Assessment Of The Older Patient with Incontinence.

Frankie Bates

Urinary Incontinence (UI):

UI Is the involuntary loss of urine sufficient to be a problem

Prevalence:

* Affects 4 million globally
* Affects 3.3 million Canadians
* Costs an estimated $2.6 billion/year
* Direct cost $1 billion
* Indirect costs $1.6 billion

(International Continence Society)
(The Canadian Continence Foundation)

Impact on older adults

Morbidity:

- Sleep deprivation, falls, sexual dysfunction
- Depression, social withdrawal
- UTI's Cellulitis, pressure ulcers

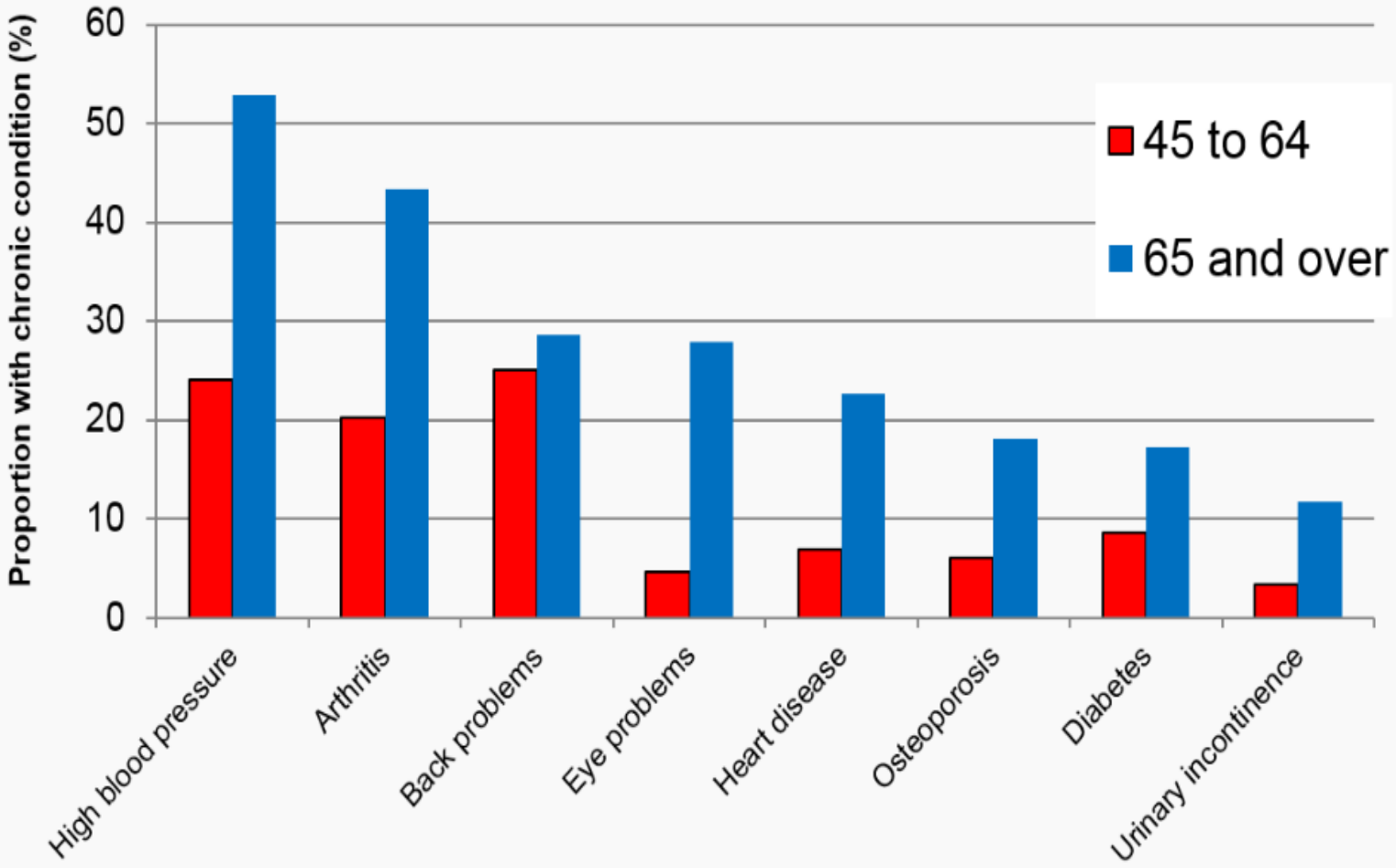
- Is the most common reason for transfer of older patient's from acute care to long term care rather than discharge home.

(Kurlowicz,Clinical Guidelines 2002)
(Midthun SJ Urologic Nursing 2004)
(Grebling 2005) (Karram Siddiighi 2008)

Chronic conditions

Eight chronic conditions are prevalent in more than 10% of the population aged 65 and over

Proportion of individuals 45 years of age and over with selected chronic conditions, Canada, 2008/2009



Source: Statistics Canada, Canadian Community Health Survey (2008/2009)—Healthy Aging.

