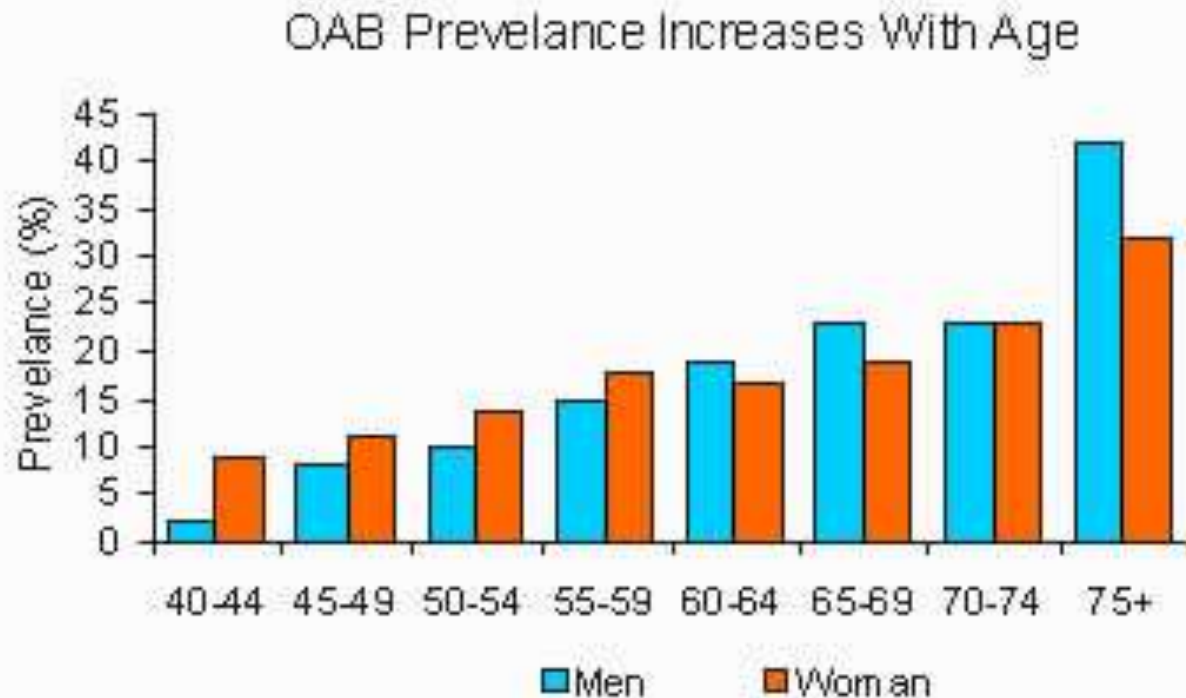


Lower Urinary Tract Symptoms in Men & Women

Daniel J Iewinshtein
Chief, Urologic Surgery CISSS Pierre Boucher

- Divuligation: Astellas, Sanofi, Jansen

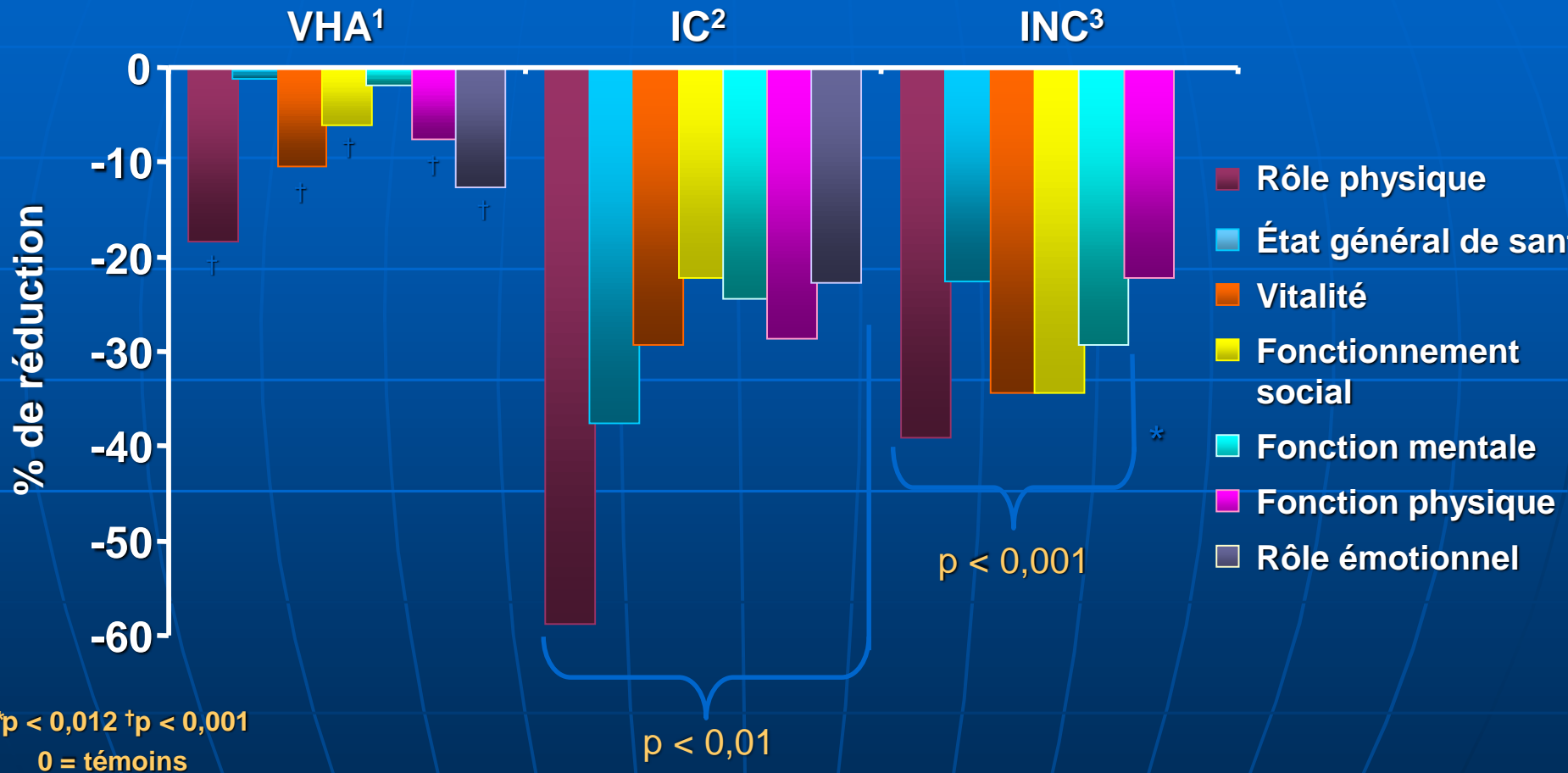
OAB Affects Younger and Older Adults⁹



Canadian Bladder Urinary Survey: Incontinence

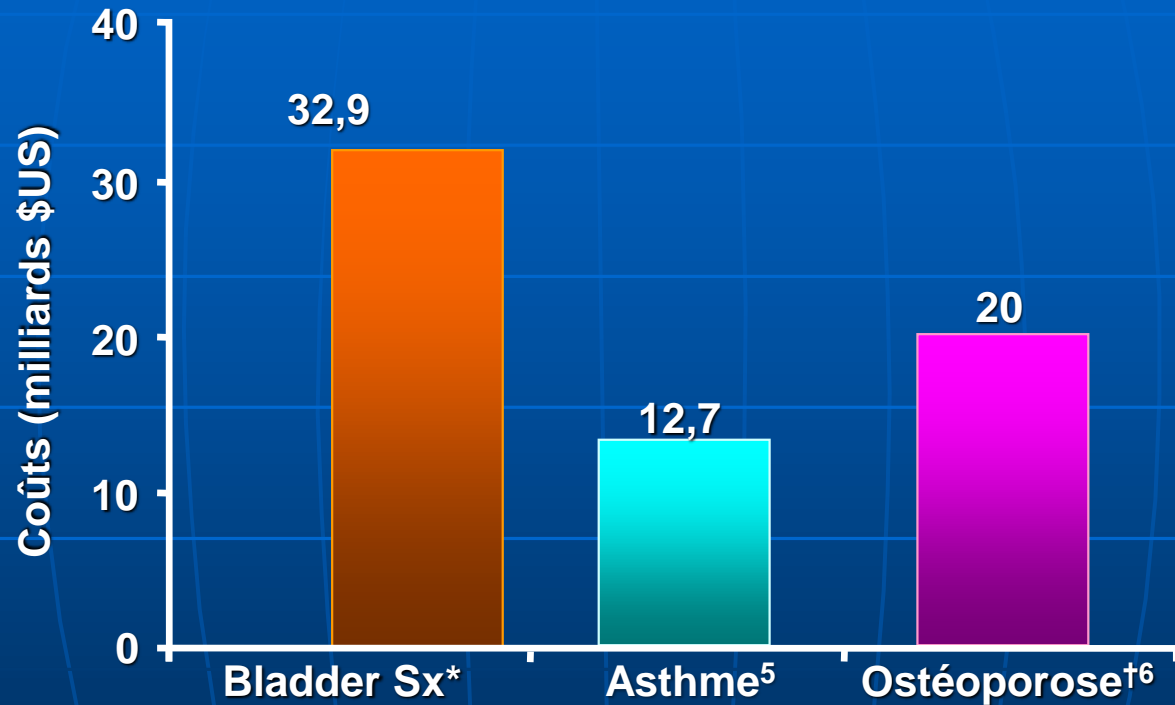
Age group (y)	Males			Females		
	N	any leakage	≥ once/day	N	any leakage	≥ once/day
All	476	15%	5%	524	29%	8%
18-40	205	9%	3%	213	16%	3%
41-64	200	16%	5%	239	33%	8%
65+	70	30%	11%	61	55%	20%

