvage radiotherapy is applied, an additional risk factor is added. Finally, some patients develop a difficult situation: stenosis of anastomosis.

To give a comprehensive management, one should adapt to the resources available or provide a reasonable referral. Ideally this should be done in a team-based approach.

The objectives are:

1. To explain surgical techniques that decrease the risk of incontinence and diagnostic methods and treatment for incontinence.
2. To explain the role of pre and post behavioural therapy to improve the functional outcome

Learning Objectives

1. Review current evidence about the usefulness of physiotherapeutic treatment previous to radical prostatectomy in the prevention of incontinence.
2. Outline a diagnostic and management scheme for patients with post- prostatectomy incontinence.
3. Explain the treatment options and timing in post prostatectomy incontinence.

IMPROVING CONTINENCE BEFORE AND AFTER RADICAL PROSTATECTOMY.

Course director: Jose E Batista Miranda.
CM Teknon and URD Urodynamic Centers. Barcelona, Spain

Speakers:

Anais Bassas.
Physiotherapist. CM Teknon, Barcelona, Spain

Kari Bo
Exercise scientist. Norwegian School of Sports Medicine
Akershus University Hospital, Norway.

Argimiro Collado Serra.
Unidad de Urodinámica. S. de Urología. Fundación IVO, Valencia.

ICS 2015. Montreal . Handouts written may 31st 2015.

INTRODUCTION JE BATISTA .

THINGS HAVE CHANGED IN THE LAST YEARS

1- NEW SURGICAL OPCIONS (laparoscopy/ robotics) SEEMED TO REDUCE FUNCTIONAL COMPLICATINOS... BUT PATIENTS ARE STILL COMING ! .

2- TIMING IN PRE AND POSTOPERATIVE CARE
(Preoperative management, early postoperative intervention)

3- NEW THERAPEUTIC OPTIONS

Radical prostatectomy:

Impact on

- *Urologic practice
- *Resource distribution (Robotic surgery)
- *Complications .

Number of procedures; difficult to asses worldwide

Some data (Diebert CM Urol Oncol 2015)

451.707 radical prostatectomies in USA (2002-09)

Personal, social and economic costs of incontinence.

The symptom is denied by patients and urologists

Late consultation

After the impact of diagnosis and treatment many patients simply "give up" with incontinence.

Economic impact:

Spain 2011, Male population: 23M.

Diapers : 355 M €
Condom catheters : 9 M€

Under reported consequences:
i. e. dermatitis



FIGURA 10. Dermatitis causada por incontinencia.

PREOPERATIVE FACTORS

THAT WE CAN NOT CHANGE

(but we can choose and inform)

PREOP FACTORS: COMORBIDITY

Evaluating Urinary Continence and Preoperative Predictors of Urinary Continence After Robot Assisted Laparoscopic Radical Prostatectomy
 G. Novara, V. Ficarra,* C. D'ella, S. Secco, A. Cioffi, S. Cavalleri and W. Artibani
 From the Department of Oncological and Surgical Sciences, Urology Clinic, University of Pavia, Pavia, Italy
J Urol 2010

	UNIVARIATE	MULTIVARIATE
AGE	0.024	0.027
BMI	0.140	
Charlson	0.007	0.009

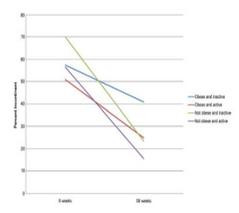
OBSESITY
 Van Roermund y cols. Urol Int 2009
 (BMI>30) Incontinencia 25.8% versus 8.7%

PHYSICAL ACTIVITY

Risk of Urinary Incontinence Following Prostatectomy: The Role of Physical Activity and Obesity
 Kathleen Y. Wolin,* Jason Luly, Siobhan Sutcliffe, Gerald L. Andriole† and Adam S. Kibel
J Urol 2010

Active and slim

↓ 26%
 Incontinence
 less likely



Prevalence of incontinence after prostatectomy by obesity and physical activity

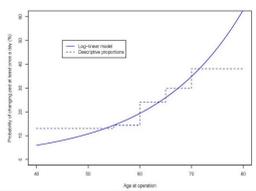
PREOP. CONTINENCE

Patient and tumour-related factors for prediction of the return of urinary continence after radical prostatectomy
 Karolinska Institutet logo and list of authors: Anna Wiklund MD PhD, Stefan Carlsson MD PhD, Gunnar Stenlund MD PhD, Thomas Thoren-Lindvall MD PhD, Jonas Hugosson MD PhD, Johan Olovsson MD PhD, Ulfens Wikstrand MD PhD, Eva Haglund MD PhD, Ni Peter Wiklund MD PhD, Karolinska University Hospital, Karolinska Institutet, Department of Molecular Medicine and Surgery, Section of Urology, Sweden

539 patients
 Continence @ 12 months

- no relation**
- BMI
 - Previous TURP
 - Previous RT
 - Stage/ Gleason
 - Prostatic volume

- + relation**
- Age
 - Previous continence



PEROP RISK FACTORS: SUMMARY

FACTOR	CUTOFF RISK VALUE
age	>65 (Novara J Urol 2010)
BMI	>30
Prostatic volume	>90
Comorbidity	+++
Previous continence	ICIQ-UI SF >8
Urodynamic study	Hiperactive detrusor.
Physical activity	
Urethral length	
Previous TURP	

PREOPERATIVE FACTORS

WE CAN CHANGE
 CHOOSE AND INFORM

PHYSIOTHERAPY IN THE PREOPERATIVE OF PROSTATECTOMY

ANAÏS BASSAS PARGA
 BARCELONA - SPAIN

Patient information

- ✓ Information about pelvic floor
- ✓ Oral & written information / instructions about exercises
- ✓ To teach him to be aware of his muscles and how they work
- ✓ Practise of PFM contractions with or without BFB / Knack
- ✓ Routine at home

Assessment

- 24h pad-test
- Questionnaires (make it simple) :
 - IPSS
 - ICIQ-SF
 - OAB
 - King's Health Questionnaire
- *Urodynamics*

Pelvic Floor Muscle Training (PFMT): preop and postop better than postop only?

