



Primary Care Management Guidelines Female Urinary Incontinence

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Overview of Lecture

- Primary Care Management Guidelines for Incontinence
- Newer forms of Specialist Management

“Tell me...and I forget,
teach me...and I remember,
involve me...and I learn”

(Benjamin Franklin)

Martha, a 57 year old woman presents with the complaint of increasing urinary incontinence.

What parts of the history are appropriate?

History

Urinary leakage

- **Circumstances:** Mixture of stress incontinence for 20 years since her last delivery and urge incontinence over the past two years.
- **Frequency:** Approximately twice per day.
- **Effect on quality of life:** Wears pads, changes twice a day.

History continued...

Urological

- **Urgency**
- **Daytime frequency:** >2 hourly
- **Nocturia:** twice
- **No voiding difficulty**
- **No dysuria, no UTIs, no haematuria**

History continued...

Bowel habit: __

Normal

Obstetric, medical, gynae:

- *3 vaginal deliveries*
- *"Smoker's cough"*
- *No other predisposing factors*
- *No prolapse symptoms*
- *Menopause age 51*
- *Leakage with intercourse*

History continued...

Previous incontinence/pelvic floor surgery:

None

Previous conservative management:

Tried pelvic floor muscle exercises postnatally - did not work.

History continued...

Drug / lifestyle:

- *Coffee 5 cups/day.*
- *Smokes 10/day.*
- *No diuretics, alpha-blockers, HRT.*
- *Heavy lifting in part-time job as nurse aid.*

History Summary

Martha, a 57 year old woman presents with a complaint of mild stress incontinence since her last delivery 20 years ago and urge incontinence over the past 2 years.

She experiences leakage twice per day and wears pads and also experienced leakage with intercourse.

She experiences frequency, urgency and nocturia.

She has got no prolapse symptoms. She has had 3 vaginal deliveries. She has a smokers cough as she smokes 10 cigarettes per day, otherwise she is quite fit. She drinks 5 cups of coffee per day and her job as a Nurse Aid involves heavy lifting.

She has tried post-natal pelvic floor muscle exercises, which she was taught in a postnatal exercise class. She feels that these do not work.

What parts of the physical examination are appropriate?

Examination

80 kgs, otherwise general exam NAD.

- Abdominal exam: *NAD*
- Pelvic: *Atrophic vaginitis*
No demonstrable stress incontinence
No uterovaginal prolapse
No pelvic masses
? no residual
Poor pelvic floor muscle contraction
- Neurological: *Simplified neurological exam NAD*

Case Summary

Martha, a 57 year old women presents with a complaint of mild stress incontinence since her last delivery 20 years ago and urge incontinence over the past 2 years.

She experiences leakage twice per day and wears pads and also experienced leakage with intercourse.

She experiences frequency, urgency and nocturia.

She has got no prolapse symptoms. She has had 3 vaginal deliveries. She has a smokers cough as she smokes 10 cigarettes per day, otherwise she is quite fit. She drinks 5 cups of coffee per day and her job as a Nurse Aid involves heavy lifting.

She has tried post-natal pelvic floor muscle exercises, which she was taught in a postnatal exercise class. She feels that these do not work.

She weighs 80kgs, has atrophic vaginitis with a poor pelvic floor muscle contraction.

What baseline investigations are appropriate in General Practice?

Investigations

- MSU / urinalysis: *NAD*
- Urinary diary

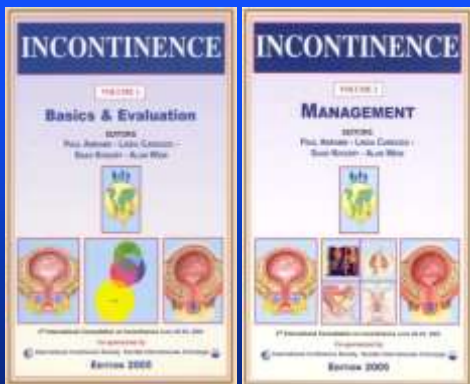
Date	Time	Volume	Urgency	Leakage	Stress	Urgency	Urgency	Urgency
01/01	08:00	200ml						
01/01	09:00	150ml						
01/01	10:00	100ml						
01/01	11:00	150ml						
01/01	12:00	100ml						
01/01	13:00	150ml						
01/01	14:00	100ml						
01/01	15:00	150ml						
01/01	16:00	100ml						
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01/01	19:00	150ml						
01/01	20:00	100ml						
01/01	21:00	150ml						
01/01	22:00	100ml						
01/01	23:00	150ml						
01/01	00:00	100ml						

What is your most likely diagnosis?