Quality of Life



1. O'Connor RM *et al. Pharmacoeconomics.* 1998;14:531-539.
2. Rothrock NE *et al. J Urol.* 2002;167:1763-1767.
3. Ellis AK, Verma S. *J Am Board Fam Pract.* 2000;13:392-397.

Cost



* Dont la VH¹, le SDPC (F²), le SDPC (M³) et les IVU⁴.

† Le calcul des coûts est surtout fondé sur les fractures de la hanche.

SDPC = syndrome douloureux pelvien chronique

1. Wagner TH, Hu T-W. *Urology*. 1998;51:355-361.

2. Mathias SD et al. *Obstet Gynecol*. 1996;87:321-327.

3. Calhoun EA et al. *J Urol*. 2001;165(suppl):25.

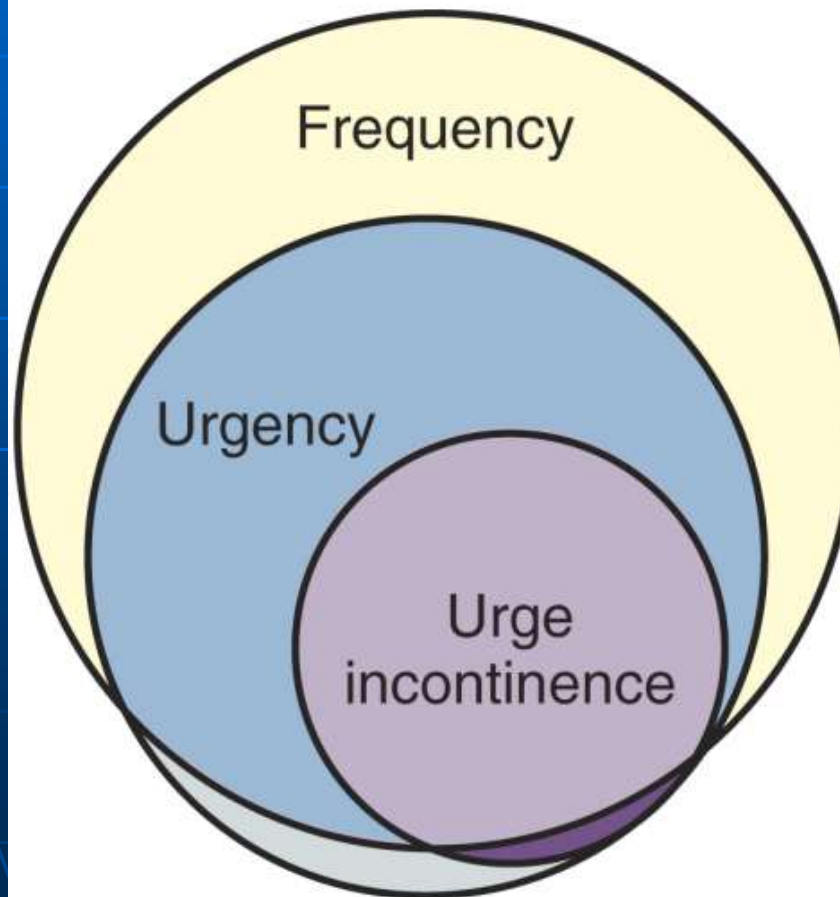
4. Foxman B. *Am J Med*. 2002;113(suppl 1A):5S-13S.

5. CDC. *MMWR Morb Mortal Wkly Rep*. 2001;50(32):682-686.

6. Lindsay R. *Am J Med*. 1995;98(suppl 2A):9S-11S.

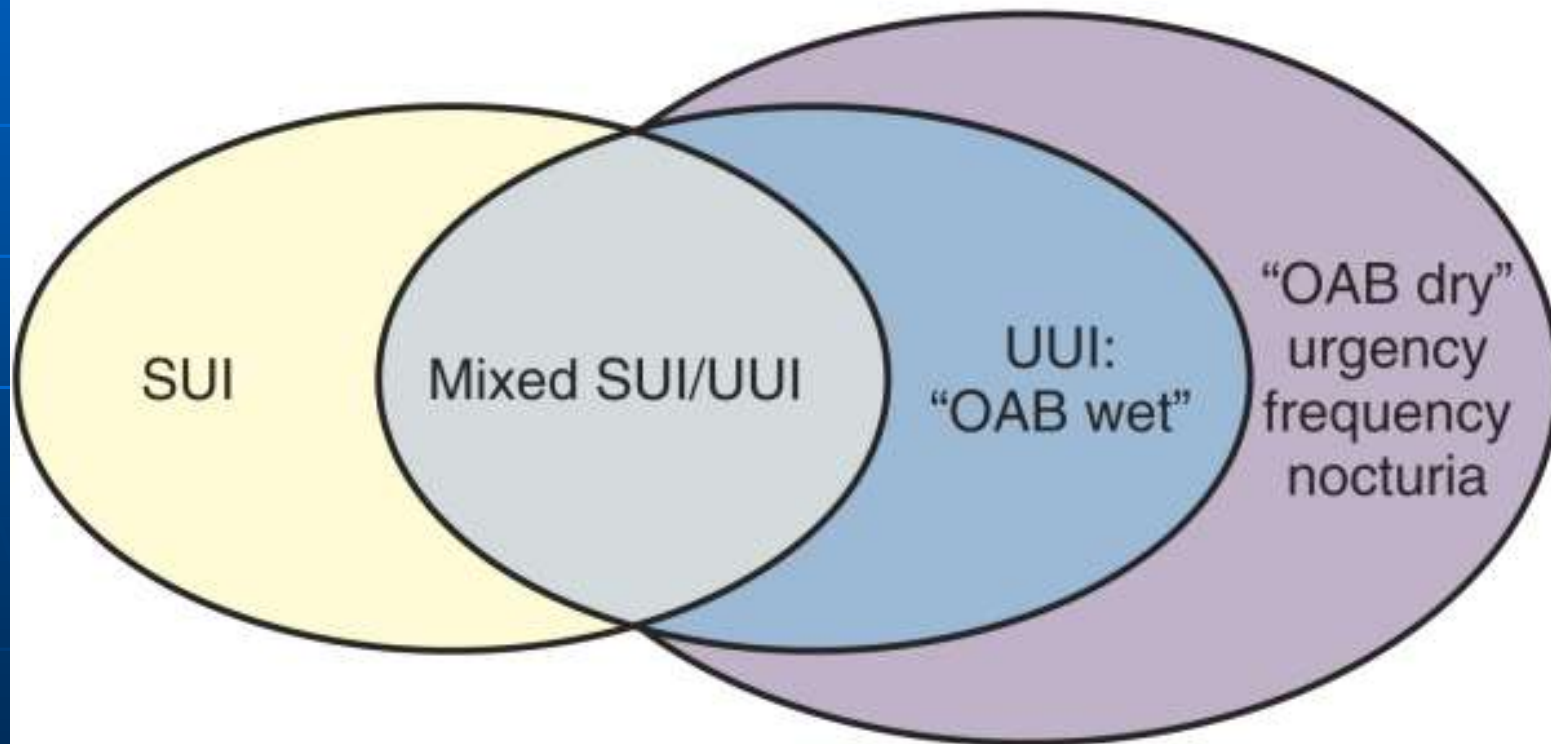
OAB: Definition

OVERACTIVE BLADDER
(SYMPTOMATIC DIAGNOSIS)