- Patients 180 males
- Treatment group (n=91) → started PFMT 3 weeks before surgery and continued after RP.
- Control group (n=89) → started PFMT after catheter removal.
- Assessed:
 - 24h pad-test (daily until continence, 3 consecutive days of 0gr) / 1h pad-test
 - VAS / IPSS / King's Health Questionnaire
- Results
 - No difference in duration on postop UI between both groups
 - Mean time to continence was 30 and 31 days
 - Media amount of first-day incontinence was 108gr and 124gr
- Conclusion: 3 preop sessions of PFMT didn't improve postop duration o incontinence



Guerra et al. Influence of preoperative and postoperative pelvic floor muscle training compared with postoperative PFMT on urinary incontinence after radical prostatectomy: a randomized controlled trial. European urology 2012; 62: 70-77

Is preoperative and postoperative PFMT better than postoperative PFMT only?

- Obj. To assess the effect of preoperative PFMT among patients undergoing radical prostatectomy. Public and private hospital comparison.
- 139 males
- Public hospital (n=32) & Private hospital (n=107) providers of PFMT
- ICIQ-UI SH done to assess UI at 3 months after RP
- Results/Conclusion
 - Private hospital provides preoperative PFMT more than public hospital.
 - Respondents receiving preop PFMT had significantly better self-report UI at 3 months after RP that those who didn't received it. (Mean ICIQ-UI SH 6.2 vs 9.2).
 - Additional strategies are needed to improve PFMT receipt among patients undergoing RP in the public system.

Hirschhorn et al. A multicomponent theory-based intervention improves uptake of pelvic floor muscle training before radical prostatectomy: a "before and after" cohort study BJU Int 2014; 113:383-392



Is preoperative and postoperative PFMT better than postoperative PFMT only?

- 179 males
- Treatment group (n=87):
 - 3 weeks before RP: weekly assisted BFB session and GAH + daily PFMT at home & written instructions
 - BFB contractions(1,3,5 seconds)+quick contractions+intense contractions+maximum strength contractions
- Control group (n=92)

Is preoperative and postoperative PFMT better than postoperative PFMT only?

Continence improvement	Control group	Treatment group	Mean 24hPadTest	Control Group	Treatment Group
1st w-6th w	10%	38%	1st w	458	544
1st w-3th month	44%	72%	6thw	345	285
1st w-6th month	58%	89%	3rd month	233	115
1st w - 1 year	47%	98%	6th month	165	75
			1 year	152	12

- Conclusions
 - A programme of intensive preoperative PFMT does not guarantee completely recovery continence, but it considerable REDUCES DURATION AND SEVERITY of SUI after RP

Collado et al. Intensive preoperative pelvic floor muscle training reduce duration and severity of stress urinary incontinence after radical prostatectomy: a randomized controlled trial. 2013. Valencia



Is preoperative and postoperative PFMT better than postoperative PFMT only?

-100 males

-Control group (PFMT without BFB + verbal&written instructions in PFMT before and after surgery)

-BFB group (PFMT with BFB 2 to 4 weeks before surgery + PFMT 4 times/day + to resume PFMT after surgery when catheter were removed)

-Continence assessment: personal&phone interviews.

-**FOLLOW UP:** 6 months after surgery

-1 or 0 pad/day 94% (44 of 47) → BFB group

-1 or 0 pad 96% (48 of 50) → control group

-**CONCLUSION:**

-Preoperative BFB didn't improve outcome of PFM exercises on overall continence or the rate of return of urinary control in men undergoing radical prostatectomy.

-Bales et al. Effect of preoperative BFB/PFT on continence in men undergoing radical prostatectomy. Urology. 2000 Oct 1;56(4):527-30



Is preoperative and postoperative PFMT better than postoperative PFMT only?

•**Results**

•Preop physiotherapist-guided PFMT reduces time to continence by 28% (it reduces the duration and severity of early incontinence after RRP)

	24h pad-test	Incontinence severity (>50g)
	6w months	3 months
Treatment group	9g diff	no sign 8/152 no sign diff
Control Group	17g diff	no sign 33/132 no sign diff

Patel et al. Preoperative pelvic floor physiotherapy improves continence after radical retropubic prostatectomy. Int J Urol 2013 80(10):986-92

-284 males

-Treatment group (n=152) → received physiotherapist-guided pelvic floor muscle training program from 4 weeks preop.

-Control group (n=132) → received verbal instruction on PFM exercise by the surgeon.

-Postop all patients received physiotherapist-guided pelvic floor muscle training.



	Patients	Assessment	Follow-up	Conclusion
Tienforti et al. BJU International 2012	32 males	Questionnaires Nº pads/week Nº UI episodes/week	6 months	FAVOUR
Geraerts et al. 2013	160 males	24h pad test 1h pad test Questionnaires (IPSS, VAS, King's health Q)	12 months	No sign diff
Hirschhorn et al. BJU Int 2014	139 males	ICIQ Questionnaire	3 months	FAVOUR
Tobia et al. Arch Esp Urol 2008	38 males	Nº pads	2 months	No sign diff
Collado et al. 2013	179 males	24 h pad test ICIQ Questionnaire	12 months	FAVOUR
Bales et al. Urol. 2000	100 males	Personal and phone interviews	6 months	No sign diff
Patel et al. Int J Urol. 2013	284 males	24h pad test Severity of incontinence	3 months	FAVOUR

Is preoperative and postoperative PFMT better than postoperative PFMT only?

