Guidelines on Urinary Incontinence (2006)

Continence Foundation of the Philippines

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Algorithm for the Initial Management of Urinary Incontinence in Children

1. Urinary Incontinence
2. "Complicated" Incontinence Associated with: Urinary tract anomaly; Neuropathy; pelvic surgery, Voiding (emptying) symptoms, Recurrent urinary infection, any other abnormality detected e.g. Post void residual?
3. Specialized Management
4. N
5. Nocturnal Enuresis (monosymptomatic)
6. Mono-Symptomatic Nocturnal Enuresis?
7. Y
   - Explanation/ Education
   - Enuresis Diary
   - Alarm
   - Desmopressin
8. Failure?
9. Y
   - Specialized Management
10. N
11. Daytime + Nightime Wetting + Urgency/Frequency + Voiding symptoms
12. Y
    - Bladder Training
    - Antimuscarinics
13. Failure?
14. Y
    - Specialized Management
15. N
   - Recurrent Infection or Dysfunctional voiding
16. Specialized Management

FIGURE 1
Algorithm for Specialized Management of Urinary Incontinence in Children

1. Urinary Incontinence

2. Incontinence without suspicion of urinary tract anomaly?
   - Y: Consider need for urodynamics, Renal/bladder ultrasound, Assess Post Void Residual, Flow rates ± Electromyography, Behavioral Evaluation
   - N: Incontinence with suspicion of urinary tract anomaly

3. Abnormal?
   - Y: Go to #8
   - N: Y: Storage /Voiding Dysfuntion without Neuroanatomic Basis

4. Neurogenic Bladder
   - Y: Clean intermittent cath, Pharmacotherapy, Bowel Management, Intravesical electrical stimulation
   - N: Consider: Micturating cystogram, Renal scintigram, Urodynamics, Cytourethroscopy, Spinal imaging

5. Anatomic Causes of Urinary Incontinence
   - Antibiotics if with infection, Correct anomaly (see surgical treatment in children)

6. Y: Bladder training (incl NE alarm), Bowel management, Pelvic Floor relaxation ± biofeedback, Pharmacotherapy (single/combination) - antimuscarinic, - alpha blockers, - Desmopressin, Neuromodulation (surface or percutaneous)

7. N: Y: Go to #8

8. Consider:
   - Y: Micturating cystogram, Renal scintigram, Urodynamics, Cytourethroscopy, Spinal imaging
   - N: Consider:

9. Anatomic Causes of Urinary Incontinence
   - Antibiotics if with infection, Correct anomaly (see surgical treatment in children)

10. Y: Bladder training (incl NE alarm), Bowel management, Pelvic Floor relaxation ± biofeedback, Pharmacotherapy (single/combination) - antimuscarinic, - alpha blockers, - Desmopressin, Neuromodulation (surface or percutaneous)

11. N: Y: Go to #8

12. Anatomic Causes of Urinary Incontinence
   - Antibiotics if with infection, Correct anomaly (see surgical treatment in children)
Algorithm for the Initial Management of Urinary Incontinence in Women

1. Urinary Incontinence

2. Incontinence associated with: pain, hematuria, recurrent infection, voiding symptoms, pelvic irradiation, radical pelvic surgery, suspected fistula. If other abnormality found: significant post void residual, significant pelvic organ prolapse, pelvic mass?

3. Complicated incontinence/Recurrent Incontinence

4. Specialized Management

5. Incontinence on physical activity

6. • General assessment
   • Urinary Symptom Assessment (including frequency-volume chart and questionnaire)
   • Assess quality of life and desire for treatment
   • Physical examination: abdominal, and pelvic
   • Cough test to demonstrate stress incontinence if appropriate.
   • Urinalysis + urine culture -> if infected, treat and reassess if appropriate
   • Assess voluntary pelvic floor muscle contraction
   • Assess post-void residual urine