Urge vs. Stress Incontinence

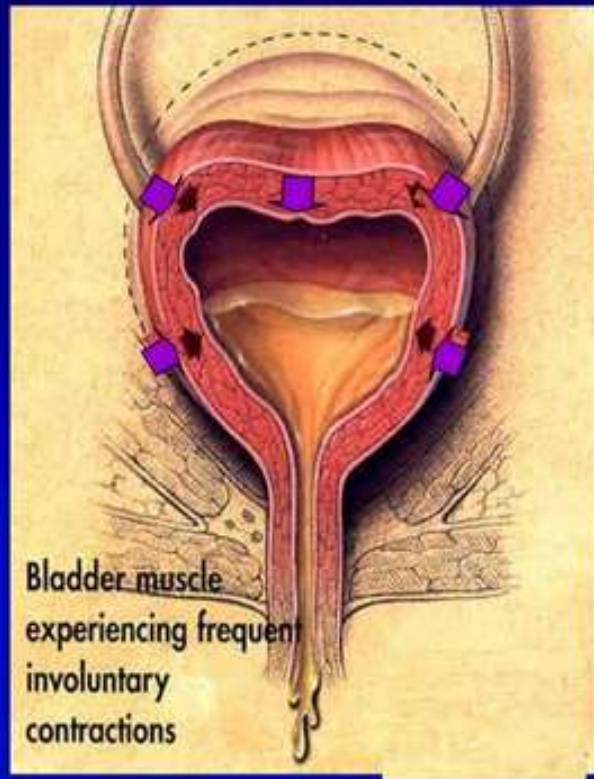
STORAGE SYMPTOMS AND INCONTINENCE



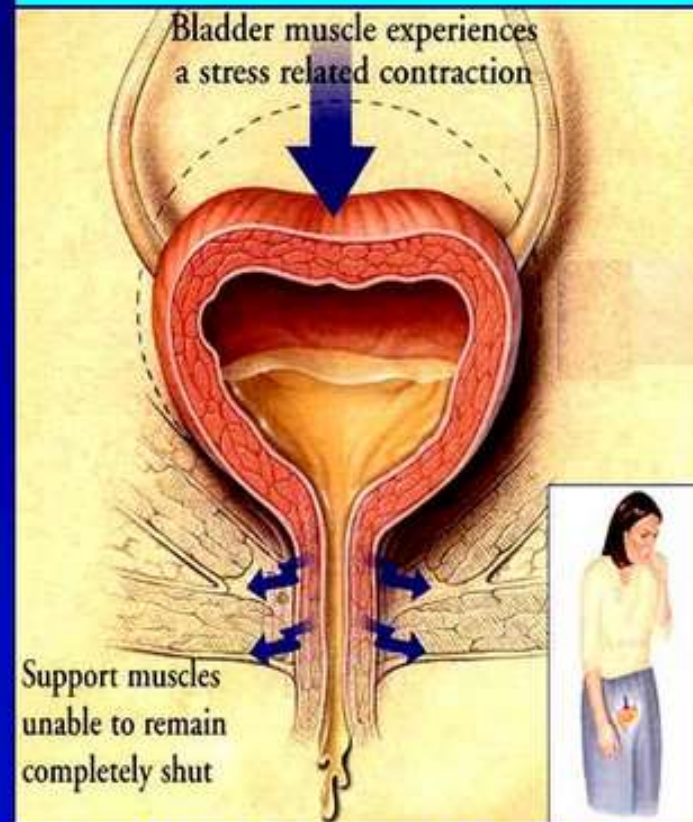
SUI: stress urinary incontinence
UUI: urge urinary incontinence

OAB vs SUI

OAB and UII



SUI



Fantl A, et al. *Urinary Incontinence in Adults: Acute and Chronic Management*. Clinical Practice Guidelines No. 2, 1996 Update. Rockville, MD: Agency for Health Care Policy and Research: March 1996. AHCPR publication 96-0682.

Case 1

- Female 55 YO
- Incontinent
- *Questionnaire?*

Evaluation

- Frequency?
- Urgency?
- Inc Effort?
- Urge inc?
- hematuria?
- Sx neuro?
- ATCD: HAT? kids?
- A + C urine/ journal

Dx?