Prevalence Of Any UI in Women By Age Group

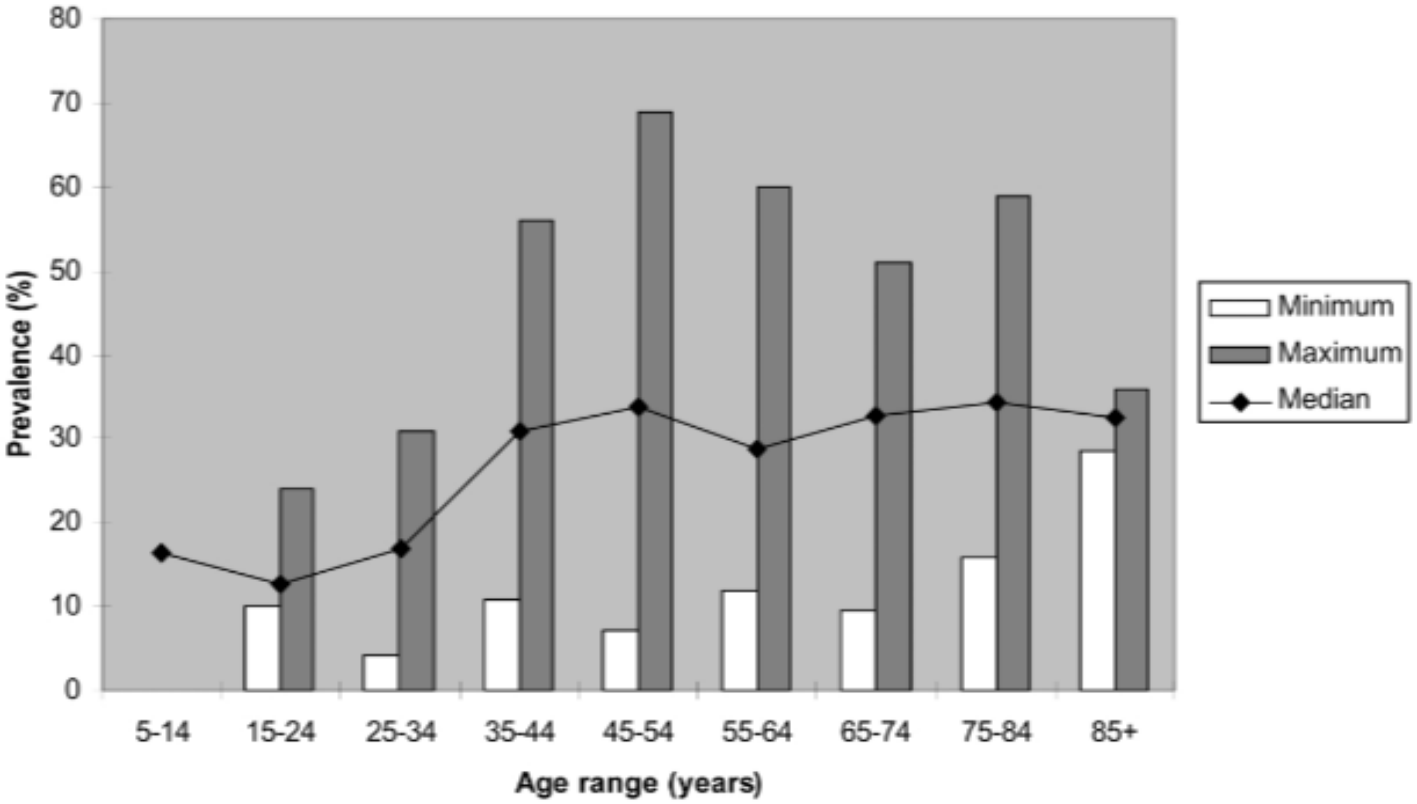


Fig. 1. Prevalence of any UI in women by age group (data from 13 studies).

Assessment is Vital !

* A working knowledge of the diagnosis and treatment of the various types of urinary incontinence is fundamental to the care of patients.
* History (Can be subjective, helps elicit most likely diagnosis)
* Use listening skills, show empathy and understanding
* Try to measure the degree of bother
* (Qualitative Problem , not a Quantitative problem)
* U/A and culture ONLY if patient is symptomatic

MartinJL; Williams KS et al. 2006. Krhut J; Zachoval R; et al 2014. Avery K; Donovan J; Culligan PJ et al Am Fam Physician. 2000 Dec 1;62(11):2433-2444.
Abrams e tal ICIQ 2004. Kobwitaya K; Bunyavejchevin S; et al 2015. Ryhammer AM Djurhuus JC et al. 1999. Wagner TH; Patrick DL et al 1996, ICI 2015

Never Assume!

Age related changes that may predispose older persons to UI:

* Detrusor over activity
* Benign Prostatic Hyperplasia (BPH)
* Atrophic vaginitis and urethritis
* Decreased ability to postpone voiding
* Decreased total bladder capacity
* Decreased detrusor contractility
* Increased post void residual

(Nordling 2002)
(Madersbacher et al 1998)
(Lovatsis , Drutz 1998)

Requirements of Continence

* Aware of urge to void (dementia..)
* Able to get to the bathroom (restraints..)
* Able to suppress the urge until you reach the bathroom
* Able to void when you get there – sympathetic/parasympathetic
* Dexterity (stroke; zippers; hip protectors…)
* Motivation to stay dry

* Resnick NM et al Nuer/ Urodyn 1995
* Incont frail Eld pers. ICI 6th Edition 2016
* Pfisterer MH et al. J Am Ger Soc 2006

Assessment

* **Validated Tools (ICIQ, Kings Health, The Questionnaire for female Urinary Incontinence Diagnosis (QUID)etc.**
* Post void residual
* Bladder diary 3 to 5 days
* Pad usage, type and amount
* Hx and Physical (includes pelvic exam)
* Bowel History (Frequency and Type)
* Fluid intake (Type and Amount)
* Functional ability
* Med/ Surg / Obstet Hx

* Stothers L Freidman Curr Urol Rep 2011
* Wyman JF Am J Nurs 2003
* Incont 6th Ed ICI 2016
* Goode PS et al Incont Old Women JAMA 2010

Initial number

ICIQ-FLUTS 08/04

CONFIDENTIAL

DAY MONTH YEAR

Today's date

Urinary symptoms

Many people experience urinary symptoms some of the time. We are trying to find out how many people experience urinary symptoms, and how much they bother them. We would be grateful if you could answer the following questions, thinking about how you have been, on average, over the PAST FOUR WEEKS.