7. Presumed due to sphincteric incompetence?

8. Stress Incontinence

9. • Assess oestrogen status
   • Assess and treat as appropriate.
   • Life style intervention
   • Pelvic floor muscle training, bladder retraining

10. N

11. Incontinence with mixed symptoms?

12. Dual serotonin and noradrenaline reuptake inhibitors*

13. Mixed Incontinence

14. Failure?

15. Specialized Management

16. N

• Other Physical therapies
• Devices

* Subject to local regulatory approval; not yet FDA (formerly BFAD) approved for this indication

FIGURE 3A
Urinary Incontinence

Figure 3a

17

Urge Incontinence

18

- Assess oestrogen status and treat as appropriate.
- Life style intervention
- Pelvic floor muscle training, bladder retraining

19

Antimuscarinics

20

Failure?

21 Y Specialized Management

21 N

FIGURE 3B
Algorithm for Specialized Management of Urinary Incontinence in Women

1. Urinary Incontinence

2. Incontinence associated with: Pain, hematuria, recurrent infection, voiding symptoms, pelvic irradiation, radical pelvic surgery, suspected fistula?

3. Complicated Incontinence/Recurrent Incontinence
   - Consider:
     - Urethrocytostoscopy
     - Further imaging
     - Urodynamics

4. Lower urinary tract anomaly/pathology
   - Correct anomaly
   - Treat pathology

5. Assess for pelvic organ mobility/ prolapse
   - Consider imaging of the UT/ pelvic floor
   - Urodynamics

6. Urodynamic Stress Incontinence (USI)

7. If initial therapy fails:
   - Anti-incontinence surgery
     1. Low tension slings
     2. Colposuspension
     3. Injections
     4. AUS

8. Incontinence with mixed symptoms?

9. Mixed Incontinence (USI/DOI)

10. If initial therapy fails:
    - Neuromodulation
    - Bladder augmentation
    - Urinary diversion

11. Incontinence with urgency/frequency/Urge incontinence?

12. Detrusor Overactivity Incontinence (DOI)
    - If initial therapy fails:
      - Neuromodulation
      - Bladder augmentation
      - Urinary diversion

13. Incontinence with urgency/frequency/Urge incontinence?

14. Underactive detrusor
    - Correct anatomic bladder outlet obstruction (e.g., iatrogenic by urethrolysis)
    - Intermittent catheterization

15. If initial therapy of predominant problem fails:
    - Neuromodulation
    - Bladder augmentation
    - Urinary diversion

16. Incontinence associated with poor bladder emptying

17. Urodynamics

18. Bladder outlet obstruction

19. • Intermittent catheterisation

20. • Correct anatomic bladder outlet obstruction (e.g., iatrogenic by urethrolysis)

21. • Intermittent catheterization

Figure 4
Algorithm for the Management of Urinary Incontinence in Frail-Disabled Elderlies

1. Elderly with Urinary Incontinence

2. UI Associated with: Pain, Haematuria, Recurrent Symptomatic UTI, Pelvic Mass, Pelvic Irradiation, Pelvic/LUT Surgery, Major Prolapse (Women), Post Prostatectomy (Men)?

3. Specialized Assessment

4. UI caused by: Delirium, atrophic vaginitis, pharmaceuticals, psychological, excess urine output, reduce mobility, stool impaction and other factors

5. Clinical Diagnosis

6. Mixed UI?

7. Initially treat predominant symptoms

8. On-going Management and Reassessment

Go to figure 5A.1, 5A.2, 5A.3

FIGURE 5A
Urinary Incontinence

**Urge UI**
- Lifestyle interventions
- Behavioral therapies
- Consider cautious addition and trial of antimuscarinic drugs
- + Topical estrogen (women)

**Significant PVR**
- Treat constipation
- Review medications
- Double voiding
- Consider trial of alpha-blocker (men)
- If PVR>500=catheter decompression then reassess

**Stress UI**
- Lifestyle intervention
- Behavioral therapies
- + Topical estrogen (women)

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**FIGURE 5A.1**

**FIGURE 5A.2**

**FIGURE 5A.3**
Algorithm for the Initial Management of Urinary Incontinence in Men

1. Urinary Incontinence

2. Incontinence associated with: Pain, hematuria, recurrent infection, voiding symptoms, prostate irradiation, radical pelvic surgery, any other abnormality detected e.g., significant post void residual?