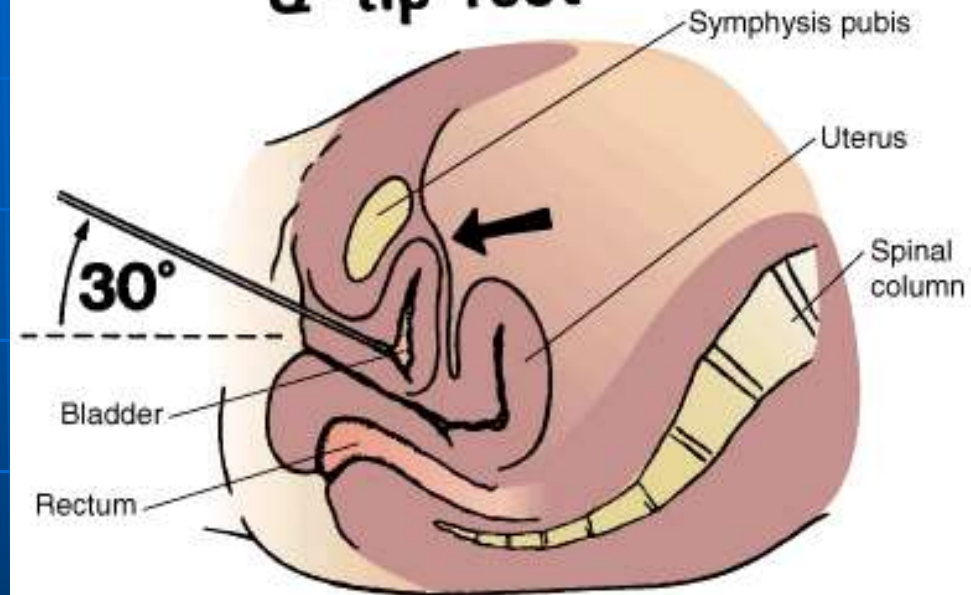
Evaluation: Cysto



Medscape®

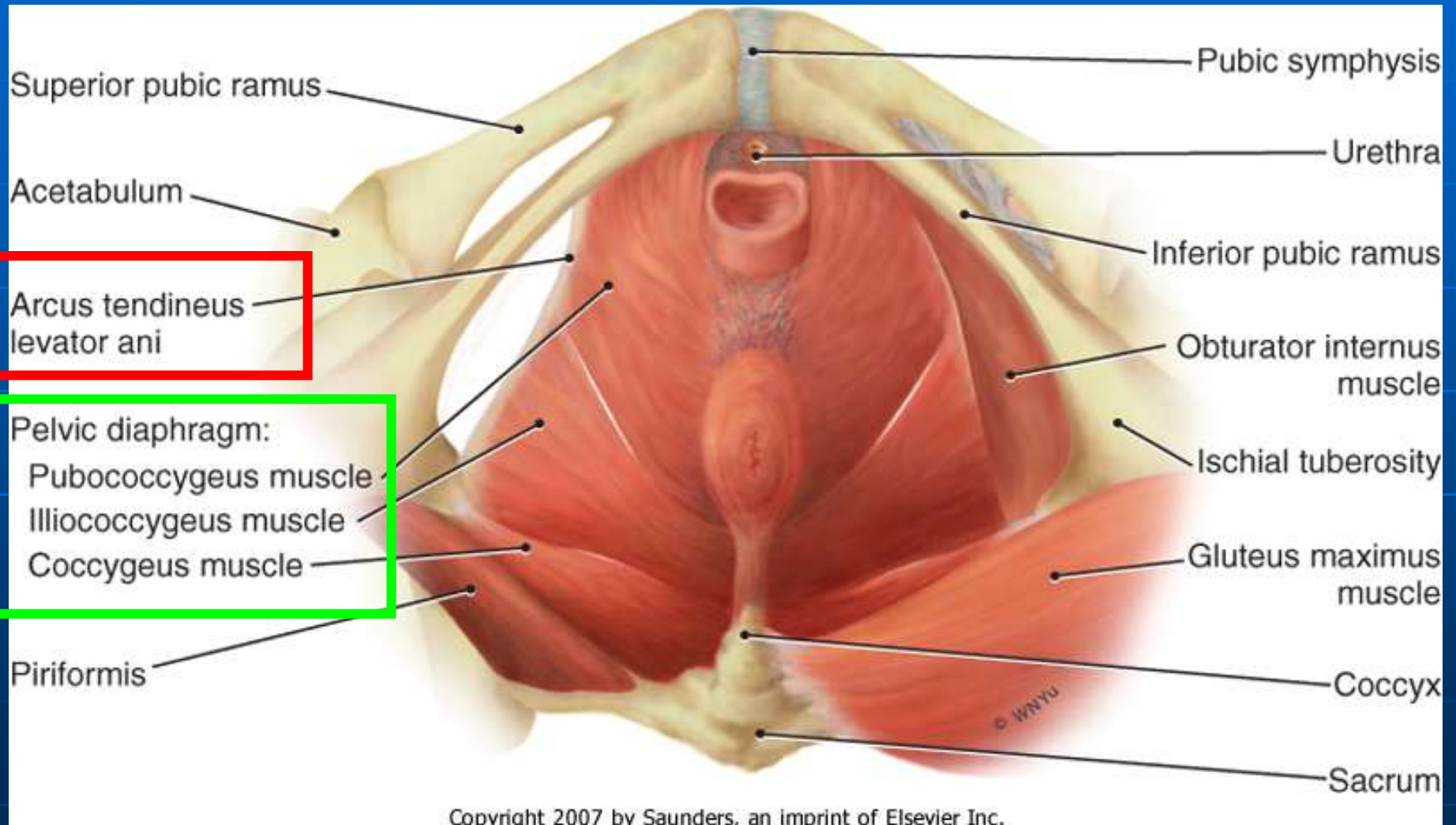
www.medscape.com

Q-tip Test

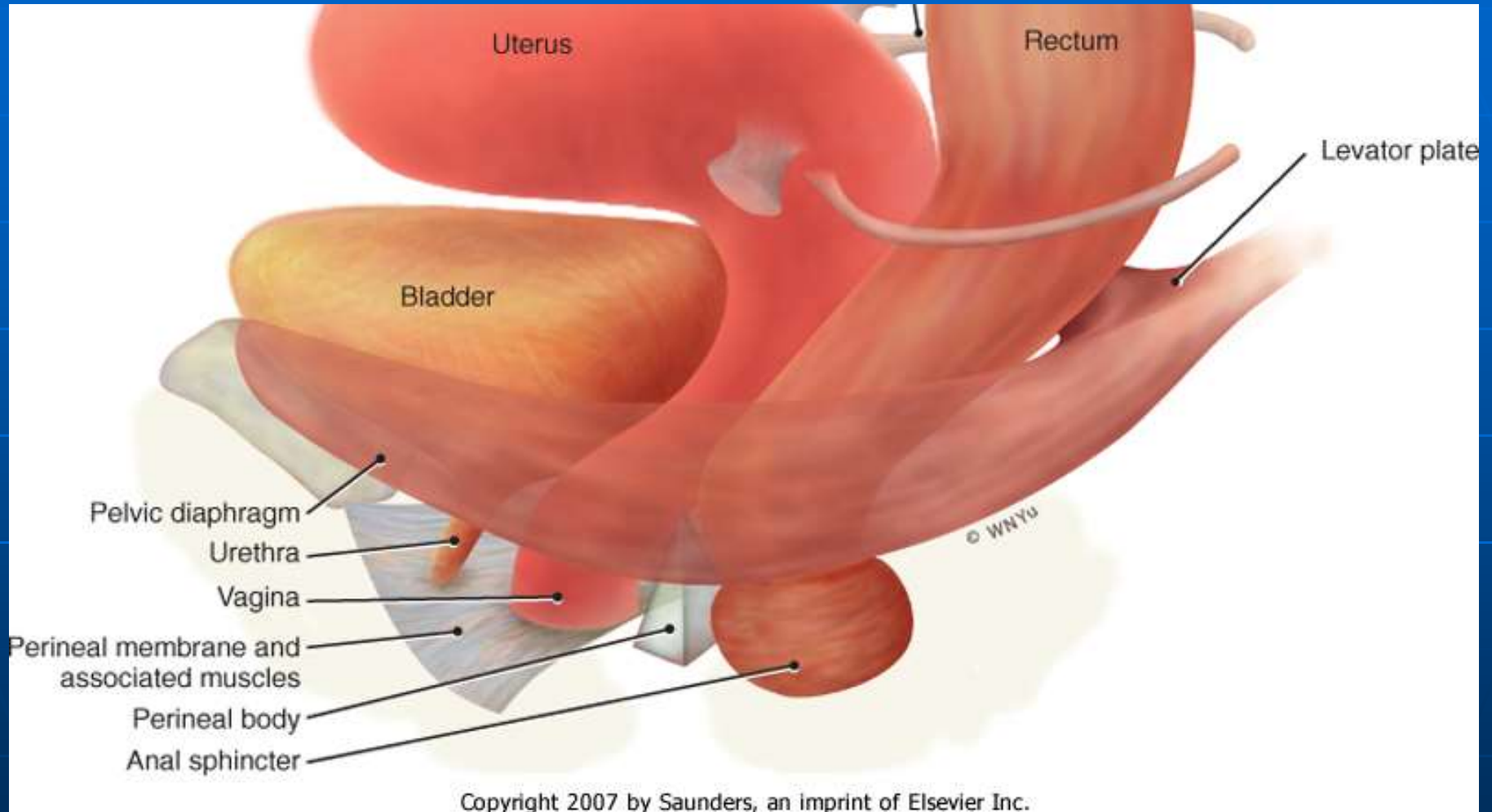


Source: Urol Nurs © 2008 Society of Urologic Nurses and Associates

Pelvic diaphragm: Post- delivery



POST HAT: no uterosacrals!



SUI: video fluoroscopy

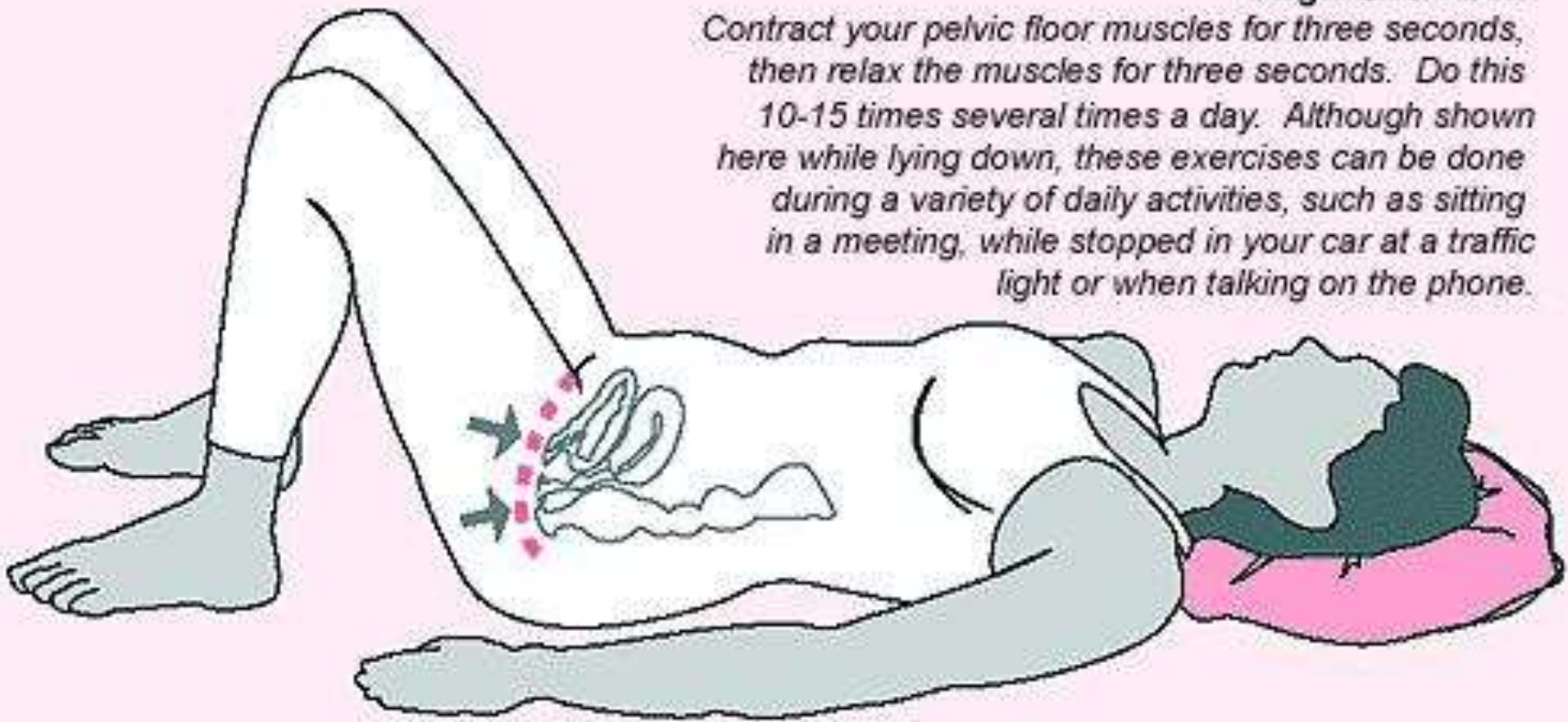


RX?