1. Please write in your date of birth:

DAY MONTH YEAR

2a. During the night, how many times do you have to get up to urinate, on average?

none	0
one	1
two	2
three	3
four or more	4

2b. How much does this bother you?

Please ring a number between 0 (not at all) and 10 (a great deal)

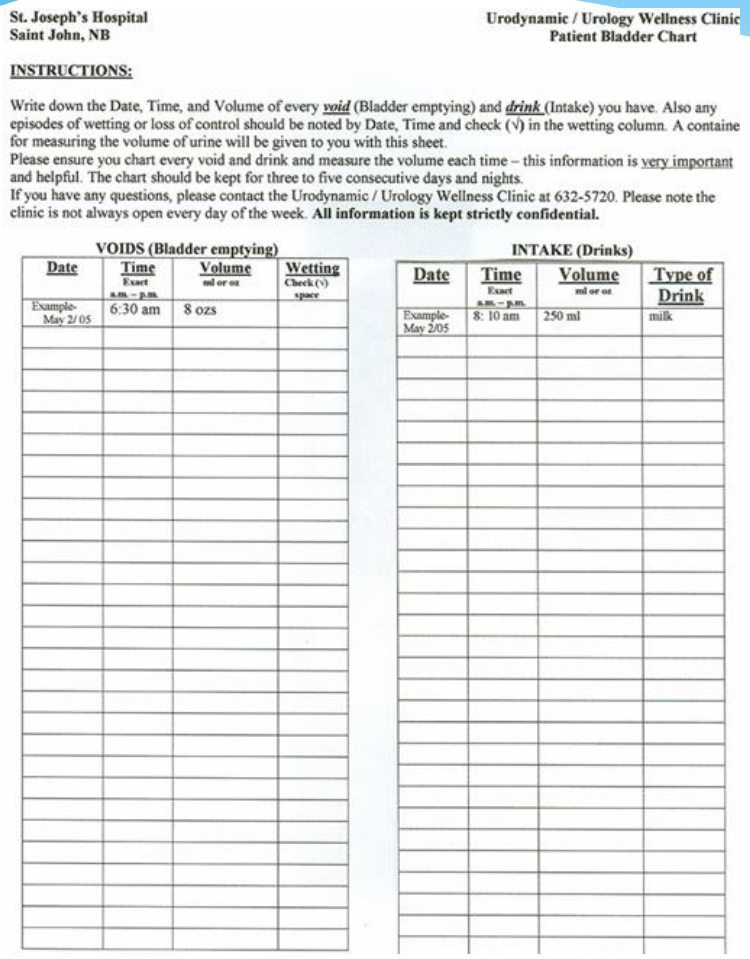
0 1 2 3 4 5 6 7 8 9 **10**

not at all — a great deal

3a. Do you have a sudden need to rush to the toilet to urinate?

Assessment Tools

3 day diary (ICI 6th edition 2016)



St. Joseph's Hospital
Saint John, NB

Urodynamic / Urology Wellness Clinic
Patient Bladder Chart

INSTRUCTIONS:

Write down the Date, Time, and Volume of every ***void*** (Bladder emptying) and ***drink*** (Intake) you have. Also any episodes of wetting or loss of control should be noted by Date, Time and check (√) in the wetting column. A containe for measuring the volume of urine will be given to you with this sheet.
Please ensure you chart every void and drink and measure the volume each time – this information is very important and helpful. The chart should be kept for three to five consecutive days and nights.
If you have any questions, please contact the Urodynamic / Urology Wellness Clinic at 632-5720. Please note the clinic is not always open every day of the week. **All information is kept strictly confidential.**

VOIDS (Bladder emptying)

Date	Time Exact a.m. – p.m.	Volume ml or oz	Wetting Check (√) space
Example- May 2/ 05	6:30 am	8 ozs	

INTAKE (Drinks)

Date	Time Exact a.m. – p.m.	Volume ml or oz	Type of Drink
Example- May 2/05	8: 10 am	250 ml	milk

References :

1. Bright, E., Drake, M., & Abrams, P. (2011). **Urinary diaries:** Evidence for the development and validation of diary content, format, and duration. Neurourology and Urodynamics, 30(3), 348-352.

2. Honjo, H., Kawauchi, A., Ukimura, O., Nakao, M., Kitakoji, H., & Miki, T. (2009). **Analysis of bladder diary** with urinary perception to assess overactive bladder symptoms in community-dwelling women. Neurourology and Urodynamics, 28(8), 982-985.

3. Jeyaseelan, S.M., Roe, B.H., & Oldham, J.A. (2000). The use of **frequency/volume charts** to assess urinary incontinence. Physical Therapy Reviews, 5(3), 141- 146.

4. Tincello, D.G., Williams, K.S., Joshi, M., Assassa, R.P., & Abrams, K.R. (2007). **Urinary diaries:** A comparison of data collected for three days versus seven days. Obstetrics & Gynecology, 109(2), 277-280.

5. Nurourol Urodyn 2015

Evaluation of Bowel Function

Bristol Stool Chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces. **Entirely Liquid**

TWO WEEK BOWEL CHART

Please fill in the chart every day using the numbers from the Bristol Stool Scale chart for the type of stool (bowel movement). If no stool is passed then just leave the chart empty for that day.