Detrusor Overactivity and Urodynamic Stress Incontinence

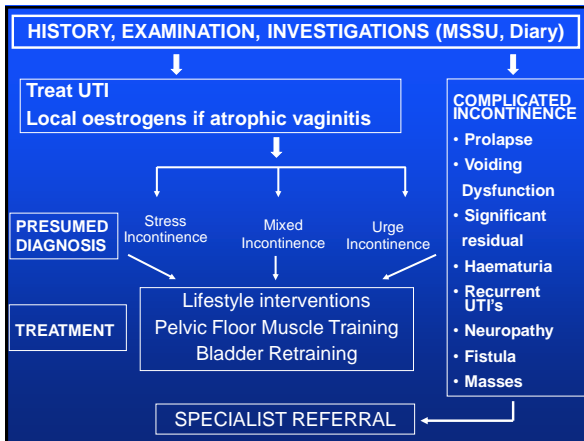
Regarding your subsequent management of this woman, would your primary choice of treatment, based on the best available evidence be:

1. Lifestyle interventions (decrease weight and caffeine, stop smoking, decrease heavy lifting) AND topical oestrogens
2. Refer for bladder retraining/pelvic floor muscle training
3. Start anticholinergic treatment alone
4. Refer for specialist opinion and urodynamics
5. Option 1 and 2
6. Option 1, 2 and 3
7. Option 1, 2, 3 and 4.



PRIMARY CARE MANAGEMENT GUIDELINES Female Urinary Incontinence		
Guideline	Recommendation	Level of Evidence
1. Offer lifestyle advice to all women with urinary incontinence.	Offer lifestyle advice to all women with urinary incontinence.	Strong
2. Offer pelvic floor muscle training to all women with urinary incontinence.	Offer pelvic floor muscle training to all women with urinary incontinence.	Strong
3. Offer anticholinergic treatment to women with overactive bladder syndrome.	Offer anticholinergic treatment to women with overactive bladder syndrome.	Strong
4. Offer topical oestrogens to women with urinary incontinence.	Offer topical oestrogens to women with urinary incontinence.	Weak
5. Offer bladder retraining to women with urinary incontinence.	Offer bladder retraining to women with urinary incontinence.	Weak
6. Offer referral to a specialist for women with urinary incontinence.	Offer referral to a specialist for women with urinary incontinence.	Weak

<http://www.electiveservices.govt.nz/pdfs/National-Guidelines-FUI.pdf>



- ## Lifestyle Interventions
- Weight reduction
 - Relieving constipation
 - Cessation of smoking/treatment of chronic cough
 - Caffeine reduction/fluid management
 - Reduction of physical forces (exercise, work)
 - Postural changes

- ## Oestrogens and Incontinence
- Cochrane Review
 - Oestrogens may help incontinence especially urge incontinence but not when combined with progestogen
 - Vaginal oestrogens may improve urgency, frequency and recurrent UTIs
- (Wheaton et al 2003)

- ## Pelvic Floor Muscle Training (PFMT)
- Level 1A Evidence to Suggest that for Women with Stress, Urge and Mixed Incontinence, PFMT is Better than No Treatment

- ## Pelvic Floor Muscle Training (PFMT)
- Lack of consistency in P.F.M.T. programmes
 - 3 sets of 8-12 slow velocity maximal contractions sustained for 6-8 seconds, performed 3-4 times a week and continued for at least 15-20 weeks is recommended.

- ## P.F.M.T.
- Assessed by a person with special training
 - correct contraction performed
 - ensure appropriate training intensity
 - Expected rates of cure/improvement are 65-74% in short term
 - Improvement in symptoms is a more common outcome than cure

Factors Affecting Outcome of Pelvic Floor Rehabilitation

- The single factor that is consistently associated with positive outcome is motivation and/or compliance with the intervention

(2nd ICJ)



? Long term effectiveness of pelvic floor rehabilitation

The NordiSphincter AS SEEN ON TV

There's only one way to cure stress incontinence forever.