•Contradictory results.

It may be attributable to sample size and/or RCT quality.

We conclude that:

- BFB can help to identify the muscle.
- BFB is not better than PFM exercises alone.
- PFMT is better than only oral&written instructions.
- 24h pad test + Questionnaires to evaluate UI severity&duration
-

We suggest to teach PFM exercises before surgery because:

- patient is pain-free and with a normal sensation (anatomically intact)
- better proprioception
- have time to practise PFM exercises and get confidence with them

POSTOPERATIVE ASSESMENT.

Jose E Batista

URD / Teknon, Barcelona




Postoperative workup

When should we start assesment?.

SURGERY SCHEDULED

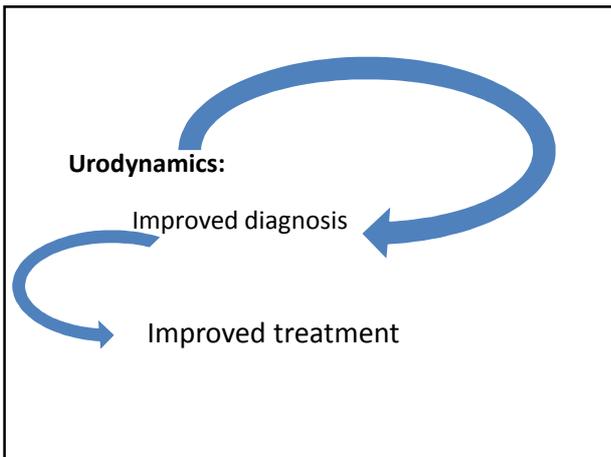
physiotherapy

AFTER SURGERY

physiotherapy

No improvement in 3-6 months:
URODYNAMIC STUDY

Patient percieves we consider his problem



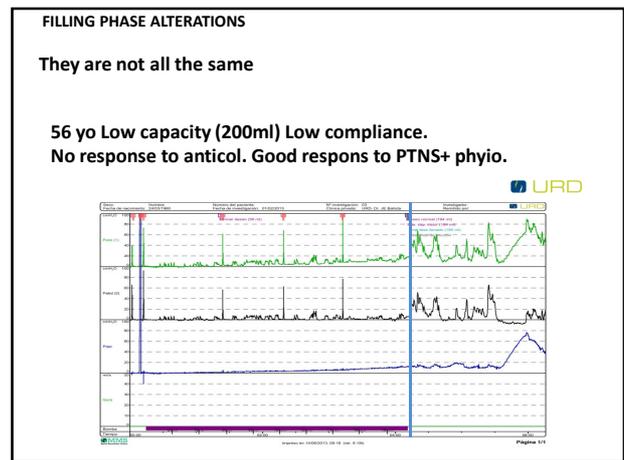
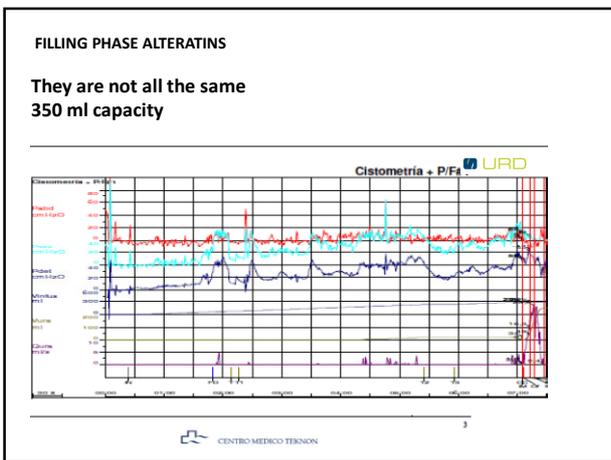
URODYNAMICS: what we can find

FILLING PHASE:

- D.O.
- Low bladder compliance / capacity
- Normal, stable bladder

VOIDING PHASE

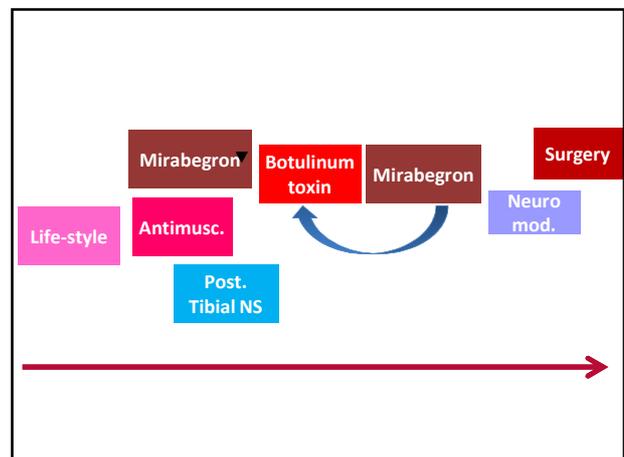
- Obstruction
- Under- active detrusor



Diagnóstico postoperatorio: URODINAMIA

Mild filling phase alterations don't affect AUS outcome.
Can j urol 2011 jun;18(3):5695-8.