	Type & amount of stool (i.e. large, med., small)	Type & amount of stool (i.e. large, med., small)	Type & amount of stool (i.e. large, med., small)
MONDAY			
TUESDAY			
WEDNESDAY			
THURSDAY			
FRIDAY			
SATURDAY			
SUNDAY			
MONDAY			
TUESDAY			
WEDNESDAY			
THURSDAY			
FRIDAY			
SATURDAY			
SUNDAY			

Bristol Stool Scale:

The seven types of stool are:

- Type 1: Separate hard lumps, like nuts (hard to pass)
- Type 2: Sausage-shaped, but lumpy
- Type 3: Like a sausage but with cracks on its surface
- Type 4: Like a sausage or snake, smooth and soft
- Type 5: Soft blobs with clear cut edges (passed easily)
- Type 6: Fluffy pieces with ragged edges, a mushy stool
- Type 7: Watery, no solid pieces. **Entirely liquid**

Assessment Continued

* Post void residual
* Bladder diary 3 to 5 days
* Pad usage, type and amount
* Hx and Physical (includes pelvic exam)
* Bowel History (Frequency and Type)
* Fluid intake (Type and Amount)
* Functional ability
* Med/ Surg / Obstet Hx

Stothers L Freidman Curr Urol Rep 2011
Wyman JF Am J Nurs 2003
Incont 6th Ed ICI 2016
Goode PS et al Incont Old Women JAMA 2010

Identify Contributing Factors

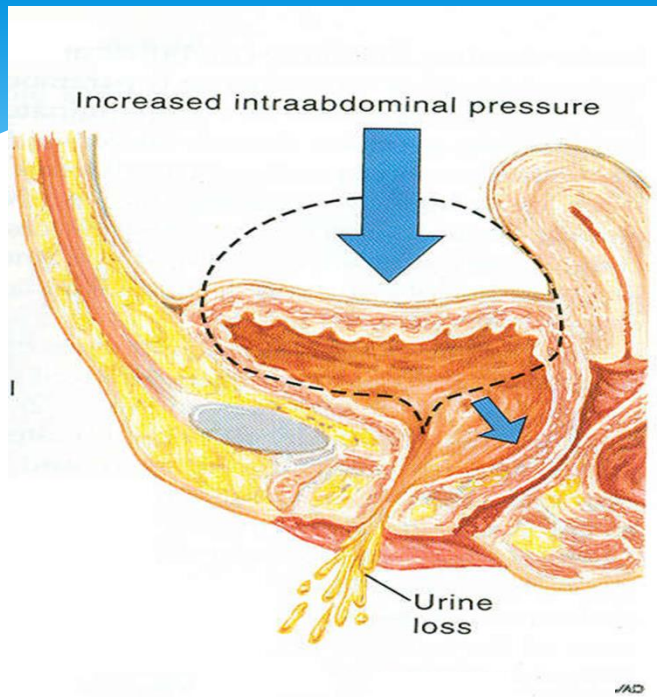
* Mobility issues
* Reduced cognitive awareness
* Constipation
* Fluid Intake; Caffeine intake
* Excessive weight : (UI 26% less likely if slim and active)
* Smoking (chronic cough)
* Previous Pregnancies, deliveries
* Underlying medical issues/medications
* Recurrent UTI
* Environmental barriers

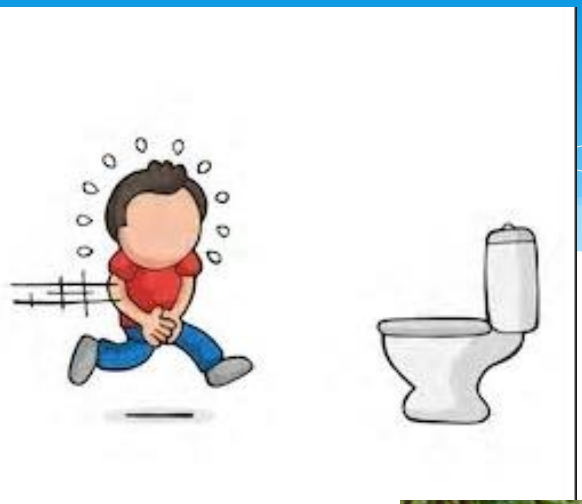
Das RN; grimmer-Sommers KA; 2012 Liang CC; Wu MP; et al 2013 Vissers D; Neels H et al. 2014
Domoulin C et el . ICI 6th Edition 2016

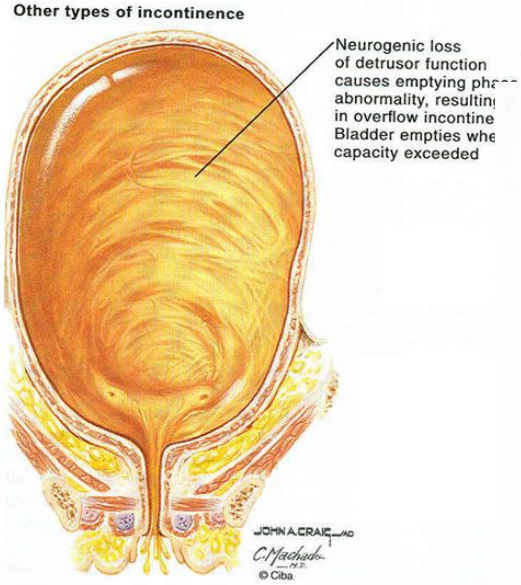
Voiding History

* Weak Urinary Stream
* Intermittent Stream (Staccato flow)
* Straining to void
* Feeling of incomplete emptying
* Prolonged void
* Post void dribble
* Hesitancy
* Spraying
* Sit to void vs Hover ?