Kegel

Kegel Exercises:

Contract your pelvic floor muscles for three seconds, then relax the muscles for three seconds. Do this 10-15 times several times a day. Although shown here while lying down, these exercises can be done during a variety of daily activities, such as sitting in a meeting, while stopped in your car at a traffic light or when talking on the phone.

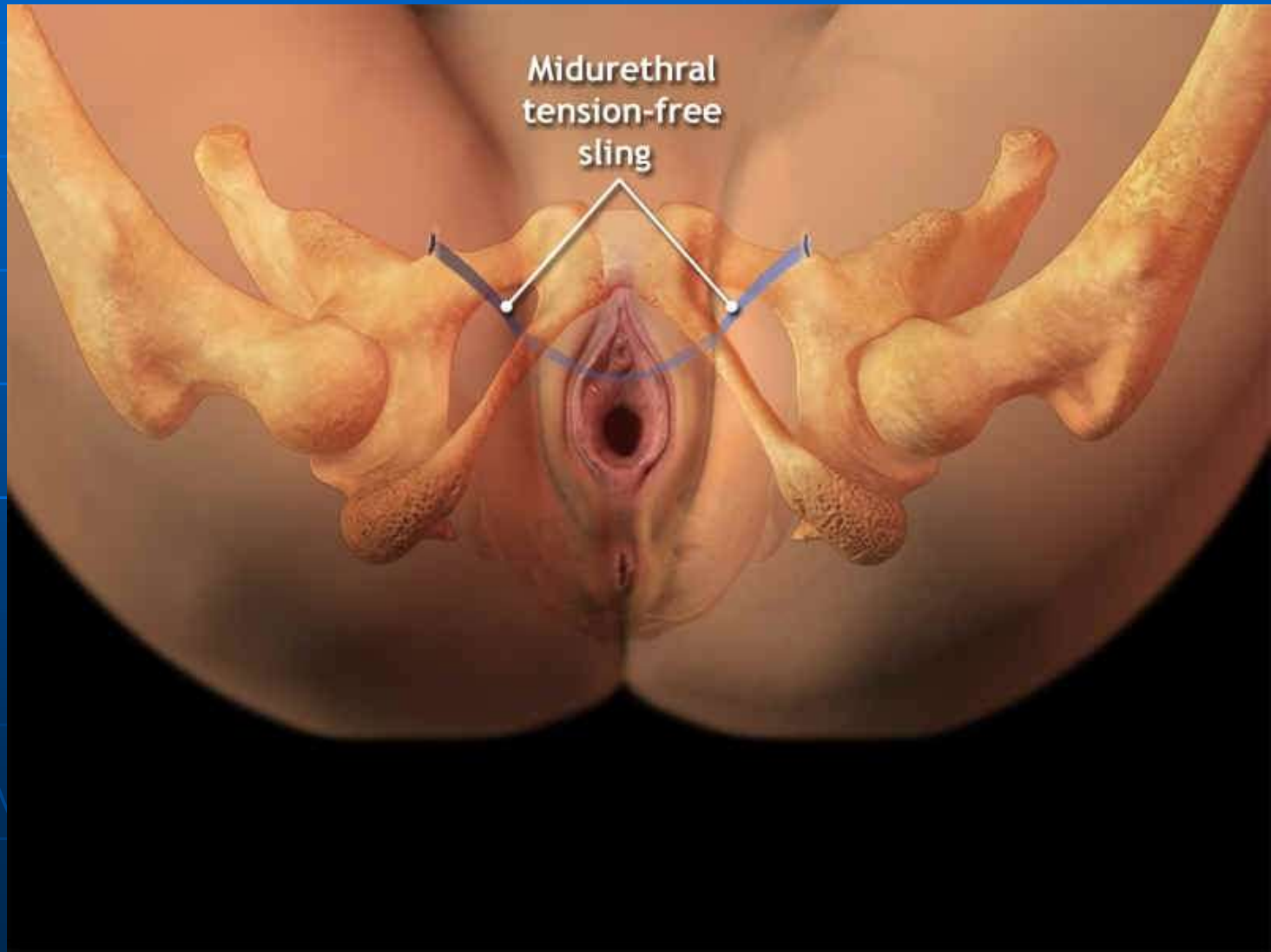


Biofeedback?

- Vaginal probe
- Cochrane review july 2011
- N=1583, 17 trials
- HR 0.75 (0.66-0.86, 95% CI)