Previous radiotherapy / low capacity / low compliance:
Bladder cycling+ antichol + PTNS + re- evaluation



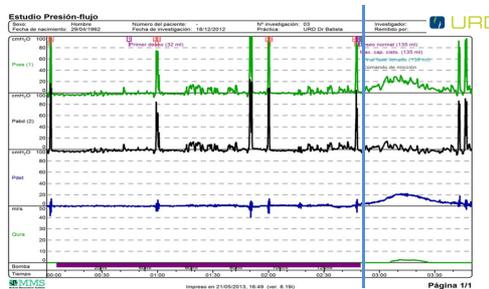
VOIDING PHASE ALTERATIONS

Detrusor underactivity is prevalent after radical prostatectomy.
Chung DE, Can Urol Assoc J. 2012 :

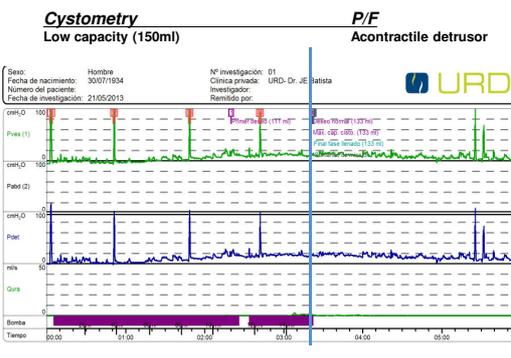
264 urodynamics post-RP.
 Detrusor underactivity 41%
 Obstruction 17%

(Overactive detrusor 7%)

Voiding phase alterations: hipocontractility



78a, Cryotherapy, TURP: INDWELLING CATHETER
 URODYNAMICS AFTER cycling 5 days: complete functional failure.



ASSESSMENT / SUMMARY

- Simple questionnaires and 24h pad test
- Urodynamic study (6 months)
 - Mild alterations are no contraindication to AUS
 - Severe alterations warrant treatment

Postprostatectomy Established Stress Urinary Incontinence Treated With Duloxetine

Argimiro Collado Serra, Jose Rubio-Briones, Miguel Puyol Payás, Inmaculada Iborra Juan, Juan Casanova Ramón-Borja, and Eduardo Solsona Narbón

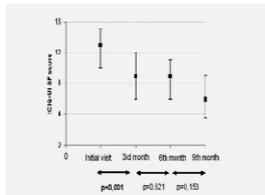


Figure 1. Continence results by decrease in ICIQI-SF score according to visit schedule.

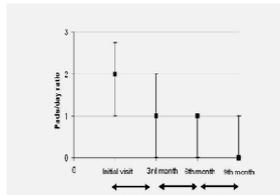


Figure 2. Continence results by decrease in daily pad use daily according to visit schedule.

Conservative treatment: (once surgery is ruled out.)

60-70% patients rule out surgery

NEGOTIATE AND CHANGE DEVICE ACCORDING TO ACTIVITY

1st phase: physiotherapy and .

2nd phase: clamps / condom catheters,

CONSERVATIVE MANAGEMENT

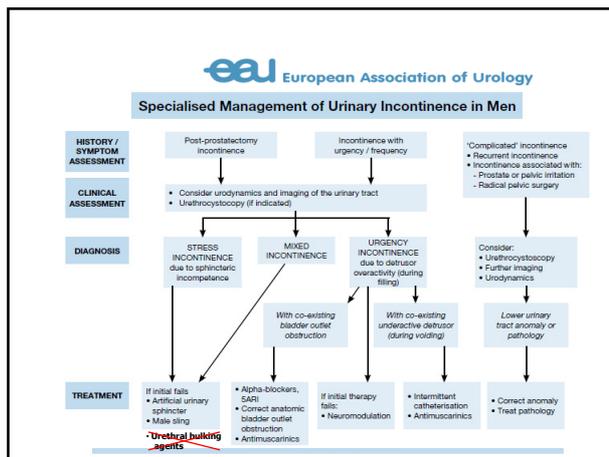
PENILE CLAMPS



FIGURA 1. Pinza de Cunningham.

FIGURA 2. Dispositivo Ono.

FIGURA 3. Pinza de Baumucker.



A. Collado.

FACTORS DERIVED FROM SURGICAL TECHNIQUE

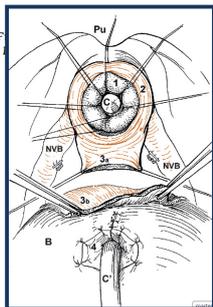
- Wide variation
- Each surgeon describes his/her technique...but few are willing to reproduce others' results

Eur Urol 2007

Early Continence Recovery after Open Radical Prostatectomy with Restoration of the Posterior Aspect of the Rhabdosphincter

Francesco Rocco^a, Luca Carmignani^a, Pietro Acquati^a, F. Bernardo Rocco^b, Stefano Casellato^a, Giacomo Gazzano^c, F.

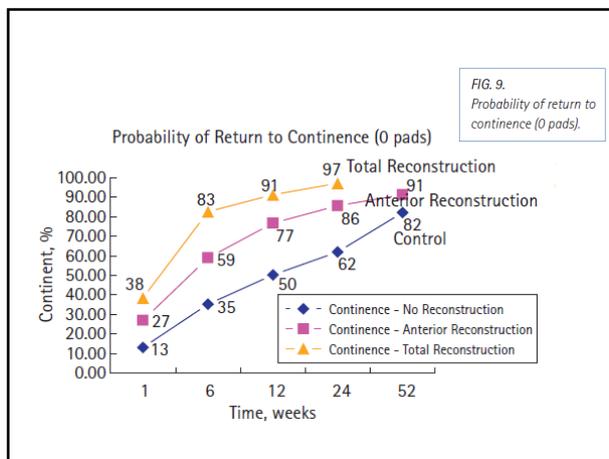
Fibrous tissue posterior to sphincter
Residual Denonvilliers' fascia



"TEWARI'S COMMANDMEN"



- Preservation of puboprostatic ligaments
- Flap "fibromuscular" retrotrigonal flap
- Preservation of Santorini's plexus and PP ligaments
- Long urethral
- Retro-vesical flap" (Pagano)
- Sutura de "Rocco's suture"
- Tendinous arc and puboprostátic lig. reanastomosis



Impact of Posterior Musculofascial Reconstruction on Early Continence After Robot-Assisted Laparoscopic Radical Prostatectomy: Results of a Prospective Parallel Group Trial

Neil Joshi^{a,b}, Willem de Blok^a, Erik van Muijlekom^a, Henk van der Poel^{a,c}

NO DIFFERENCES

- % incontinence
- Complications

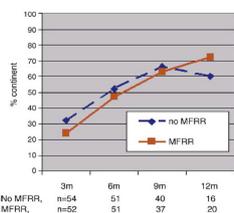


Fig. 2 – Return to full continence after robot-assisted laparoscopic prostatectomy by month after surgery for patients receiving median fibrous raphe reconstruction (MFRR) and control group.

