

Results for the intervention group of a large RCT for men with urinary incontinence after prostate surgery.

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On behalf of the MAPS trial group



BACKGROUND

- Large multicentre RCT for men after prostate surgery (MAPS) in 34 centres in UK
- Effectiveness of PFMT for urinary incontinence
- Intervention in:
 - 205 men after radical prostatectomy (RP)
 - 220 men after transurethral resection of prostate (TURP)
- Control groups (206, 222 respectively) received standard care

OBJECTIVES OF INTERVENTION

- To provide a standardised assessment and therapy to RP and TURP men in the intervention groups
- To monitor men's progress by measuring pelvic floor muscle (PFM) contraction strength and self report of exercises
- To reduce urinary incontinence following RP and TURP by PFM Training (PFMT) and urge suppression techniques and advice

TIMING OF INTERVENTION

- Therapists (50% physiotherapists and 50% nurses) received standardised training
- Men had 4 therapy appointments in 3 months
 - at baseline (6 weeks after surgery) and 2, 6, and 12 weeks later

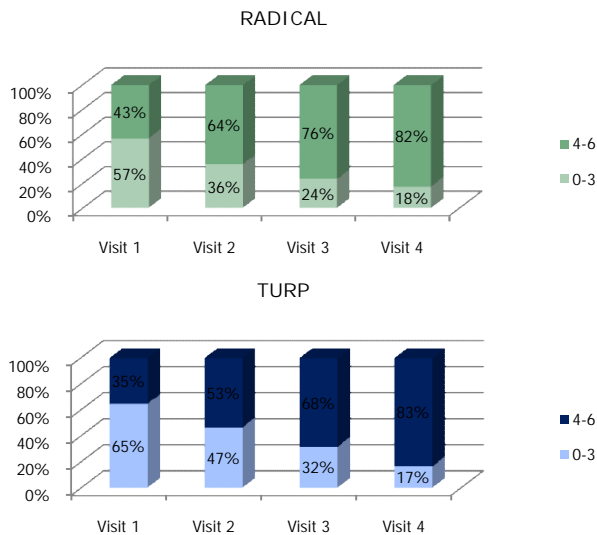
DESIGN OF INTERVENTION

- PFMT for intervention groups:
 - 3 sets of maximal contractions twice a day (lying, sitting, standing)
 - Hold contractions for up to 10 seconds
 - 'The Knack' (contract before activity or 'stress')
 - Slight contraction while walking
 - Strong contraction after urinating
- Leaflet (intervention group only)
- Urge suppression techniques:
 - When 'urge' experienced, sit or stand calmly for one minute
 - When urge has disappeared, walk calmly to toilet or continue activities
- Leaflet (intervention group only)
- Lifestyle advice on:
 - Amount and type of fluid intake
 - Constipation
 - Lifting
 - UTIs
 - Diet
 - General exercise
 - Chest problems/smoking
 - Leaflet (both intervention & control groups)

RESULTS

- Age of RP men 62 years SD 5.7
- Age of TURP men 68 years SD 7.7
- 85% of RP men and 72% of TURP men attended 3-4 appointments
- 92% of RP men and 41% of TURP men knew about pelvic floor exercises

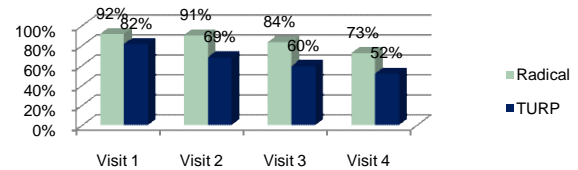
RESULTS OF INTERVENTION – PFM STRENGTH



Grades of PFM Strength (puborectalis muscle strength / endurance)

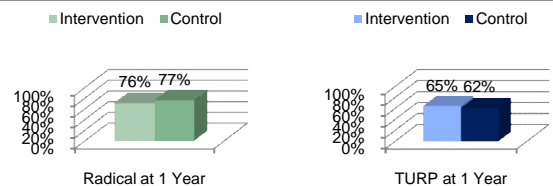
Nil	0	No muscle contraction	Good	4	Good finger resistance
Flicker	1	Muscle flickers	Strong	5	Strong finger resistance
Weak	2	Weak contraction with no lift	Very strong	6	Very strong grip on finger
Moderate	3	Moderate contraction with no lift			

RESULTS – UI at each visit during 3-month intervention period

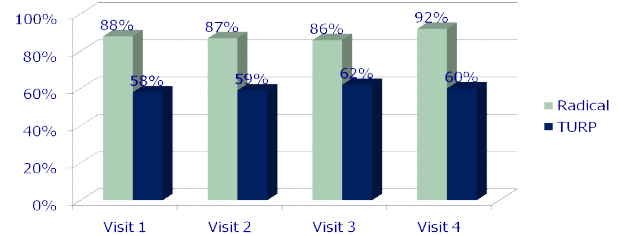


- RP men reported more SUI than UUI
- In RP men during 3 months:
 - SUI fell from 84% to 72%
 - UUI fell from 20% to 15%
 - PMD fell from 63% to 25%
- TURP men reported more UUI than SUI
- In TURP men during 3 months:
 - SUI fell from 36% to 21%
 - UUI fell from 57% to 20%
 - PMD fell from 57% to 33%

RESULTS OF RCT – UI at 1 year in the randomised groups



RESULTS - erectile dysfunction at each visit during intervention



SUMMARY

- Compliance (attendance) was good
- Pelvic floor muscle strength increased over the 3 month therapy period
- Incontinence reduced in RP and TURP men during intervention period
- But control groups showed similar improvement at 3, 6, 9 and 12 months
- Sexual dysfunction was more common after RP (~90%) but did not improve in either group

RESULTS – CONTROL GROUPS

- Many men knew about PFMT
- Some men were provided with information about PFMT as part of standard care
- At 12 months, 50% of RP men & 20% of TURP men were performing PFMT

OTHER RESULTS – INTERVENTION GROUPS

- Few men had faecal incontinence or constipation, which were not affected by therapy
- Around 90% of RP men had erectile dysfunction, which failed to improve with therapy
- Around 60% of TURP men had erectile dysfunction, which failed to improve with therapy

CONCLUSIONS

- In 4 appointments in 3 months:
 - RP and TURP men increased PFM strength
 - RP and TURP men reduced UI (SUI, UUI and PMD)
- But men in control groups also improved equally
 - ? Due to prior knowledge of PFMT ?
 - ? From tightening PFMs in response to leakage ?
- Would more intensive therapy help more ?

CONTACT DETAILS

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