3. Complicated Incontinence/Recurrent Incontinence

4. Specialized Management

5. N

6. Post-micturition dribble

7. Post-prostatectomy incontinence

8. General assessment
   - Urinary Symptom Assessment and symptom score (including frequency-volume chart and questionnaire)
   - Assess quality of life and desire for treatment
   - Physical examination: abdominal, rectal, sacral neurological
   - Urinalysis + urine culture if infected, treat and reassess
   - Assessment of pelvic floor muscle function
   - Assess post-void residual urine

9. Stress Incontinence presumed due to sphincteric incompetence?

10. Lifestyle interventions
    - Pelvic floor muscle training
    - Bladder training

11. Failure?
    Y
    - Special Management

    N

12. Y
    - Continence products
    - External applicances

13. N

14. N

15. Incontinence with urgency/ frequency

16. Urge Incontinence presumed due to detrusor overactivity

17. Lifestyle interventions
    - Pelvic floor muscle training
    - Bladder training
    - Antimuscarinics

18. Failure?
    Y
    - Special Management

    N

FIGURE 6
Algorithm for Specialized Management of Urinary Incontinence in Men

1. Urinary Incontinence

2. Incontinence associated with: pain, hematuria, recurrent infection, voiding symptoms, prostate irradiation, radical pelvic surgery?

3. Complicated Incontinence/Recurrent Incontinence
   - Consider:
     - Urethrocystoscopy
     - Further imaging
     - Urodynamics

4. Lower Urinary tract anomaly/pathology
   - Correct anomaly
   - Treat pathology

5. Post-prostatectomy Incontinence
   - Consider:
     - Urodynamics and imaging of the urinary tract
     - Urethrocystoscopy (if indicated)

6. Incontinence with urgency/frequency
   - Consider:
     - Urodynamics and imaging of the urinary tract
     - Urethrocystoscopy (if indicated)

7. Stress Incontinence due to sphincteric incompetence?
   - If initial therapy fails:
     - Artificial urinary sphincter
     - Male sling
     - Bulking agents

8. Urge Incontinence due to detrusor overactivity (during filling)

9. With coexisting detrusor overactivity (during voiding)
   - With coexisting bladder outlet obstruction

10. Mixed Incontinence

11. If initial therapy fails:
    - Neuromodulation
    - Autoaugmentation
    - Bladder augmentation
    - Urinary diversion

12. If initial therapy fails:
    - Neuro-modulation
    - Autoaugmentation
    - Bladder augmentation
    - Urinary diversion

13. With coexisting bladder outlet obstruction
    - Alpha-blockers, 5alphaRI
    - Correct anatomic bladder outlet obstruction
    - Antimuscarinics

14. If initial therapy fails:
    - Prostatectomy
    - Autoaugmentation
    - Bladder augmentation

15. Intermittent catheterisation
    - Antimuscarinics

16. If initial therapy fails:
    - Neuromodulation
    - Autoaugmentation
    - Bladder augmentation

17. If initial therapy fails:
    - Neuromodulation
    - Autoaugmentation
    - Bladder augmentation

18. If initial therapy fails:
    - Neuromodulation
    - Autoaugmentation
    - Bladder augmentation

19. If initial therapy fails:
    - Neuromodulation
    - Autoaugmentation
    - Bladder augmentation

FIGURE 7
**Guidelines on Urinary Incontinence**

Urinary incontinence (UI) is defined as the involuntary loss of urine which causes a social or hygienic problem and is objectively demonstrable. It can be classified into urethral and extra-urethral conditions. Urethral causes include stress UI (SUI), overactive bladder (OAB), mixed UI, overflow, and transient UI. Extra-urethral causes are congenital anomaly (ectopic ureter or bladder extrophy) and fistula. The transient causes can be remembered by the mnemonic (DIAPPERS) Dementia/Delirium, Infection, Atrophic vaginitis, Pharmacological, Psychological, Endocrine, Restricted mobility and Stool impaction.