Get Pelvic Floor Muscles of SteelThe NordiSphincter

Call 1-800-Sphincter For a Free Brochure. (no salesman will call)



Long-term Effectiveness

Norwegian (selected) figures

- 70% of women still exercising more than once per week
- 70% improvement at 5 years

Bladder Retraining

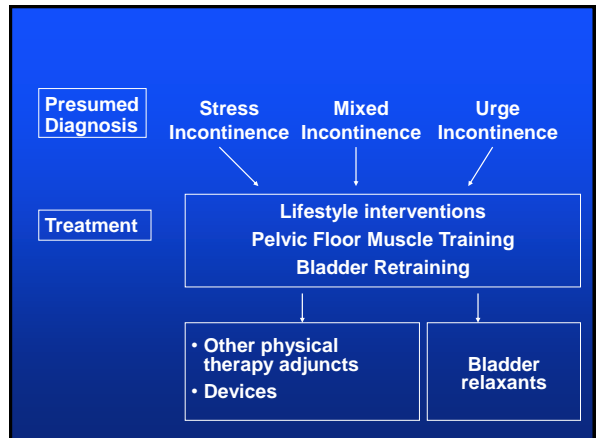
- 1st described by Jeffcoate and Francis in 1966 as “bladder discipline”
- Programme of patient education and a scheduled voiding regime

Patient Education and Scheduled Voiding Regime:

- Mechanisms of continence and incontinence
- Increasing voiding intervals
- Urgency control strategies
- Self monitoring of voiding behaviour
- Positive reinforcement by a clinician

Bladder Retraining

- Level 1 A evidence to suggest that for women with urge, stress and mixed incontinence, bladder retraining is more effective than no treatment



You advise local oestrogens decrease coffee and refer for pelvic floor muscle and bladder retraining.

You see Martha back in 3 months.

She has noticed some improvement but is still troubled with her urge incontinence.

You decide to prescribe an antimuscarinic drug. Which of the following is the most EFFECTIVE?

1. Oxybutynin (ditropan)
2. Tolterodine (detrusitol)
3. Solafenacin
4. Oxytrol (transdermal patch of oxybutynin)

Detrusitol, Solafenacin and Oxytrol are as EFFICACIOUS as oxybutynin in reducing the symptoms of overactive bladder syndrome

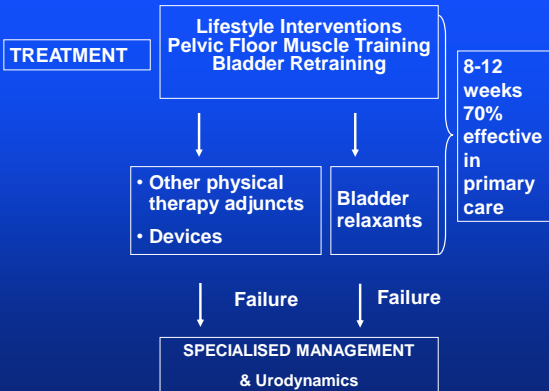
BUT.....

Patients on Detrusitol, Solafenacin & Oxytrol, in comparison with those on oxybutynin, were found to:

- Suffer less adverse events generally
- Less incidence of dry mouth
- Considerably less incidence of severe dry mouth
- Significantly decreased incidence of dose reductions
- Significantly decreased withdrawal rate.

- Detrusitol, Solafenacin & Oxytrol are more **EFFECTIVE** in clinical practice in treating symptoms of overactive bladder syndrome

But.....NOT FUNDED!



