Urinary continence management in women: a multidisciplinary approach

The urogynaecologist approach
Dr Anna Rosamillia

What is normal bladder function?
- Incontinence is not normal
- Normal voiding is 7-8 times during waking hours and 1 or less per night

Urinary Incontinence
- Prevalence varies between 25-35%
- More common in women than men
  - 35.3% women vs 4.4% men
  - 10.9% in multiparous women
- Increases with age

Risk factors for urinary incontinence
- Childbearing
  - Vaginal delivery
- Age/menopause
- Obesity
- Chronic raised intra-abdominal pressure e.g. chronic cough, constipation, heavy lifting
- Previous genitourinary surgery, radiation
- Other medical conditions e.g. diabetes, stroke, depression, MS, other neurological conditions
- Genetics
- High impact physical activity
Assessment

- History taking - see PFQ
- Physical examination: cognition, mobility, abdo-pelvic exam; POF, CST
- Investigations
  - Bladder diary
  - MSU +/- cytology
  - Post-void residual volume – U/S or in-out catheter
  - Urodynamic testing
    - If type of UI unclear or if no first-line treatment after initial workup
    - If urge incontinence not alleviated by anti-cholinergics
    - If stress incontinence not helped by pelvic floor exercises
    - If requiring surgery
  - Cystoscopy
  - Recurrent UTI, haematuria
  - Imaging for suspected masses

Red flags-referral to specialist

- Uncertain diagnosis
- Lack of response to adequate trial of conservative therapies
- Haematuria without infection
- Severe pelvic organ prolapse
- Abnormal post-void residual urine volume
  - >100 mL, elderly >150–200 mL
- Neurological condition (e.g. multiple sclerosis, spinal cord lesions) in which a component of neurogenic bladder is suspected
- History of pelvic surgery

Management

- Education; correct aggravating factors; vag E;
- Pelvic floor muscle training +/- ES
- Bladder retraining
- If oab; bladder relaxant meds trial; if refractory-refer-botox, neuromodulation
- If si; continence devices; surgery-mid urethral sling
- Correct/address associated issues; prolapse; bowel and sexual dysfunction

OAB

- Ditropan; oxytrol
- tolterodine
- Solifenacin; darifenacin
- Mirabegron

ABC trial: 100 Units Botox vs Solifenacin 5 to 10 mg; Baselin 5 UUI per day (3.4 in drug and 3.3 in Botox reduction) Dry rate of 13% in drug and 27% in Botox; All Qols better; 5% ISC@ 2 m

Peripheral tibial nerve stimulation
Sacral neuromodulation
Major urological surgery

Synthetic mid-urethral slings

- Most data available for the TVT – 17 years
- Cure rates – 85%
- Improvement rates – 94%
- Success at 5 years – 80-85%
- Day case or O/N
- Complications
  - Bladder perforation – 2.7-9.5%
  - De novo or worsening of bladder overactivity
  - Voiding dysfunction
    - usually minor and temporary 7%
    - complete retention 2.5%
  - Mesh erosion 0.7%

Better success rates when supervised by continence physiotherapist or continence advisor (30% women have difficulty performing a correct contraction at first attempt)

Meta-analysis showed overall 66% success rates

Sports physiology- maximal contraction 6 to 10 secs 6 repeats=1 set; 2-3 sets per day; daily

May be aided by vaginal cones, biofeedback, electrostimulation, magnetic chair stimulation
The physiotherapist approach

Janetta Webb
Pelvic Floor Physiotherapist

Physiotherapy

• Level 1 evidence for pelvic floor muscle training (PFMT) in management of female urinary incontinence
• Challenges to the PF:
  – Pregnancy
  – Childbirth
  – menopause
  – abdo/pelvic surgery
  – LBP
  – repetitive heavy lifting/straining
  – ageing
  – obesity
  – neurological disease
  – chronic respiratory disease