In 1998, the Asia Pacific Continence Advisory Board (APCAB) established an Asian prevalence of 14.6% for urinary incontinence among females and 6.8% among males. Generally, UI is only half as prevalent among men compared to women. Whereas mixed urinary incontinence (58.7%) prevails among women; most reports show the predominance of overactive bladder or detrusor overactivity (48%) among men. The factors found to be correlated with higher prevalence of urinary incontinence include: older age, higher parity i.e., pregnancy and childbirth, menopause, and obesity.

Stress urinary incontinence (SUI) presents as leakage of urine resulting from an increased in intra-abdominal pressure as when coughing, sneezing, or any physical exertion e.g., running etc. Affected individuals with overactive bladder (OAB) or detrusor overactivity complain of frequency, urgency, with or without urge incontinence and nocturia. When there is an underlying neurological lesion, it is called detrusor hyperreflexia or neurogenic detrusor overactivity. Mixed UI has the symptomatology of both stress UI and OAB. Overflow incontinence is due to the spinal cord in cases of bony abnormality or neurological lesion. It occurs in an atonic bladder or detrusor underactivity manifested as distended bladder by abdominal palpation or presence of large residual urine common among diabetic, and in bladder outlet obstruction e.g., BPH among males and urethral stenosis among women. Urodynamics can very well demonstrate detrusor underactivity.

**EVALUATION**

1. **History and General Assessment**
   - Emphasis should be on the severity, duration and bother of urinary symptoms, physical abilities, co-existing diseases, lifestyle, patient’s mental status, medication, expectations of treatment, and support system.
2. **Physical examination**
   - The usual gynecological examination plus stress test for UI and focused neurological testing.
3. **Urinalysis**
4. **Frequency volume chart**
5. **Post void residual urine (PVR)**
6. **Imaging by ultrasound or x-ray**
7. **Endoscopy**
8. **Quality of life assessment**
9. **Renal function test**
10. **Urodynamics**

This is indicated prior to most invasive treatments, after treatment failure, as part of a long-term surveillance programme in neurogenic lower urinary tract dysfunction, and in “complicated incontinence”.

**OPTIONAL DIAGNOSTIC TESTS**

1. Additional urodynamic testing for urethral function namely: urethral pressure profilometry (UPP), abdominal leak point pressure (ALPP), video-urodynamics (VUDS), and or electromyography (EMG).
2. **Pad testing**
3. **Further imaging techniques include cysto-urethrography, ultrasound, CT or MRI.**

**MANAGEMENT OF URINARY INCONTINENCE in CHILDREN**

**ICI Assessments 2004: Oxford Guidelines (Modified)**

<table>
<thead>
<tr>
<th>Level of Evidence</th>
<th>Grades of Recommendation</th>
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<tbody>
<tr>
<td><strong>Level 1</strong> - Systematic review meta-analyses, good quality RCTs</td>
<td>Grade A: Based on level 1 (highly recommended)</td>
</tr>
<tr>
<td><strong>Level 2</strong> - RCTs, good quality prospective cohort studies</td>
<td>Grade B: Consistent level 2 or 3 evidence (recommended)</td>
</tr>
<tr>
<td><strong>Level 3</strong> - Case-control studies, case series</td>
<td>Grade C: Level 4 studies or majority evidence (optional)</td>
</tr>
<tr>
<td><strong>Level 4</strong> - Expert opinion</td>
<td>Evidence inconsistent/inclusive (no recommendation possible)</td>
</tr>
</tbody>
</table>

History taking and physical examination peculiar to children are very important prerequisites to address the problems of urinary incontinence in this age-group. The child’s behavioral development, bowel function, and history of urinary incontinence should be recorded. A palpable bladder, external genitalia and bony abnormalities in the gluteo-sacral area or feet, and manner of voiding must be looked for.