New Developments for Treating Detrusor Overactivity

Sacral Nerve Stimulation for Detrusor Overactivity



Sacral Nerve Stimulation



Sacral Nerve Stimulation

- 60% success at 5 years
- Surgical revision in about 30% of cases
- Cost \pm \$16,000
- ? Place for intractable and refractory overactive bladder syndrome

**Damn I look good...
I had botox!**

**Look as good
as you feel.**

Botox:
Lip enhancement
Facial line fillers
Chemical peels

Dr. Amanda Maloney,
FRCS(C)
#802 - 1200 Burrard St.
Vancouver
Tel: 604 685-0080
Fax: 604 688-5905



Botox Injection

- Theory: Paralyse detrusor
 - If inactive, can't be overactive
- Technique
 - Bladder LA instillation
 - 20-30 endoscope guided injections
 - Dome, walls
 - ? Avoid trigone - reflux
 - 200 - 300 IU total

Botox Injection

- General Results
 - Effective
 - How effective & how long for?
 - Idiopathic & neurogenic respond equally well
 - Side effects
 - Need for self-catheterisation
 - ? Increased number of UTIs
 - More side effects may emerge

Lifecycle of Incontinence

Success is:

- At age 4 - not peeing in your pants
- At age 12 - having friends
- At age 16 - having a drivers license
- At age 20 - having sex
- At age 35 - having money
- At age 60 - having sex
- At age 70 - having a drivers license
- At age 75 - having friends
- At age 80 - not peeing in your pants

You next see Anne, a 45 year old woman complaining of predominantly stress incontinence, who returns for a follow-up visit after having had 6 months of supervised pelvic floor muscle training. She has noticed some improvement, but is still bothered by incontinence in exercise, with coughing, and with laughing, and she also has some daytime frequency.

She weighs 130kgs.

No pelvic abnormality.

You refer her for urodynamics.



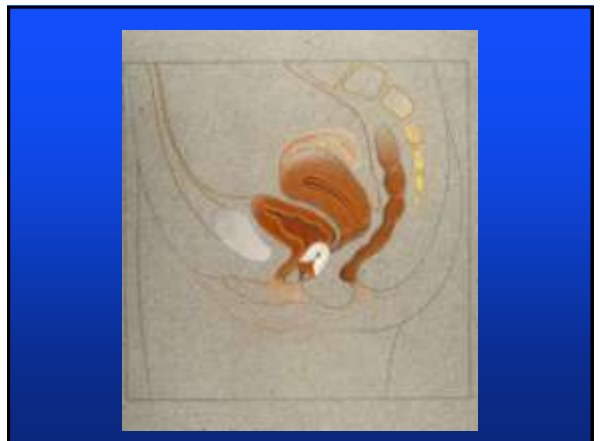
Urodynamics

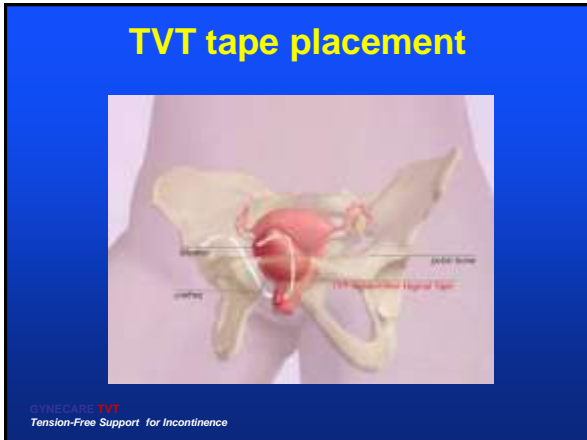
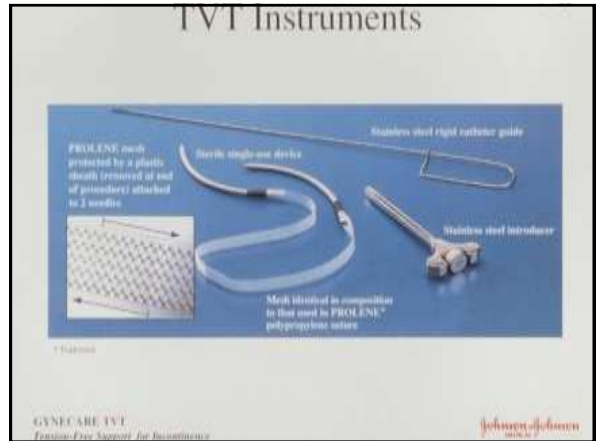
Will diagnose principally:

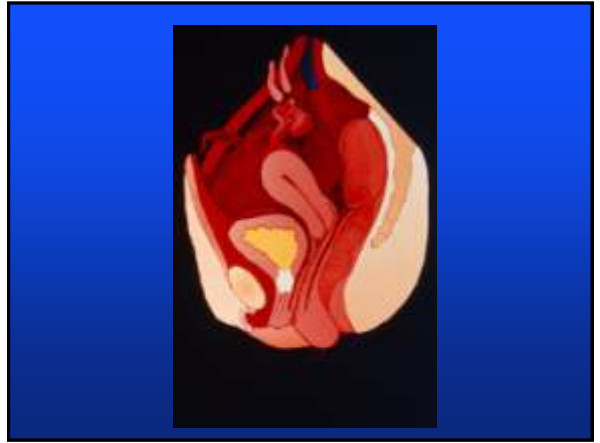
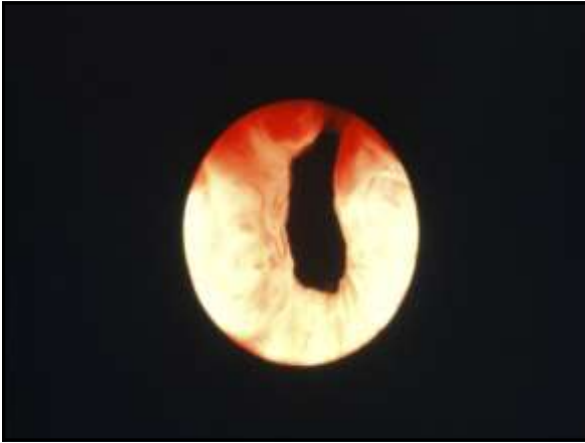
- Urodynamic stress incontinence and type
- Detrusor overactivity
- Voiding dysfunction

A diagnosis of urodynamic stress incontinence with bladder neck hypermobility is made. What would be the most appropriate treatment now?

1. Advise her that she needs to lose 30kg or more before any surgery could be done.
2. Ask her to consider a device to support the bladder neck.
3. Offer an open colposuspension.
4. Offer a TVT with appropriate counselling.
5. Offer a macroplastique injection







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Gynecare TVT

- TVT was first described by Ulmsten and colleagues in 1996
- The aim was to develop a
 - simple, minimally invasive
 - day only procedure
 - using local or regional anaesthesia to correct stress incontinence
- TVT utilises the concept of mid urethral support without tension
- To date more than a million women have been treated with TVT
- Continued high success rate between 86% (Nilsson) and 92% (Meschia)

Stanton S. Int Urogynecol J (2001)

GYNECARE TVT
Tension-Free Support for Incontinence

Tape Adjustment

- Tape adjustment made with Metzenbaum scissors between tape and urethra
- Gynecare tape is positioned [here](#)

 A diagram showing a pair of hands using Metzenbaum scissors to adjust the TVT tape. The scissors are positioned between the tape and the urethra to trim or adjust the length of the tape.

Final Tape Position

- Remove plastic sheaths one side at a time with counter pressure applied with Metzenbaum scissors.

 A diagram showing the final position of the TVT tape. The plastic sheaths have been removed, and the tape is now fully in place, supporting the mid-urethra.

TVT - Possible Complications

Significant voiding difficulty	5/130	3.8%
Infection	2/130	1.5%
UTI	8/130	6.2%
Haematoma	2/130	1.5%
Bladder Perforation	5/130	3.8%
Urge Symptoms	5/130	3.8%
Tape Rejection	0/130	0%

(Prof C Nilsson, Helsinki University)

If safe, this (TVT) will be the most exciting and innovative procedure for stress incontinence in the last 40 years, and one which now clearly rivals the colposuspension.

(Stuart Stanton 2001)

The Golden Mean

Almost every progress in our art is apt to become at first disproportionately exaggerated then equally disproportionately deprecated and finally to emerge often enough, if at all, with considerable diminution of its original prestige.

(Felix Simon 1901)

Towards Effective Management of Incontinence



Cochrane
Incontinence Review
Group



57 Reviews and 18 Protocols (2008)

Conclusions

- Urinary incontinence is a common and distressing problem for women
- Primary care management involves history, examination, simple tests and predominately conservative and in some cases, pharmacological treatment
- 70% effective

Conclusions continued...

- Specialist management involves urodynamics
- Newer self-fixing suburethral slings are highly effective for urodynamic stress incontinence



*Tell you what I dread most -
Incontinence.*