Staskin Castro D, Robinson D et el. ICI Tokyo 2016


Increased intraabdominal pressure
Urine loss




Other types of incontinence
Neurogenic loss
of detrusor function
causes emptying pha
abnormality, resultin
in overflow incontine
Bladder empties whe
capacity exceeded
JOHN A. CRAIG, M.D.
C. Machado
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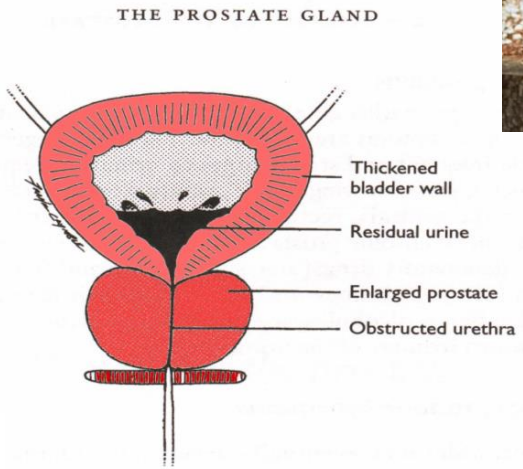
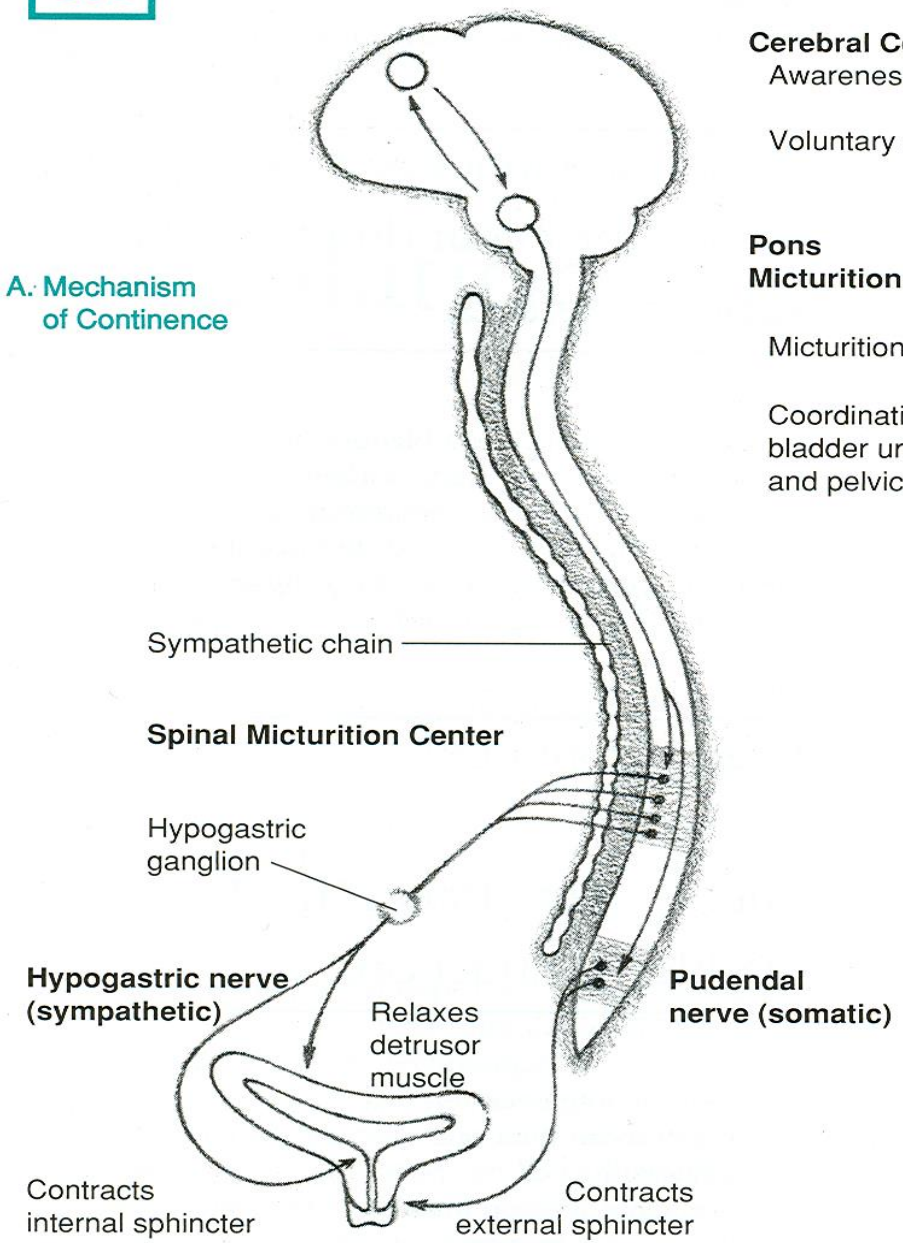
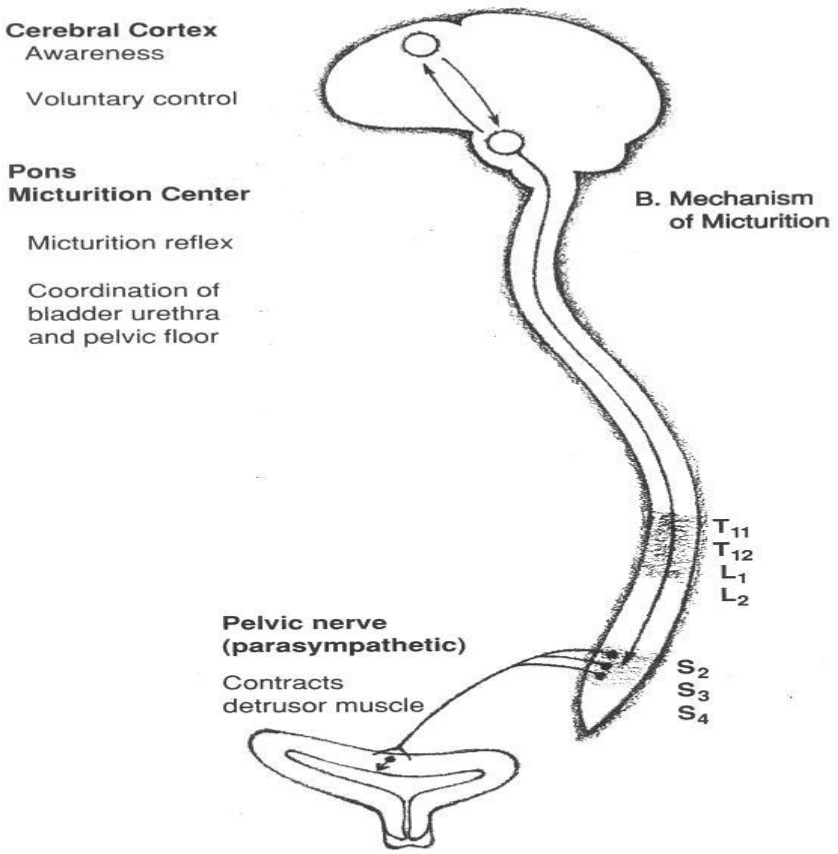