SUMMARY...

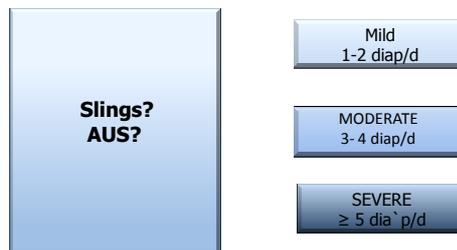
- ✓ Urethral length
- ✓ Water tight anastomosis
- ✓ Bundle preservation
- ✓ Fascial reconstruction
- ✓ Surgical volume

A Collado.
Surgical options

Critical review of “old” and new device.

INSTITUTO VALENCIANO DE ONCOLOGIA
Valencia, Spain

SELECTION CRITERIA



SELECTION CRITERIA

Non adjustable slings

- Moderate incontinence, 24h pad test < 450 mL/d, good urethral function and mobility .

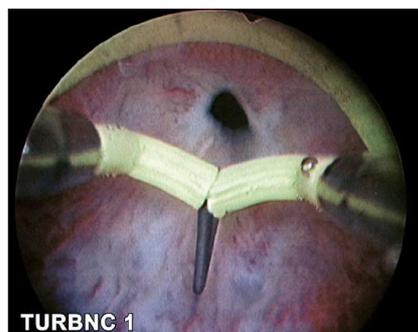
Compression devices and adjustable slings

- Moderate / severe incontinence, rigid urethra.

AUS

- Severe incontinence, no sphincter function, 24 h pad test > 450ml)

ANASTOMOTIC STRICTURE



CLASICAL PITFALLS IN ANASTOMOTIC STRICTURE

- High recurrence raty
- Continence worsening.

BLADDER NECK INCISION AFETER ANASTOMOTIC STRICTURE



Oct 1991-Oct 2011
109 procedures

Grupos de tratamiento

Control: blddder neck incision
Dilatation: BNI + DILTATION PROTOCOL
SINCE NOVIEMBER 2005

RESULTS

	Control (n=54)	Dilatation (n=55)	
After prostatectomy	37	39	p=0.83
After BNI	17	16	
SUCCESS RATE	42%	87%	p<0.01

Postoperative Physiotherapy in men - what is the evidence? ICS-15

Kari Bø

Professor, PhD
Physical Therapist
Exercise scientist

Norwegian School of Sport
Sciences

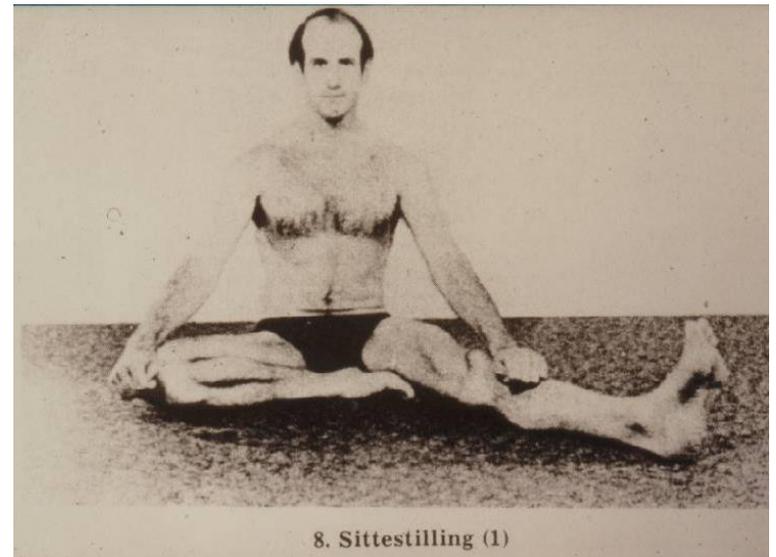
Dept of Sports Medicine

Akershus University Hospital
Dept of Obstetrics &
Gynecology



ST Chang: Internal exercises 1984

- The «deer» exercise
 - «important to strengthen rectum and prostata
 - Cures or treats hemorrhoids
 - Cures prostate weakness, hypertrophy and cancer
 - Strengthens nerves
 - Helps erectile dysfunction and premature ejaculation»

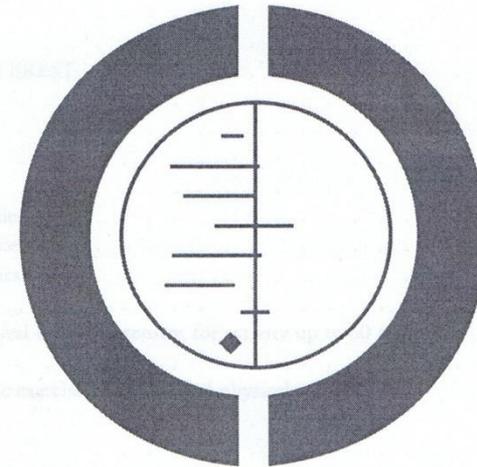


WHAT IS THE EVIDENCE?

