Physiotherapist Management Of Incontinence – A Clinician’s viewpoint

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K E M H
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Physiotherapy Assessment

Subjective
- Pt problem list
- Bladder dysfunction
  ● Storage vs emptying
- Bowel dysfunction
- 3DBD
- Red flags
  ● PVR, UTI, neuro, meds
- Pt aim vs PT aim

Objective
- PV
- PR
- RTUS
  ● pfm & pvr
Objective Examination

Why?

- PFX essential to PT
- 15-40% perform incorrect exercise
  - Valsalva manoeuvre
  - Obliques & RA
  - Gluteals & Adductors
  - Breath holding

Obj Ax comprises:

- Digital examination
  - PV & / or PR
- Peritron
  - Pressure BFB allows visual awareness.
- Real-time ultrasound
  - Suprapubic
  - Transperineal
Treatment Protocols

- Red flags
- Pelvic floor protocols (Hagen ‘14)
- Functional retraining (Abrams ‘08)
- Voiding dynamics (Wyman ‘09)
- Defaecation dynamics (Chatoor ‘09)
- Biofeedback
- Bladder retraining (Brunner ‘11)
- Mx of fluids and fibre (Abrams ‘08)
- Electrical stimulation (Moore ‘13)
- General Advice (Wyman ‘09 Hagan’12)
Muscle Rehabilitation – PFX's

- Rx priority for most pts – improve support & awareness of PFM Kegel's ex.

- Rationale for exercises:
  - Fast reflex contraction clamps urethra, and reduces bladder neck descent during episodes of raised IAP (DeLancey '96)
  - Increase muscle vol. - increases resting tone and minimise prolapse (Bo '09)
  - Inhibitory effect on bladder
  - Learned effect of conscious contraction (Bo '09)
Pelvic Floor Muscle Exercises (PFM Exs)

Then:
- Kegel(48) 300 pfm daily
  - 84% cure
- Current pamphlet statements
  - Red dot special?

Now:
- Physiological basis to PFMX
  - Overload & Specificity
  - Tailor to pt ability – hence VE

International Conference on Incontinence
- 8-12 max contractions of 6-8 secs
- 3-4 x daily, for 15-20 weeks
- Continue x 1 daily for life
- Sub max programme for endurance.
Functional Bracing Patterns
The crash course of PFX’s

- US of PF & Transversus Abdominis (TA) - reduce bladder neck descent with raised IAP

- In women taught “The Knack” (Miller 1998)
  - 38% reduction in urine loss within 1 week
  - 74% reduction following 1 month

- Reflex contraction of PC may be facilitated by TA activity (Sapsford 2000)
Results of PFM exercises

- **Cochrane Review (Hay-Smith ‘11)**
  PFM X's may be effective Rx for women with GSI or mixed incontinence.
  Not effective as stand alone for OAB

- **Overall success rate**
  60-70% in women cured or improved by 50% or more

- **Long Term Result:**
  1 x weekly protocol
  - 75%-5 years
  - 61%-10 yrs

- **Results depend on:**
  - 5-6 mths exercise
  - Regular PT/patient contact
  - Pt motivation
  - Appropriate PFX's
  - Little effect of written instruction
Electrical Stimulation (ES)

- Useful for women with:
  - Absent contraction or weak PFM.
  - Poor sensory awareness
  - OAB to assist inhibition of the bladder

- Rationale behind use:
  - Facilitates voluntary contraction
  - Increase in perceived strength
  - Increase proprioceptive awareness
  - Increase no. motor units activated
Electrical Stimulation (ES)

- **Application method**
  - Vaginal
    - Pudendal nerve
  - Anal
    - FI, males, children?
  - Perineal
    - Sufficient intensity = pain
  - Sacral
    - OAB (wet/dry) DO
  - Tibial
    - OAB (wet/dry) DO

- **Caveat Emptor**

- **Results** (Bo ‘09)
  - Poor consistency of stimulation & parameters.
  - When results are combined, there is strong evidence to suggest that ES is superior to sham ES

Plevnik '86, Matzel '95, Bo ‘09
Biofeedback (BFB)

Use of therapeutic procedures designed to measure physiological responses, process them & display measured responses to individual (Tries 1990)

- BFB aimed at:
  - Increasing patient's awareness of pf contraction
  - Maximising pf contraction while controlling accessory muscle work
  - Strengthening pf

- Methods:
  - Verbal feedback
  - Perineometer
  - Cones
  - EMG
  - Realtime ultrasound
BFB

- Verbal

- RTUS
  - Rapid localisation with rapid learning
  - Can use in lie/sit/stand

- EMG/BFB
  - Surface/vag electrodes – visual display – facilitates rapid learning
Over Active Bladder (OAB – wet or dry)

- Includes: urgency, frequency, nocturia, UI

Urgency triggers:
- Latch-key
- Running water
- En route to toilet
- Standing after sitting
- Getting out of bed
- Anxiety/ cold
Bladder Training

- Appropriate fluids
  - Caffeine, tannin, aspartame
  - 2 litres intake max
  - Look at output

- 3 day bladder chart
  - Low cap bladder
  - Frequency
  - ? nocturia

- Bladder training
  - Don't just tell them to hold on!
  - Use calming tactics

- Bladder calming tactics:
  - Pf + The Knack
  - Perineal pressure
  - Clitoral/penile pressure
  - Toe curls
  - Calf stretches
  - Sacral pressure
  - Top lip pressure
  - Suprapubic pressure
  - Ankle pressure (ptn)
Normal Bladder Habits

- Frequency x 4-6
- Nocte x 1
- Voided volumes of 250-550mls
- Total urine output @ 1500mls
- Fluid intake @ 2000mls
- Minimal caffeine, tannin, aspartame, carbonated drinks
- No leakage
- No “Just-in-case”
- No straining
Voiding & Defaecation Dynamics

- Straining to void/defaecate
  - weakens pf
  - Inhibits bladder
- Long term constipation
  - overstretch pudendal nerve
- Chronic “hoverers”
  - hesitancy & poor flows
- US hoverers vs sitters
  - 3 x residual level (Bo & Stein ‘94)
- Optimal emptying position
  - squatting (Sikorski)
- Modify for western lifestyle
Normal Bowel Habits

- Defaecation 3xday to 3xweek
- Normal desire to defaecate
- App position on toilet
- No strain, pain or bleeding
- Sense of completion
- Normal stool consistency
Basic Advice

- Management of chronic raised IAP
  - Cough, Constipation, Heavy lifting

- General exercise levels
  - ? high impact sports
    those with prolapse


- Appropriate fluid & fibre intake
  - Diet programmes push fluids
  - TV promotes 8 glasses of water “& the rest”
Does anything preclude a poor outcome?

- Lack of motivation
- Obesity
- Prior history of surgery
- Post menopausal women
- Long standing symptoms
- Presence of severe prolapse
- Poorly managed chronic cough
Referrals

- Find a Physio – APA website
- APA – 9389 9211 – ask for PT in your area
- Private Physios: consider EPC. (Check with practice first……)

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