THE PROSTATE GLAND
Thickened
bladder wall
Residual urine
Enlarged prostate
Obstructed urethra

FIGURE 3.4

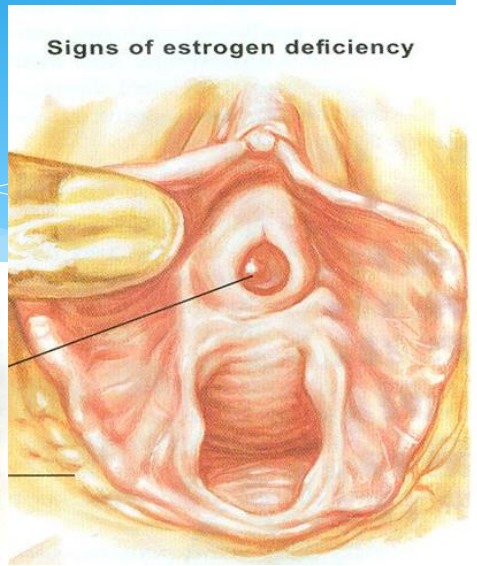
A. Mechanism of Continence
B. Mechanism of Micturition

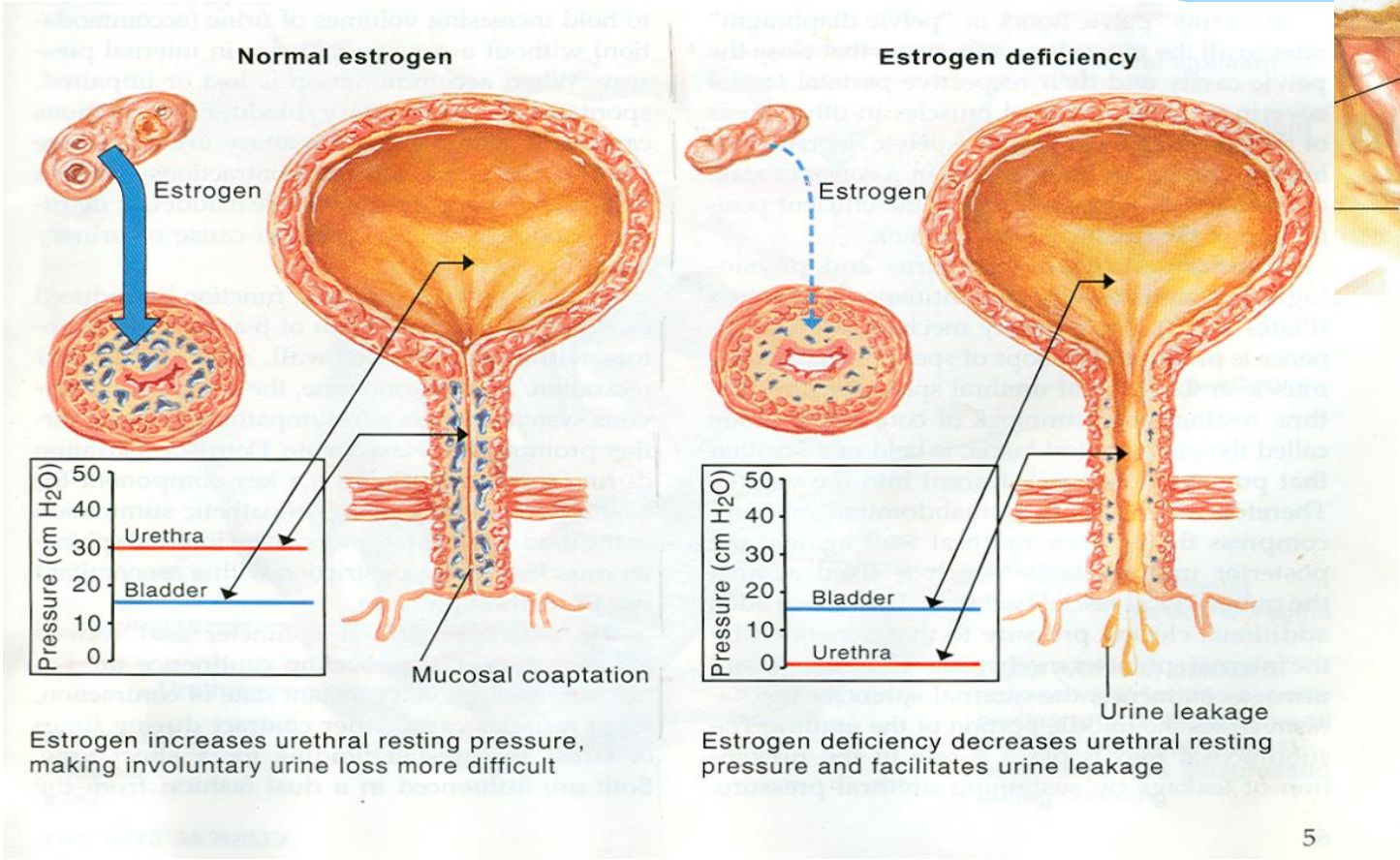



Cerebral Cortex
Awareness
Voluntary control
Pons
Micturition Center
Micturition reflex
Coordination of bladder urethra and pelvic floor
B. Mechanism of Micturition
T11
T12
L1
L2
S2
S3
S4
Pelvic nerve (parasympathetic)
Contracts detrusor muscle