Conservative management for postprostatectomy UI

Anderson et al 2015

- Determine effectiveness of conservative management for UI up to 12 months after transurethral, suprapubic, laparoscopic, radical retropubic or perineal prostatectomy
- Lifestyle intervention, PFMT, el.stim, magnetic chair
- 45 trials in men after radical prostatectomy, 4 trials after TURP, one trial after either operation
- 26 trials starting post-surgery
- Trials included 4717 men
- Variation in
 - interventions
 - populations
 - outcome measures
 - definition of cure



THE COCHRANE
COLLABORATION®

Results Cochrane 2015

- No evidence from 8 trials that PFMT was better than control for men who had UI up to 12 months after radical prostatectomy
- No effect of PFMT after TURP
- Limited evidence of el.stim, magnetic innervation or combinations
- Studies on both treatment and prevention for all men after radical prostatectomy showed moderate evidence for reduction of UI, however data not supported by pad tests



Conclusion Cochrane 2015

- Men's symptoms tended to improve over time regardless of intervention
- The value of various approaches to conservative management of post-prostatectomy remains uncertain



THE COCHRANE
COLLABORATION®

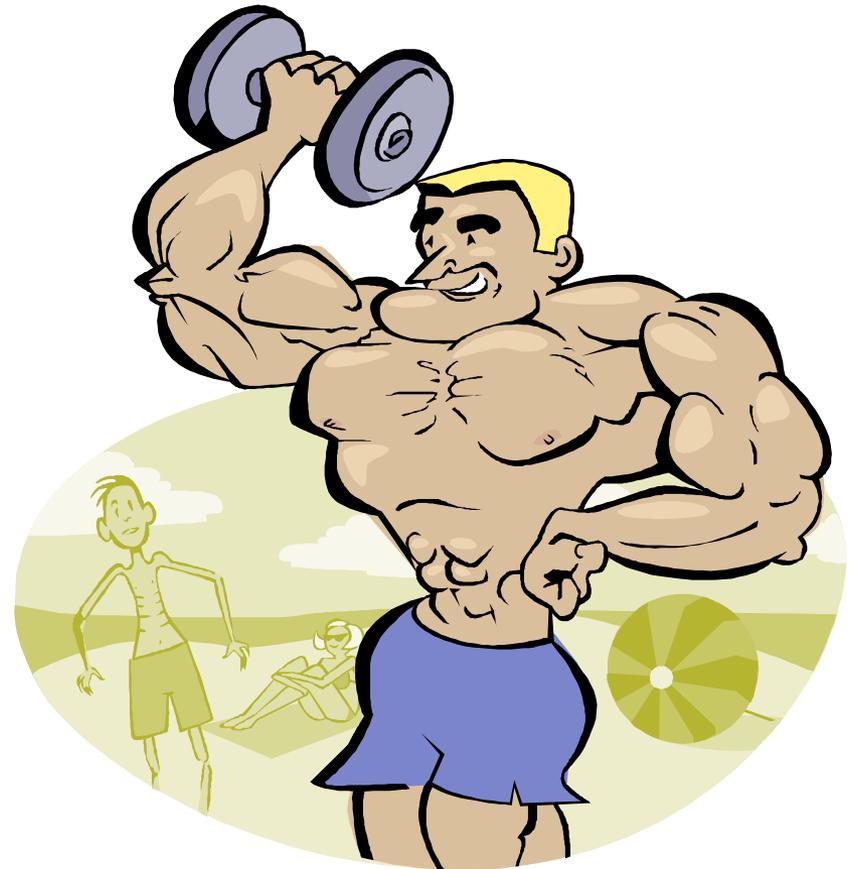
Ability to perform a correct PFM contraction

- > 30% of women unable at first consultation (Kegel-48, Benvenuti et al -87, Hesse et al-88, Bø et al-88)
- 20% of men at first consultation – 8.6% at 3 months (Øvergård et al -08)

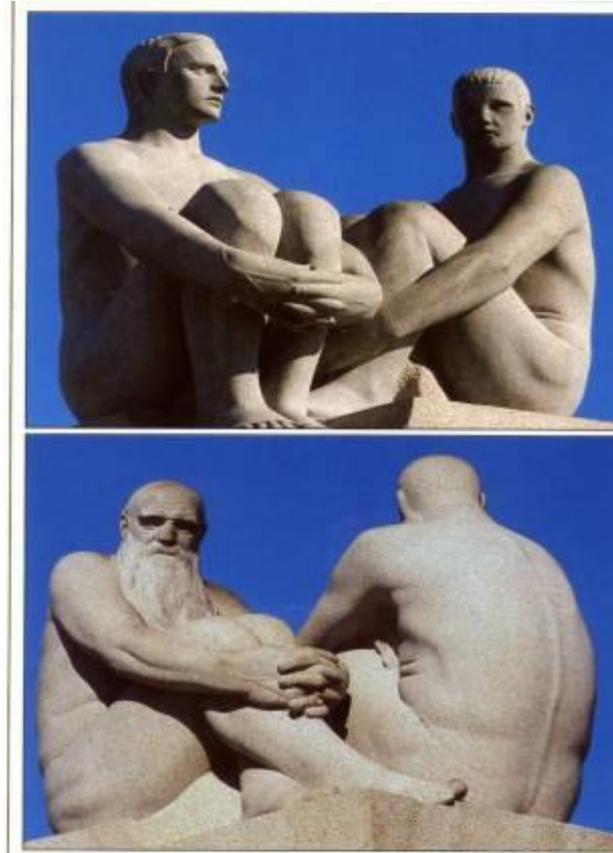


Effect of exercise training

- Dose response
 - type of exercise
 - duration
 - frequency
 - **INTENSITY**
 - **ADHERENCE**
- 8-12 (or fewer) close to maximum contractions x 3/ day, 3-5 times/ week
Haskell, ACSM -07, Garber et al -11



Examples of POSITIVE results



Radical retropubic prostatectomy ^{Van}

Kampen et al 2000

- 102 men: RCT training and control (sham)
 - 15 days after surgery
 - PT once a week (biofeedback) as long as needed (el.stim/bladder training) 90 contractions/day
- Results
 - 88% versus 56% continent at 3 months
 - at one year no difference 1 h test or VAS