Physiotherapy

• Most women have heard of their pelvic floor but:
  – say they don’t know how to work it
  – say they have tried their own PFMT and it hasn’t reduced symptoms
  – don’t feel hopeful that they can make a change
• Ask the question!
• CFA resources a good place to start
Physiotherapy Assessment
If symptomatic, need individual assessment and PFMT including:

- History taking
- Education re anatomy and function of PFMs
- PFM assessment, external perineal and PV
- Focus on acquisition of correct technique and ability to relax
- Tone, levator hiatus and avulsion, pain
- PFM reflex with coughing
- Strength, endurance, coordination

Physiotherapy Management

- Individualised training program as per assessment
- Reassessment and progression of program to achieve functional control of PFM’s in situations in which patient experiences leakage
- Patient goals
- Average length of PFMT 3-4 months with ongoing maintenance
- Adherence

Adjunctive Therapy

- Surface EMG biofeedback
- Electrical muscle stimulation
- Vaginal weights
Lifestyle modification

• General fitness

• Heavy lifting

• Bowel evacuation dynamics

Resources

• CFA PFMT for Women brochure
• Metropolitan/rural continence clinics all have multidisciplinary team including physio
• Public hospital urogynaecology/urology clinics
• Private Practice-EPC program
• www.cfaphysios.org.au

The continence nurse approach

Germana Ryan
Urology & Continence Nurse Consultant
Reasons why patients present

• Post pap smear, GP/nurse noticed a prolapse or asked them about stress incontinence
• Post childbirth or later, women keen to get back to physical activity & discover they have urine leakage
  – Usually very anxious
  – Important to listen to what the women considers to be her main issue.

Screening/assessment?

• Bladder diaries
  – Assess a women's urine output and patterns
  – Provides information about frequency and amounts voided
  – Provides information about how much fluid amounts & types
• Questionnaires
• Urinalysis
• Weight discussion

Presenting problems

• Urine loss with urgency or stress
• Bowel problems/ Constipation
• Skin issues associated with urine leakage & pad use
  – Barrier creams
  – Pads for sensitive skin
  – Appropriate use of pads
  – Sanitary pads v continence pads
Discussion points

• When?
  – activity, sneezing, jogging
• How often?
  – day
  – night – what wakes you?
• Urgency
  – is it tricky getting into the house?
• Toileting difficulty
  – voiding problems
  – feeling of incomplete emptying
  – not having a good stream
  – positioning
• Anxiety
  – about where toilets are
  – self directed fluid restriction

Key messages

• Pelvic floor exercise - assessment what women know
  – “I’ve been doing them and it hasn’t worked”
  – people would like a quick fix
• Pelvic floor muscles take time to get stronger
• Women need support to keep it up as well as good instruction initially to ensure a sustainable routine
• Change in behaviour
• Results take time and monitoring to keep on track
Key messages

• Listen to what the women wants to improve
  – What is achievable?
  – Offer support
• Provide information about the problem
  – empower women to make a decision
  – Continence Foundation of Australia resources
  – UGSA education sheets
• Refer for physio assessment and management
• Assistance with continence funding for equipment where appropriate. SWEP, CAPS, Veterans Affairs

Case study 1

– Emma 36yo
  – G2P1, forceps delivery, baby 3600g
• presents to her GP with urinary incontinence
• this commenced after the birth of her daughter 3 years ago but is now worsening
• leakage particularly bad at gym, wears a sanitary pad
• would like to conceive this year and is concerned symptoms will worsen
• best friend had it fixed with day surgery, she wants to know if she could also have it fixed

Case study 2

– Diana 63yo
  – P3
  – TAH for menorrhagia aged 50
• 6 urinary tract infections over the past 18 months
• she reports increasing frequency and difficulty getting to the toilet when she arrives home, resulting in incontinence. She says she knows every toilet in Melbourne and it is starting to affect social outings.
• intermittent constipation
Case study 3
- Dorothy 74yo
- P4
- T2DM, hypertension, BMI 27
- nocturia x 4
- OA knees
- sleep apnoea
- presents with incontinence, she’s not clear on what causes it, but just has a wet pad during the day.