Assess for Atrophy

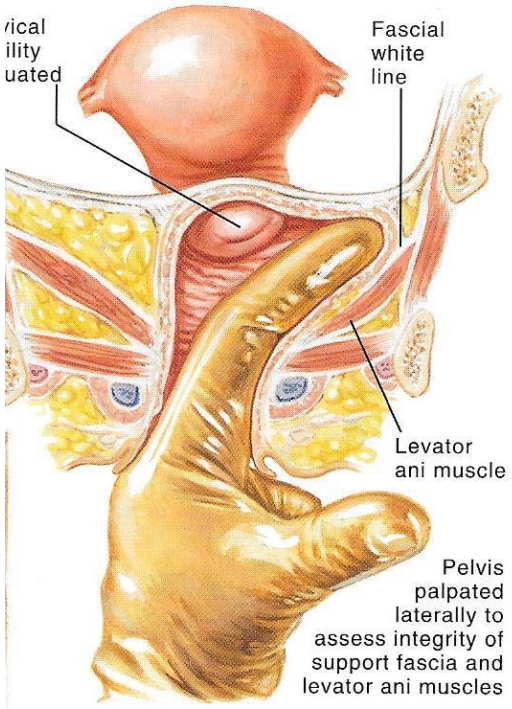
Permission Clinical Symposia 1996
Cochrane Review. Cody et al 2012
Jiang et al 2016 Rahn DD et el. Int Urogyn J 2015
Cody JD et el Cochrane Review 2009
JOGC Vol 36; 9 @014