Effect on QoL Zhang et al -06

- RCT: 29 men post prostatectomy
 - Control
 - Combined PFMT and support group
- Results
 - Trend towards increased functioning and reduced perception of illness intrusiveness in intervention group
 - Improved UI sign associated with ↓ depression and symptom distress

Physiotherapist guided PFMT after RP

Øvergård et al 2008

- RCT: 85 men → 80 after open RP (drop-out 6 %). Starting pre-operatively and immediately after catheter removal. Anal palpation
 - Control (written information 10x3 contr/day)
 - 45 min exercise class + home exercise (Bø et al -90)
- Results
 - 3 months: no sign diff except preceived problems with urinary function
 - 12 months: 92% versus 72% continent ($p=.02$)



Early postoperative pelvic floor biofeedback training

Ribeiro et al 2010

- 73 → 54 men after RP
 - PFMT with biofeedback once /week + home training for 3 months
 - Control
- Results
 - 96.2% versus 75% cured (≤ 1 pad), $p=.02$
 - Absolute risk reduction: 21.2 (95% CI: 3.45-38.81)
 - Relative risk of recovery: 1.3(95% CI: 1.02-1.69)
 - Numbers needed to treat: 5 (95% CI: 2.6-28.6)
- Conclusion: PFMT hastens recovery, improves severity, voiding symptoms and PFM strength

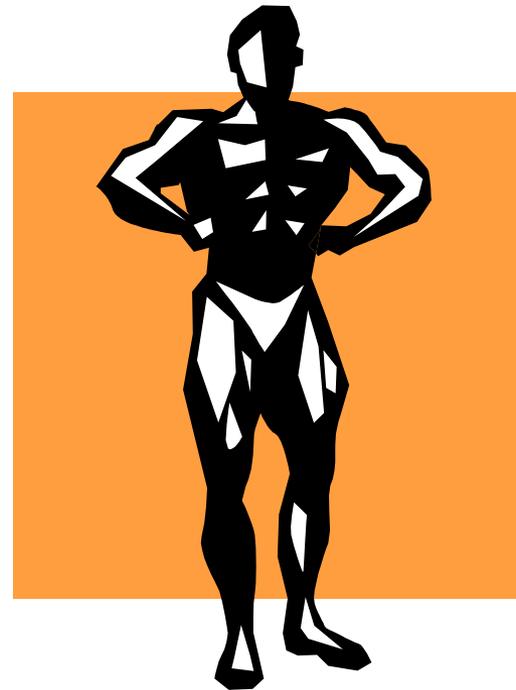
PFMT with and without biofeedback for persistent postprostatectomy incontinence

Goode et al -10

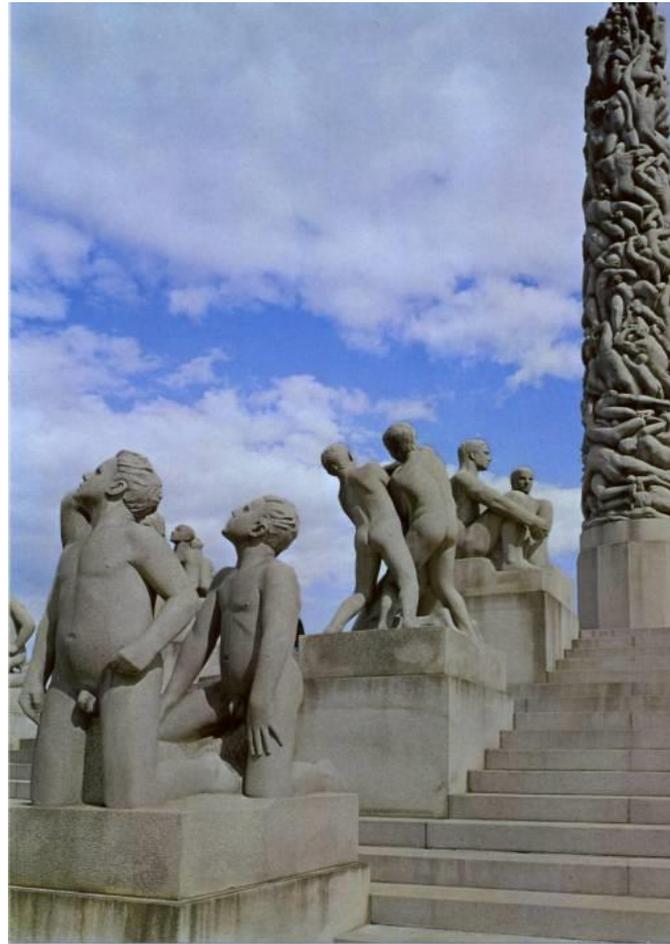
- RCT in 208 men with persisting UI > 1 year after RP. 8 weeks training period
 - PFMT + bladder control strategies
 - Same + in- office biofeedback training + el.stim
 - Delayed treatment
- Results
 - 55% and 51% reduction in incontinence episodes in treatment groups compared to controls
 - Effect durable at 12 months
 - No additional effect of adding biofeedback/el stim

Role of personal trainer Marchiori et al -10

- 332 incontinent (> 1 pad /day) after RP, starting 1 month after catheter removal
 - Control
 - Follow-up program, individual, once/week; biofeedback, el.stim
- Results
 - Continenence recovery 44 ± 2 days versus 76 ± 4
 - Number of incontinent patients higher in control group at 3,6 and 12 months
- Conclusion: tight follow-up is important