**INITIAL TREATMENT:**

Voiding diary of the child is very helpful. Nocturnal enuresis may be treated with enuresis alarm, behavioral modification, and anti-diuretic hormone analogues. Daytime incontinence should be treated with bladder training (timed voiding) with or without anti-cholinergic therapy.

**SPECIALIZED MANAGEMENT:**

Imaging studies may be indicated e.g., IVP, UTZ, MRI of the spinal cord in cases of bony abnormality or neurological condition, and / or cysto-urethroscopy. Urodynamic studies are requested if surgery is contemplated or if bladder dysfunction leads to upper tract dilatation.

If the initial treatment of nocturnal enuresis or daytime urinary incontinence for 8-12 weeks is unsuccessful, refer to a specialist. Children with complicated incontinence associated with the following conditions should be referred to a specialist from the outset:
- recurrent UTI
- voiding dysfunction
- urinary tract anomalies
- previous pelvic surgery, and
- neuropathy

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The treatment of stress or urge incontinence without voiding dysfunction in children is by conservative measures. When incontinence is associated with voiding dysfunction that results in PVR >30% of total bladder capacity, biofeedback and clean intermittent catheterization may be initiated.

**ADULT CONSERVATIVE MANAGEMENT**

This includes principally:

**A. Behavioral therapy** namely:

- (a) lifestyle interventions, physical therapies, scheduled voiding regimens
- (b) anti-incontinence devices

Lifestyle interventions find applicability in:

- Reducing obesity (level 2 evidence grade B / C reducing caffeine and carbonated beverages (level 2 / 3 evidence grade B)
- Discontinuing smoking (grade B / C)
- Reduce strenuous activity (level 2 / 3 evidence, grade B)
- Avoid constipation (level 2 / 3 evidence, grade B / C)

**B. Physical therapy**

- a. Pelvic Floor Muscle Training (PFMT) – should be offered as 1st line therapy to all women with stress, urge, or mixed UI (grade A).
- b. Vaginal cones equally effective for SUI women (grade A).
- c. Electrical stimulation
- d. Magnetic stimulation thru the seat of a chair (e.g., NeoControl – grade C recommendation

**C. Scheduled voiding regimens recommendation**

- grade C

  Augmenting drug therapy with a supervised bladder training program may be helpful in the treatment of OAB (grade D recommendation)

- a. Bladder training/drill/discipline/re-education – level 1 evidence for OAB
- b. Timed voiding
- c. Prompted voiding
- d. Habit training

**D. Complimentary therapy** – level of evidence 3/4 recommendation; grade C / D

- a. Acupuncture
- b. Herbal/naturopathic remedies
- c. Hypnosis
- d. Relaxation

**MANAGEMENT OF URINARY INCONTINENCE in WOMEN**

Abdominal, pelvic, and perineal examinations are integral part of assessing women with urinary incontinence, thus, presence of pelvic organ prolapse and uro-genital atrophy would not be missed. Stress test (cough and strain to detect leakage due to sphincter incompetence) and evaluation of pelvic floor muscle contraction prior to teaching Kegel’s exercises are likewise done. Urine examination and determination of postvoid residual volume are basic to any assessment of urinary incontinence.

**INITIAL TREATMENT**

Lifestyle intervention and pelvic floor exercise is the mainstay in the treatment of urinary incontinence. Lifestyle intervention includes fluid (caffeine, alcohol)/dietary modification, weight reduction, and smoking cessation. Urinary tract infection and estrogen deficiency are treated accordingly.

For mixed incontinence, the clinician may treat the predominant symptom first. Bladder training and anti-muscarinic drugs are given for overactive bladder. Women with both stress incontinence and significant pelvic organ prolapse may be treated by pessary while waiting for definitive treatment.