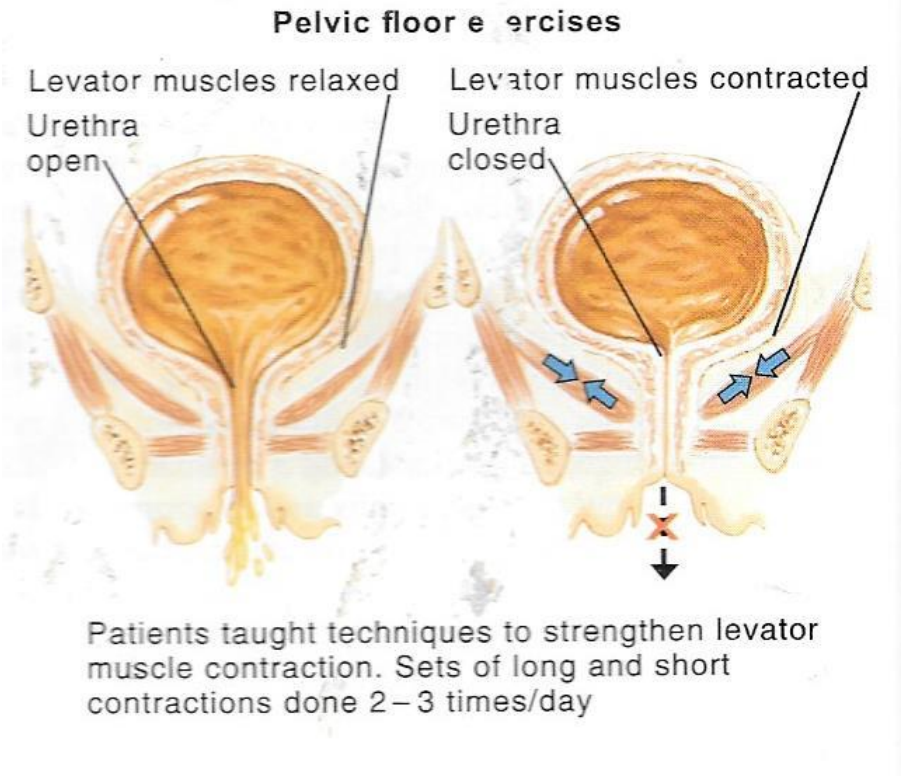




Assessing the Pelvic Floor Muscle

Domoulin C et el . ICI 6th Edition 2016
Nappi et al Revive 2016





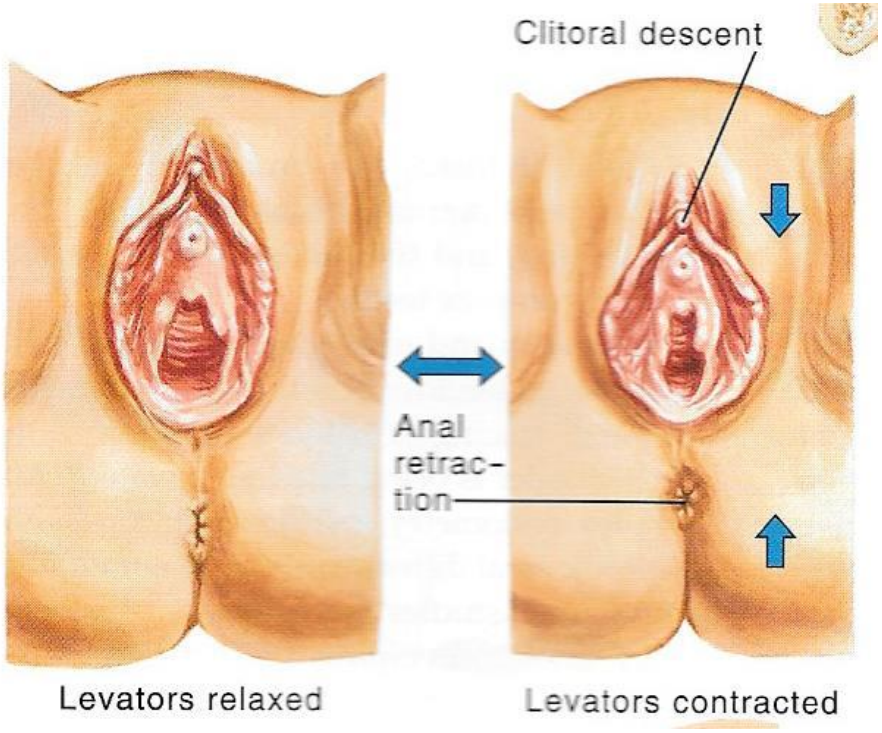
Assessing the Pelvic Floor

Laycock J Clinic Eval PF Springer. ICI 2016

Bo K, Sherburn M. Kegel AH J Obstet Gyn 1948 Bates F Urol NurJ 2003

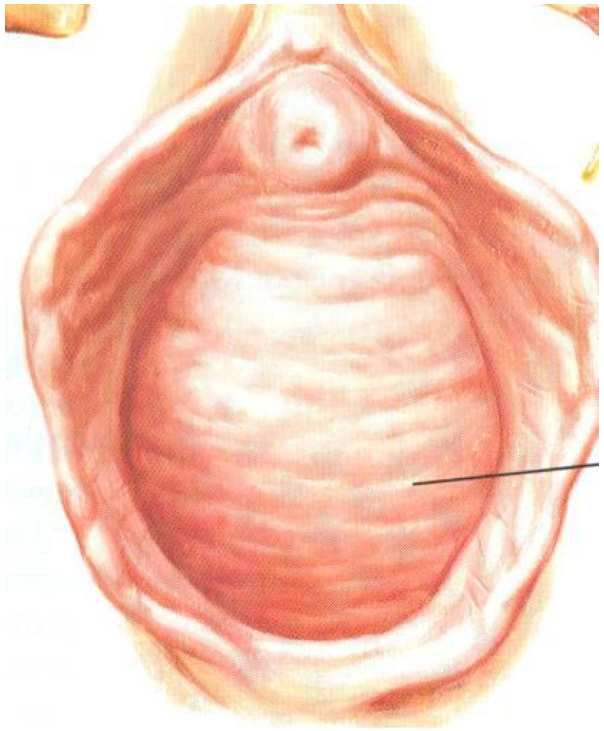
DEGREE OF FORCE	MODIFIED OXFORD SCALE
0	Lack of muscle response
1	Flicker of non-sustained contraction
2	Presence of low intensity, but sustained, contraction
3	Moderate contraction, felt like an increase in intravaginal pressure, which compresses the fingers of the examiner with small cranial elevation of the vaginal wall
4	Satisfactory contraction, compressing the fingers of the examiner with elevation of the vaginal wall towards the pubic symphysis
5	Strong contraction, firm compression of the examiner's fingers with positive movement towards the pubic symphysis.

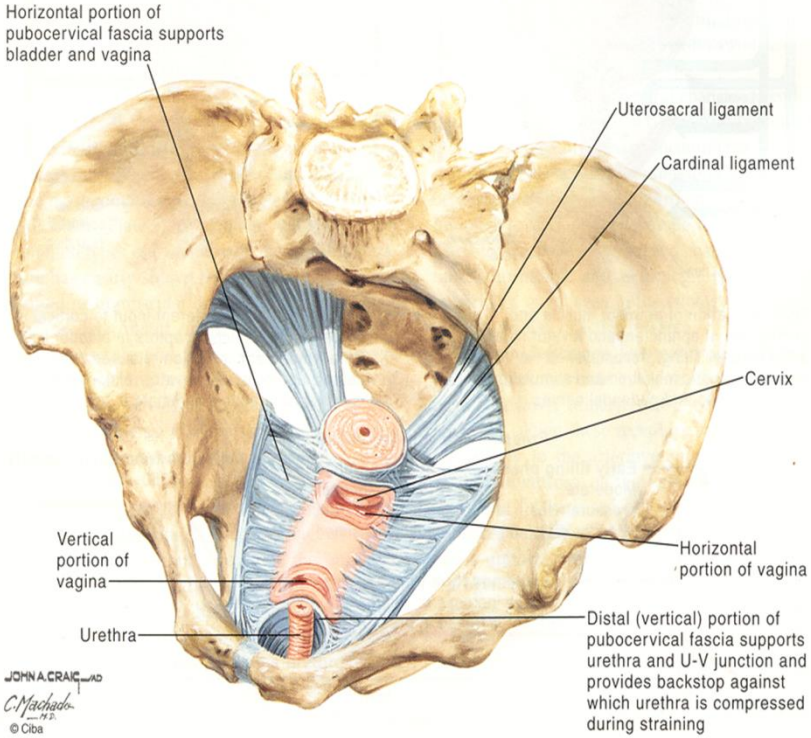
FIGURe 1 - Scale of pelvic floor muscle strength[3,9]



Cystocele Grade 3

Permission Clinical Symposia 1996





Assessing Degree of Leaking. Which Product, Freq of Change, etc.

Groutz A, Blavais JG et al. J Urol 2000

Krhut J Zachhoval R et al Neurourol Urodyn 2014

Incont frail older pt 6th Ed ICI 2016

Du Moulin et al. 2009

Diseases & Disorders Associated with UI

- Stroke
- Delirium
- Dementia
- MS
- Parkinson's Disease
- Spinal Cord Injury
- Diabetes
- Anxiety disorders
- Depression
- Alcoholism
- Psychosis
- RA
- CHF
- COPD
- Constipation

You can make the Difference!

Ask your patients if they have symptoms of UI

Let them know it is not a natural consequence of childbirth or a normal part of ageing

Refer on to a specialist if you are not comfortable with full assessment techniques

Let them know they are not alone and that is always a manageable and treatable condition

Minassian VA, Drutz H et el. J Gyn Obst 2003

Questions / Discuusion