Examples of NEGATIVE results



Verbal versus therapist-directed PFMT after RP Moore et al -08

- RCT 205 men at 4 weeks after RP. All had verbal and written instruction
 - Weekly phone contact
 - Weekly 30 min biofeedback assisted PFMT with PT + home training
- Results
 - 8 weeks: 23% versus 20% continent
 - 12 weeks: 28% 32%
 - 16 weeks: 40% 44%
 - 28 weeks: 50% 47%
 - 52 weeks: 64% 60%

Physiotherapy versus instruction folder Dubbelman et al -10

- RCT in 70 men after retropubic RP. Power calc: N=96. 82 randomized, 70 completed
 - Preoperative instruction & folder by PT
 - Same + 9 X 30 min with PT + 150 contractions /day postoperatively
- Results
 - 30% versus 27% continent on 1-h and 24 h-pad test (ns)
 - No difference in one hour pad test

PFMT and bladder training after RP and TURP Glazener et al -10

- RCT in 441 men after RP and 442 after TURP
 - Standard management
 - 4 times with «therapist»
- Results
 - 92% and 85% of RP and TURP group attended «at least one session» (!)
 - RP: absolute risk diff: -1.9% (75.5% versus 77.4%)
 - TURP: absolute risk diff: 3.4% (64.9% versus 61.5%)
 - Resources better used elsewhere (?)

Erectile dysfunction Dorey et al -04,-05

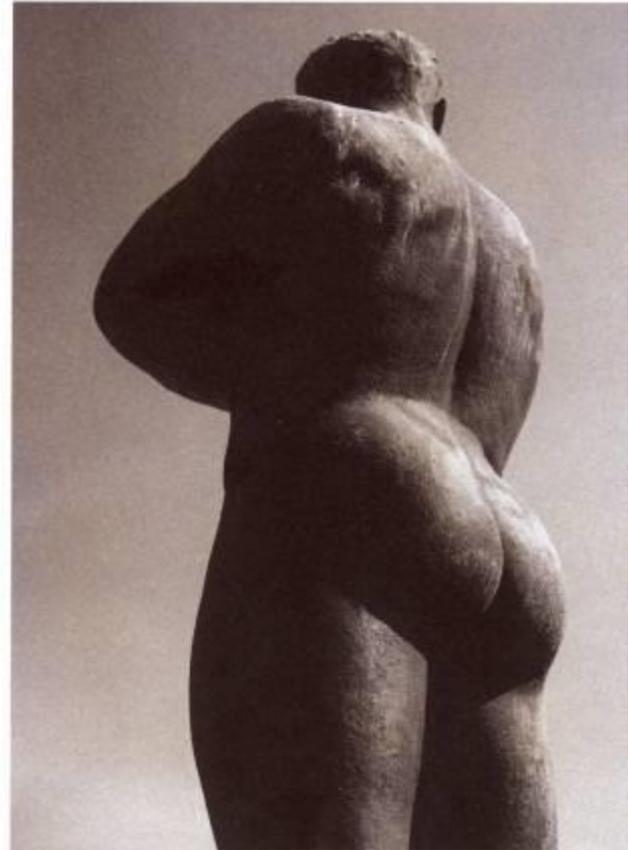
- RCT: 55 men aged > 20 with erectile dysfunction
 - Lifestyle intervention (reduce alcohol consumption, stop smoking, reduce weight, improve fitness, avoid bicycle saddle pressure)
 - Lifestyle + PFMT with biofeedback supervised by PT (5 x 30 min)
- Results
 - Sign improvement in PFMT group
 - Cross over ; 40% regained normal erectile function, 35.5% improved, 24.5 % failed



Erectile dysfunction Geraerts et al 2015

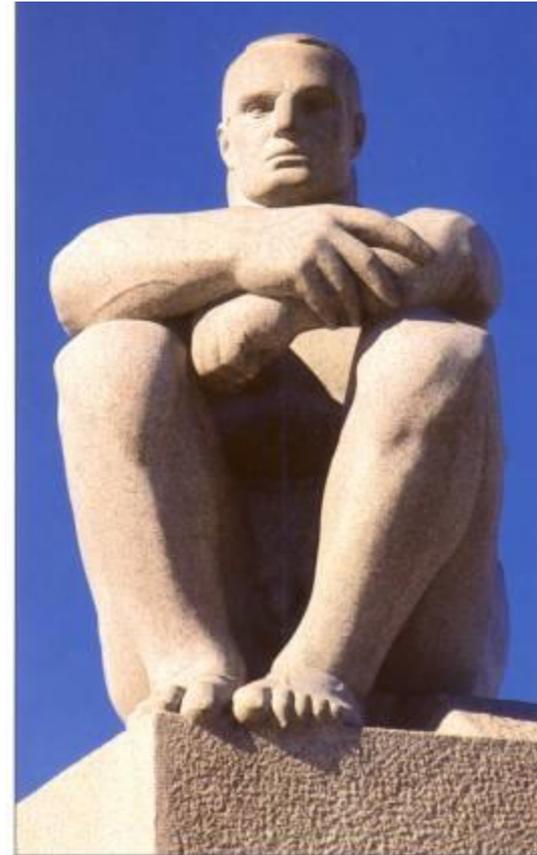
(abstract ICS 2014)

- RCT in 33 men who underwent open or robot RP with erectile dysfunction 12 months post-prostatectomy
- 3 months of PFMT
- Outcome: International Index of Erectile Function (IIEF-EF) and climacturia
- Results:
 - Significantly better erectile function in PFMT ($p=0.02$)
 - Climaturia significantly reduced ($p=0.02$)
 - No effect on orgasmatic function, sexual desire, intercourse satisfaction, overall satisfaction



Conclusion PFM training for men with UI post-prostatectomy

- Spontaneous recovery, prevalence is still high
- Exercise science?
- There is no easy way to effective training....
- Pre-operative!
- Close follow-up?
- Two RCTs on erectile dysfunction show positive results
- Can we conclude???



Thank you for your attention!