**SPECIALIZED MANAGEMENT**

If initial treatment fails in 8-12 weeks, referral to a specialist is recommended. Urodynamic studies are done prior to interventional therapy to diagnose the type of incontinence and have a precise management plan. Women with complicated incontinence e.g., associated with pain, hematuria, recurrent infection, voiding symptoms, pelvic irradiation, radical pelvic surgery, and fistula may need to have additional testing e.g., urethroscopy, cystotomy, and urinary tract imaging studies.

For cases with urodynamic stress incontinence with some degree of bladder neck or urethral mobility, retropubic suspension procedures or sling operations may be done. If there is intrinsic sphincter deficiency with limited bladder neck mobility, sling operations, injectable bulking agents, or artificial urinary sphincter are the options. Symptomatic pelvic organ prolapse if present are surgically corrected at the same time.

Idiopathic detrusor overactivity or overactive bladder is treated by neurostimulation, sacral blockade, bladder augmentation/substitution, or urinary diversion. Patients with voiding dysfunction or overflow incontinence with significant postvoid residual urine volume (>30% of bladder capacity) may be due to significant pelvic organ prolapse which needs to be corrected surgically. Other modalities of treatment are intermittent catheterization, biofeedback, and neurostimulation.

**SURGERY for UI in WOMEN**

A. **Anterior colporrhaphy** – performed through a midline anterior vaginal wall incision where there is a creation of a layer of endopelvic fascia to provide additional support to the urethra (Level 1, grade A).

B. **Burch retropubic colposuspension** – effective in curing SUI and with long term proven success (level 1, grade A). Voiding dysfunction, OAB, and posterior wall vaginal prolapse are consistently reported sequelae (level 1). A trend towards higher cure rates with the open than laparoscopic Burch procedure (level 1 / 2). Pelvic organ prolapse when present at the time of anti-incontinence surgery is associated with a poorer outcome for cure of SUI with retropubic colposuspension (level 3).

C. **Marshall-Marchetti-Krantz procedure (MMK)** – produces a similar cure rate to colposuspension but osteitis pubis complication occurring in 2.5% detracts from its value (level 3 grade C).

D. **Paravaginal repair** – if performed abdominally, it is less effective than colposuspension (level 1 / 2); however,
Urinary Incontinence

if combined with other types of anti-incontinence procedures, there is a reasonable level of efficacy. Therefore, overall continence rates must be viewed in light of these combined procedures (level 3 / 4, grade A).

E. Needle suspension – less effective in the short and long term follow-up than open colposuspension

F. Slings – autologous e.g., rectus fascia - provide effective long term cure for SUI (grade B). Allografts - e.g., cadaveric fascia lata, and xenografts - porcine small intestinal submucosa, SIS, should only be used in the context of well constructed research trials (level 3 / 4).

G. Tension-free-vaginal Tape (TVT) - has similar cure rate to open or laparoscopic colposuspension, and transobturator suburethral sling, porcine dermis sling (level 1 / 2). TVT procedure concomitant with pelvic organ prolapse results in high short-term cure rates for SUI (Level 2 / 3). It can be offered to recurrent SUI with a similar cure rate to 1st time surgery (grade B).

H. Injectable agents e.g., GAX collagen – long term durability of >4 years appears to be inferior to retropubic suspension and slings (level 4).

MANAGEMENT OF URINARY INCONTINENCE in FRAIL ELDERLY

The basic assessment of UI in the frail elderly patients should include a careful history, physical examination, urinalysis, and assessment of post-void residual urine in order to identify potentially treatable conditions, as well as assessment of cognitive function, mobility, and environmental factors (grade B-C). Urodynamic evaluation should be done before considering surgical treatment of UI (Grade B). Special precaution should be practiced in men since they should always have a post-void residual (PVR) done initially, and anti-muscarinic therapy should be given with careful clinical monitoring (grade C). Cost of treatment should be incorporated into management decisions (grade C). Prompted voiding should be offered (grade A) but not timed voiding nor habit retraining grade D).