Chirurgie: TVT-O

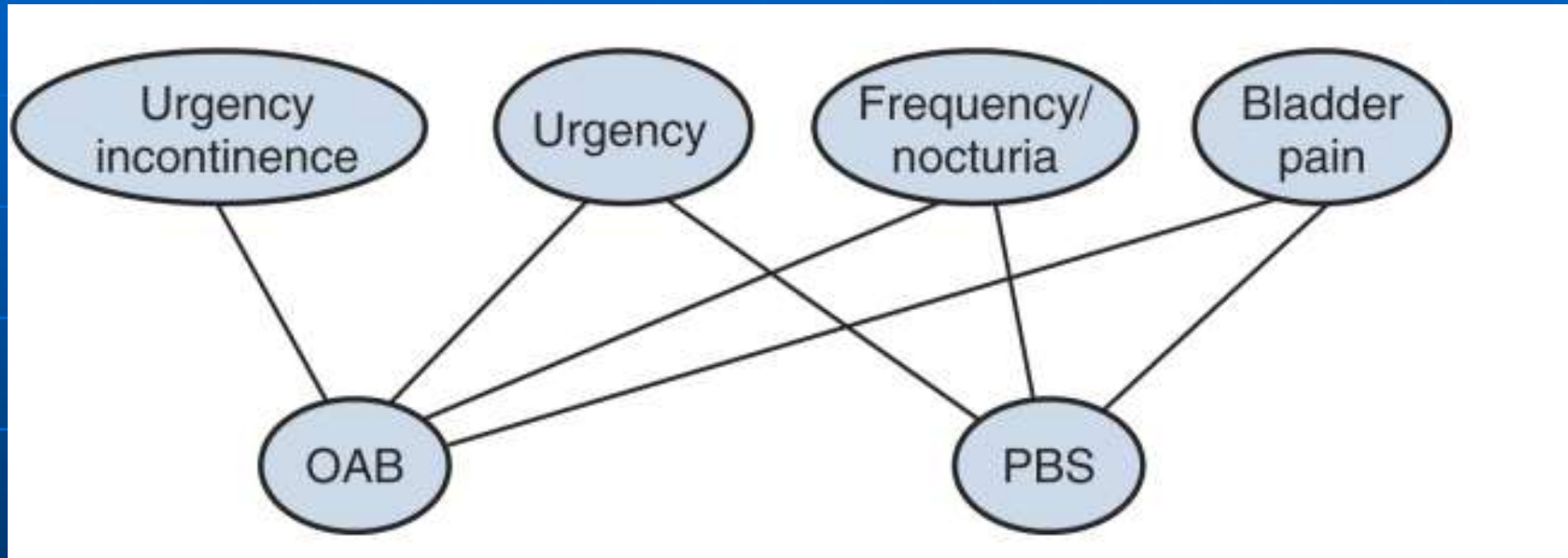


Case 2

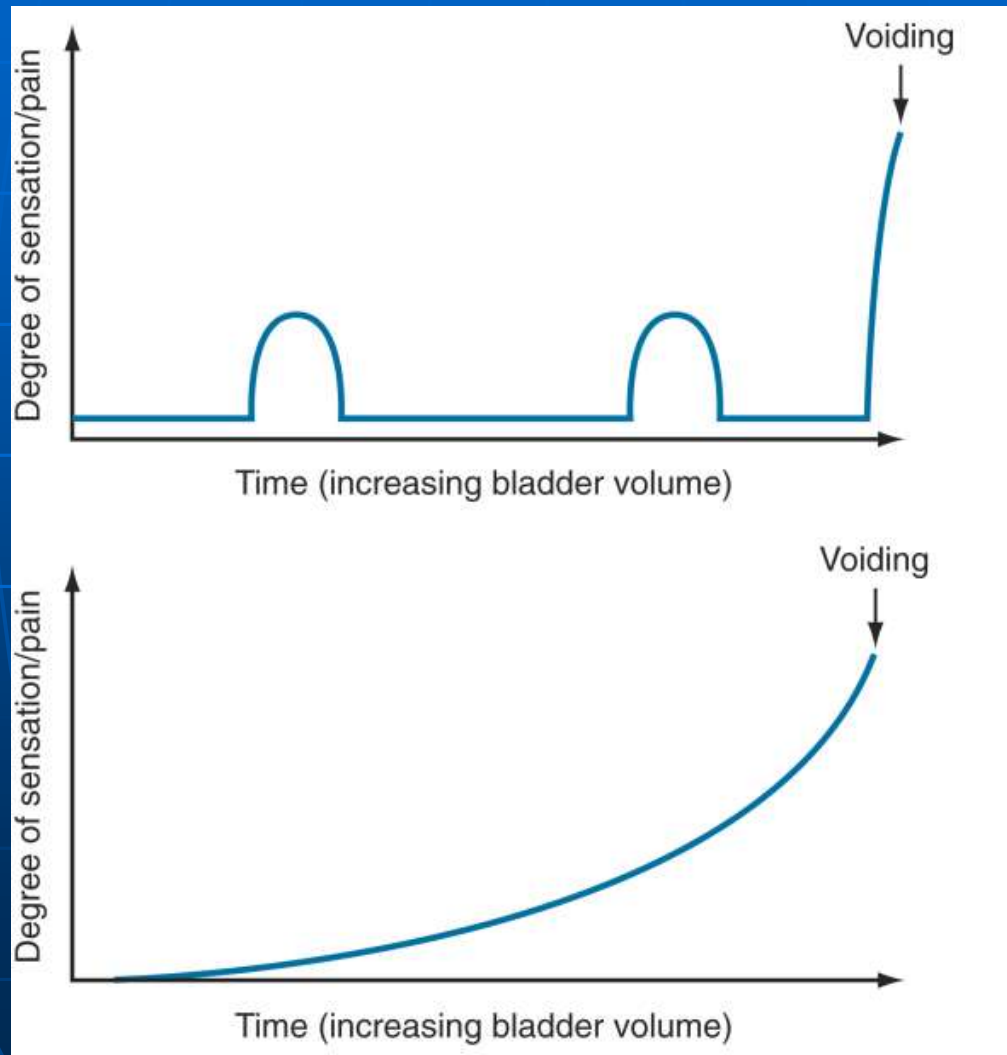
- Woman 45 YO
- Frequency
- Suprapubic pain ***important***
- ***Worse with certain foods***
- Pas d'incontinence
- ***Dx?***



OAB vs. interstitial cystitis



OAB vs. interstitial cystitis



IC: Treatment as per CUA guidelines 2016

- Re-assurance
 - Timed voiding
 - Stress management
 - Massage
- Oral:
 - amitryptiline 25-50 die (drowsy vomiting)
 - hydroxyzine
 - Elmiron 100 TID
- Intravesical
 - Dmso
 - Heparin
 - lidocaine

Case 3

- Femme 65 ans
- smoker
- Frequency/nycturia
- *Question cle?*

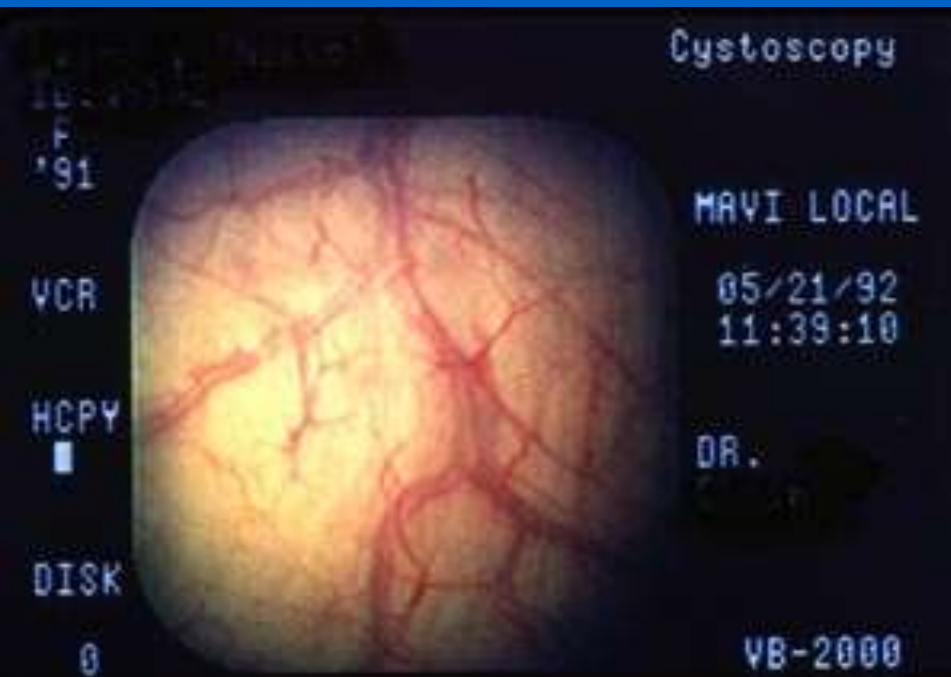


Evaluation

- Frequence?
- Urgence?
- Inc Effort?
- Inc d'urge?
- Sang?
- Sx neuro?
- ATCD: HAT? Enfants?
- A + C urine

Dx?

Symptomes de VHA mais...CIS



Case 4

- femme 65 ans
- Frequency/nycturia/incontinence
- Atcd stroke
- *Dx?*



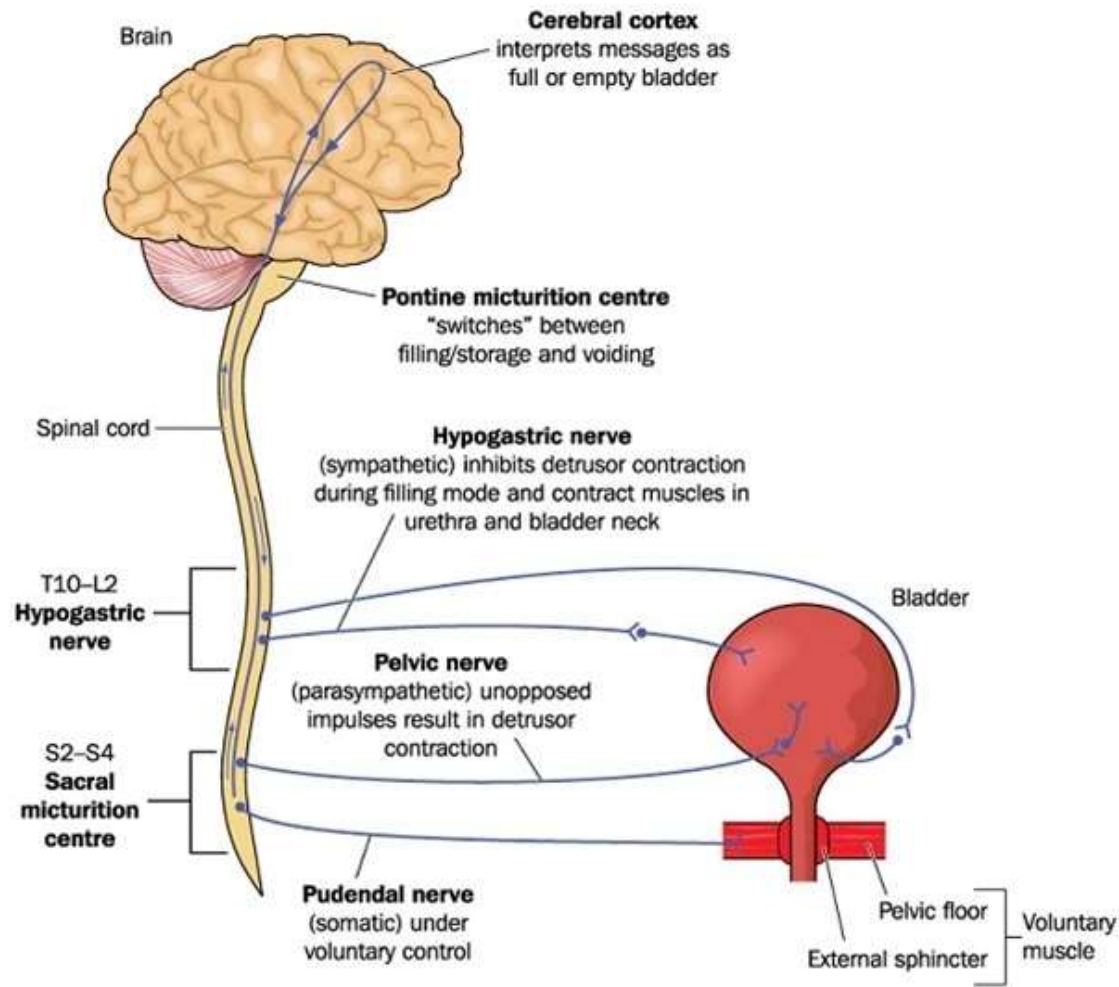
neurogenic bladder

Rx?