Drugs should be started at the lowest possible dosage (Grade C). Patients treated with anti-muscarinic agents should be monitored for adverse events, especially increased confusion and tachycardia (grade B). Topical estrogen cream may be considered as adjunctive treatment for women with atrophic vaginitis (grade B). Injections of bulking agents appear to be effective in older women (level 3). Risks of morbidity and mortality for geriatric patients undergoing anti-incontinence surgical procedures are similar to those of other major non-cardiac surgery (level 2).

INITIAL TREATMENT

Conservative therapy for urinary incontinence includes lifestyle changes, bladder training in the more alert patient, assisted voiding for more disabled patients, and prompted voiding for more cognitively impaired patients. For cognitively intact frail patients, pelvic floor muscle exercises may be considered.

The following medical therapy may be given with caution: a) anti-cholinergic drugs in cases of urge incontinence, b) alpha-blockers in men with voiding dysfunction, c) topical estrogen in women with vaginal/urethral atrophy. These drugs should be started at low doses then titrated until the desired effect or unwanted side-effect occurs.

SPECIALIZED MANAGEMENT

Referral to a specialist is recommended if patients did not respond adequately after initial management and/or if found to have other co-morbidities e.g., pain, hematuria. If surgery is necessary, urodynamic testing should be done.

MANAGEMENT OF URINARY INCONTINENCE in MEN

In men incontinence usually comes in a setting of post-micturition dribbling; overactive bladder, or post-prostatectomy incontinence.

INITIAL TREATMENT

Post-micturition dribble can be effectively treated by pelvic floor muscle exercises and direct manual compression of the bulbous urethra after voiding. Initially, overactive bladder is treated by: a) lifestyle modification, b) pelvic floor exercises, c) bladder training, d) anti-cholinergic drugs if due to detrusor overactivity, and e) alpha blockers if due to bladder outlet obstruction. Post-prostatectomy stress incontinence should be treated initially by: a) lifestyle modification, b) pelvic floor exercises, and c) bladder training.

SPECIALIZED MANAGEMENT

If initial treatment fails in 8-12 weeks, referral to a specialist is recommended. Urodynamic studies are done to have a precise diagnosis especially in cases of persistent detrusor overactivity or sphincter incompetence. Patients needing specialized management at the first instance e.g., incontinence associated with pain, hematuria, recurrent infection, voiding symptoms, prostate irradiation, radical pelvic surgery may need to have additional testing e.g., urethrocystoscopy, cytology, and urinary tract imaging studies.

For the intractable idiopathic detrusor overactivity, the following maybe recommended as deem appropriate: botulinum toxin, neurostimulation, sacral blockade, bladder augmentation/substitution, or urinary diversion. For sphincter incompetence, any of the following therapies maybe done accordingly: bulking agents, sling procedure, or artificial urinary sphincter.

If persistent urinary incontinence is associated with detrusor underactivity as evidenced by urodynamic studies, clean intermittent catheterization is recommended. If persistent urinary incontinence is associated with bladder outlet obstruction, neurostimulation or surgery to relieve obstruction may be recommended.

RECOMMENDATIONS for PREVENTION of UI in general:

1. Pelvic floor muscle training should be a standard component of prenatal and postpartum care (grade B).
2. Compulsory inclusion of incontinence in the basic curriculum for physicians, nurses, physiotherapists, and allied health professionals (grade D).

REFERENCES:

2. Ostergard’s Urogynecology and Pelvic Floor Dysfunction edited by Alfred Bent, Donald Ostergard, Geoffrey Cundiff, and Steven Swift, 5th edition 2003
Recommended Therapeutics

The following index lists therapeutic classifications as recommended by the treatment guideline. For the prescriber’s reference, available drugs are listed under each therapeutic class. For drug information, please refer to the Philippine Drug Directory System (PPD, PPD Pocket Version, PPD Text, PPD Tabs).

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