- Anti
cholinergic



Inhibition de miction: Enfant vs Adulte



Case

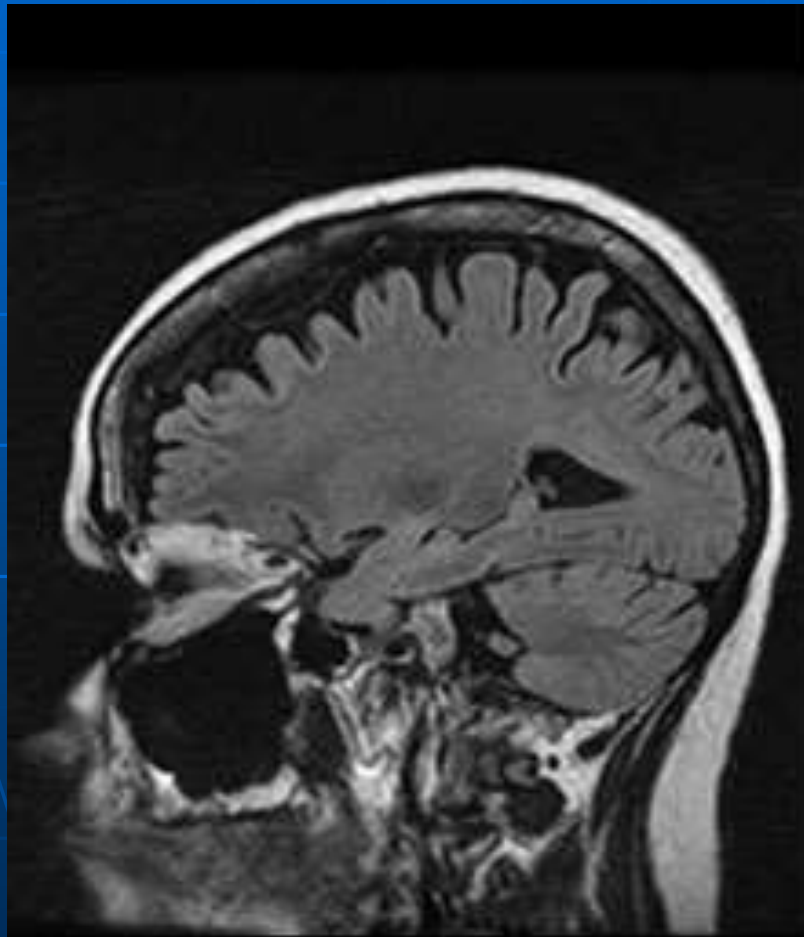
- Femme 35 ans
- Frequency/nycturia
- *Questionnaire?*

Evaluation

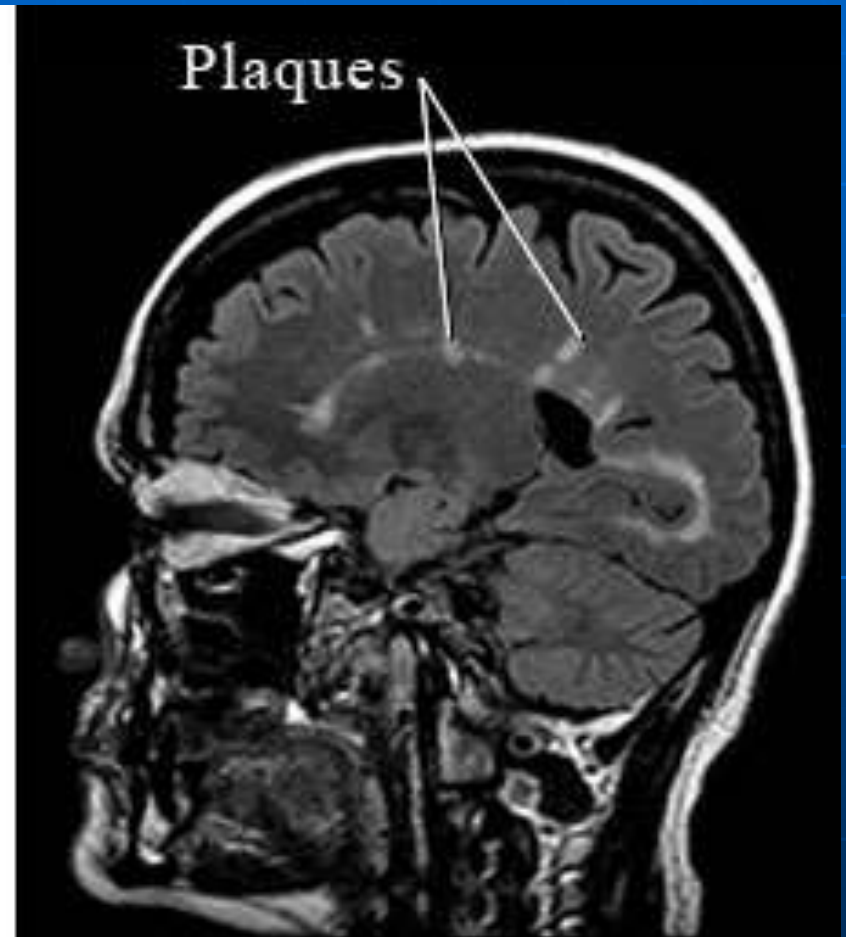
- Frequence?
- Urgence?
- Inc Effort?
- Inc d'urge?
- Sang?
- Sx neuro-gait, visual?
- ATCD: HAT? Enfants?
- A + C urine

Dx?

MS



Healthy brain



Brain with damage (lesions or plaques) caused by MS

Case

- Woman 55 YO
- Frequency/nycturia

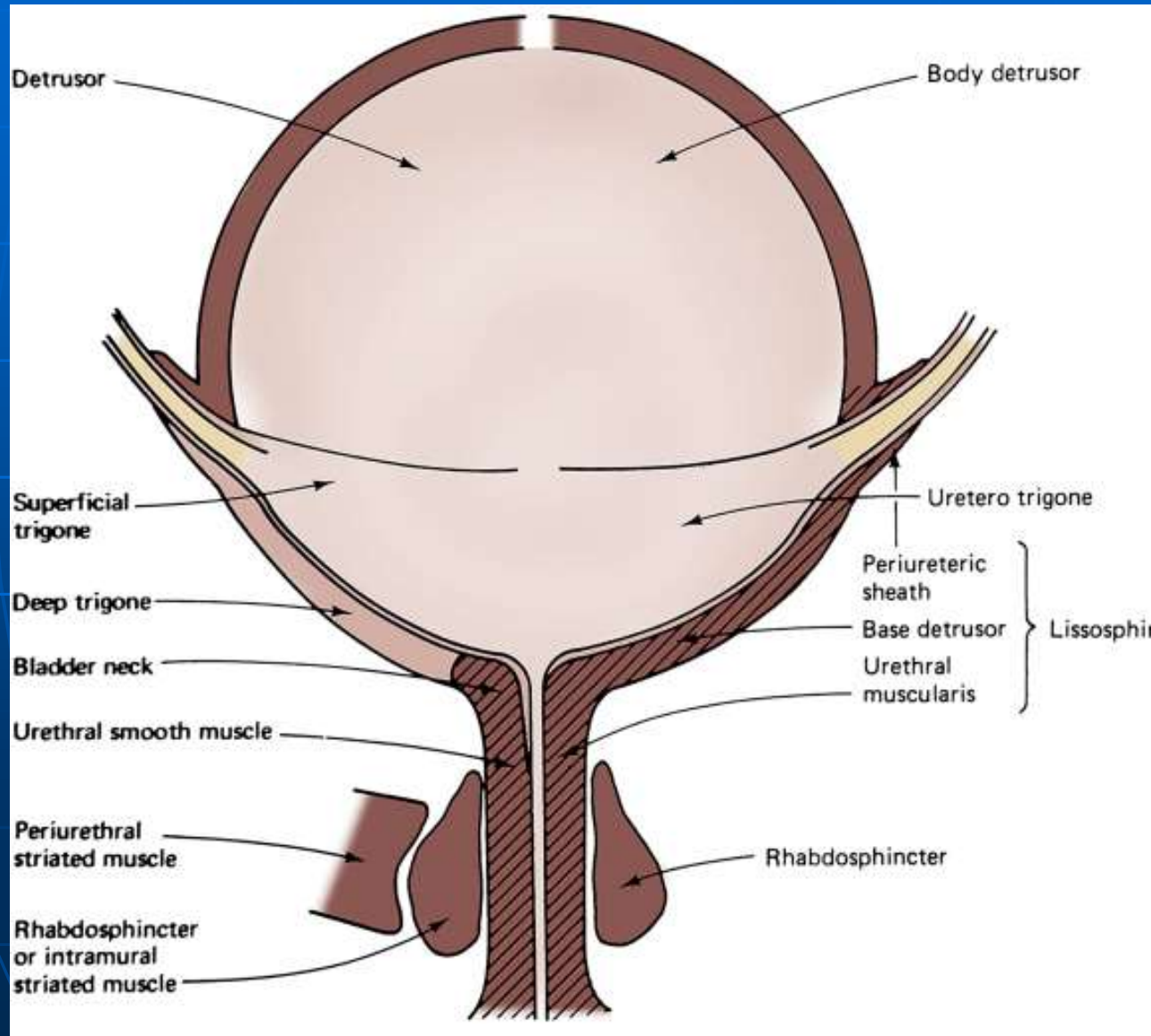


Evaluation

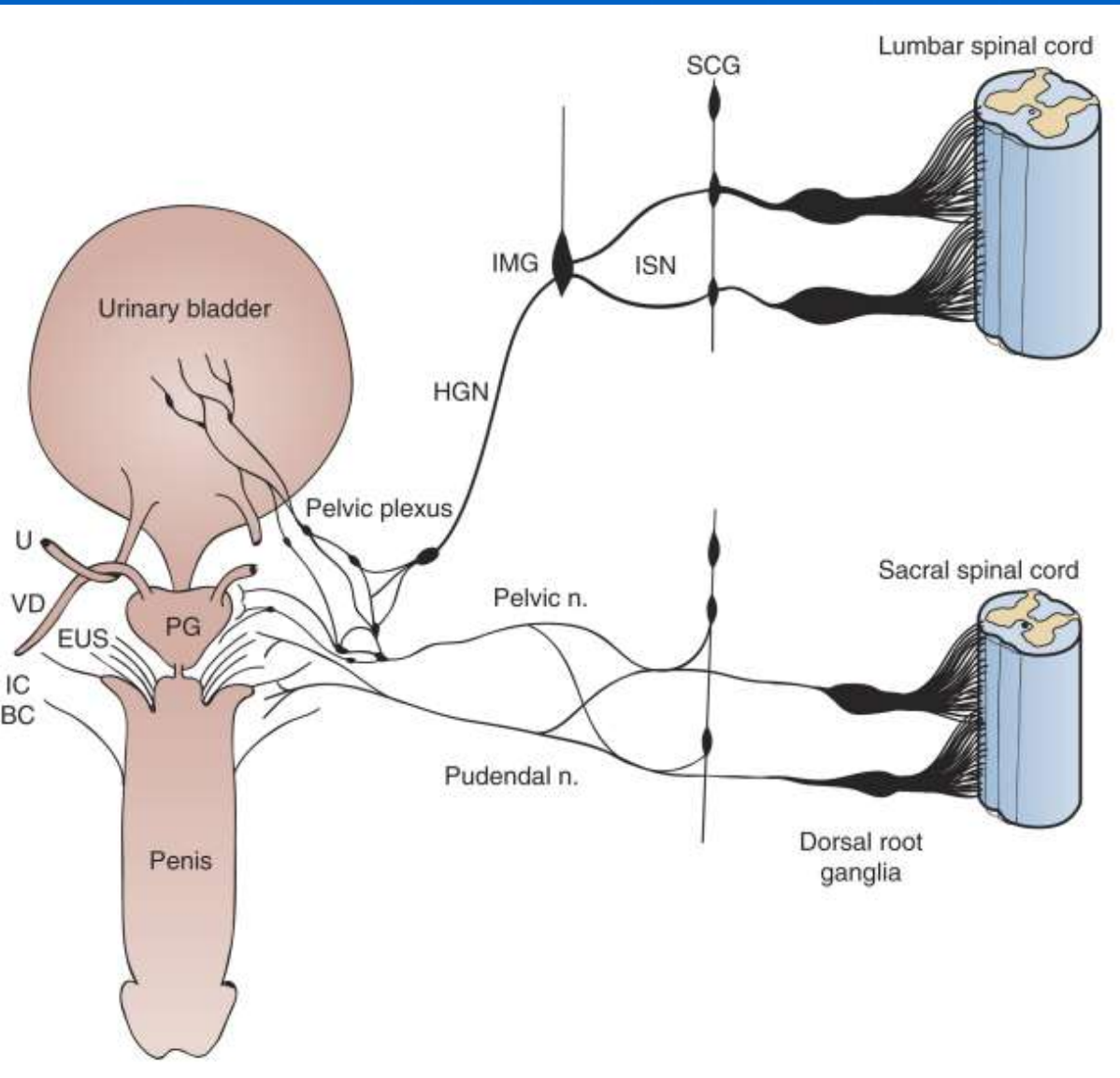
- Frequence?
- Urgence?
- Inc Effort?
- Inc d'urge?
- Sang?
- Sx neuro?
- ATCD: HAT? Enfants?
- A + C urine/ journal

Dx?

Etiology: myogenic?



Etiology: neurogenic?



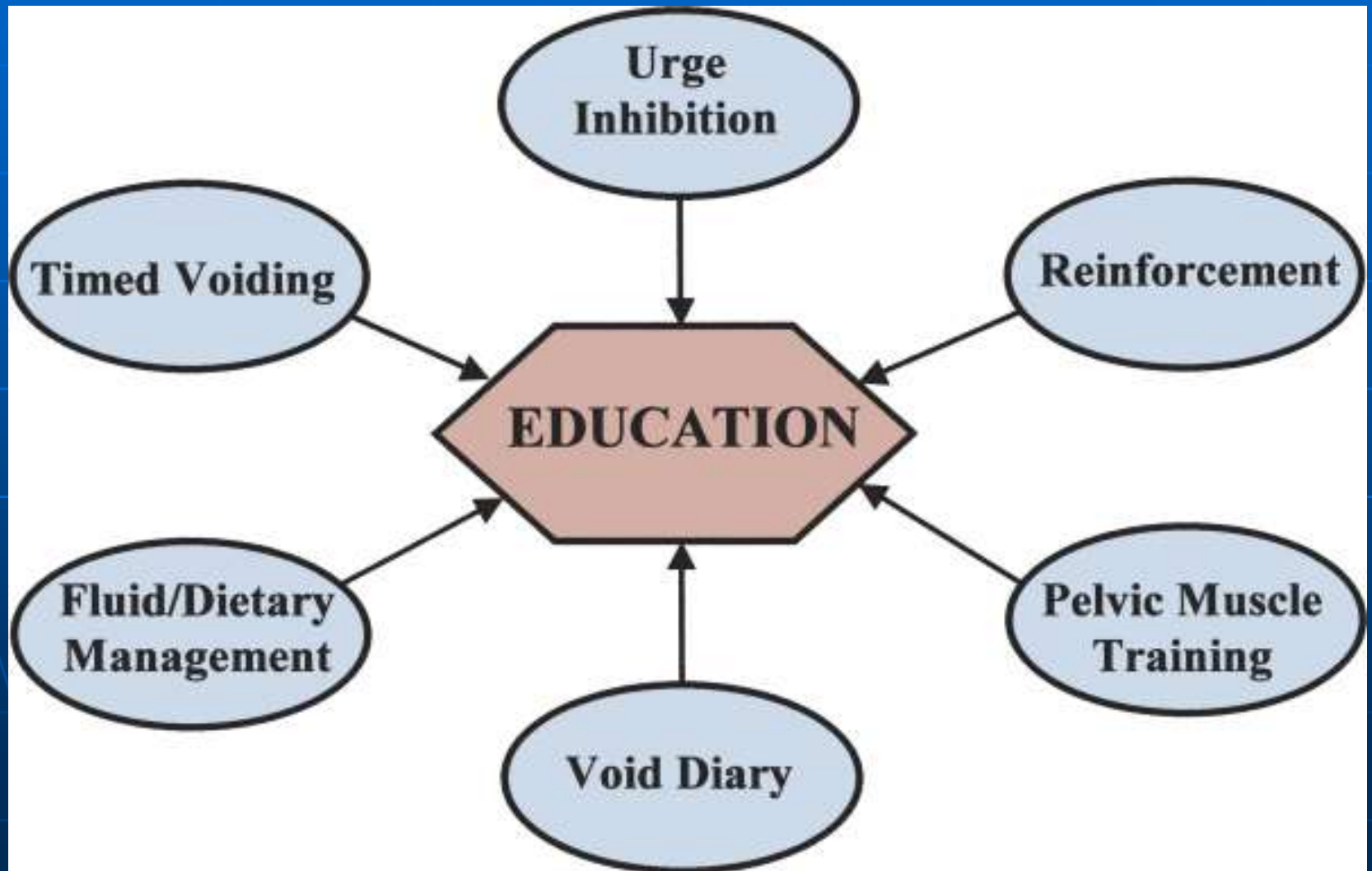
Emptying:
parasympathetic

Inhibition:
sympathetic

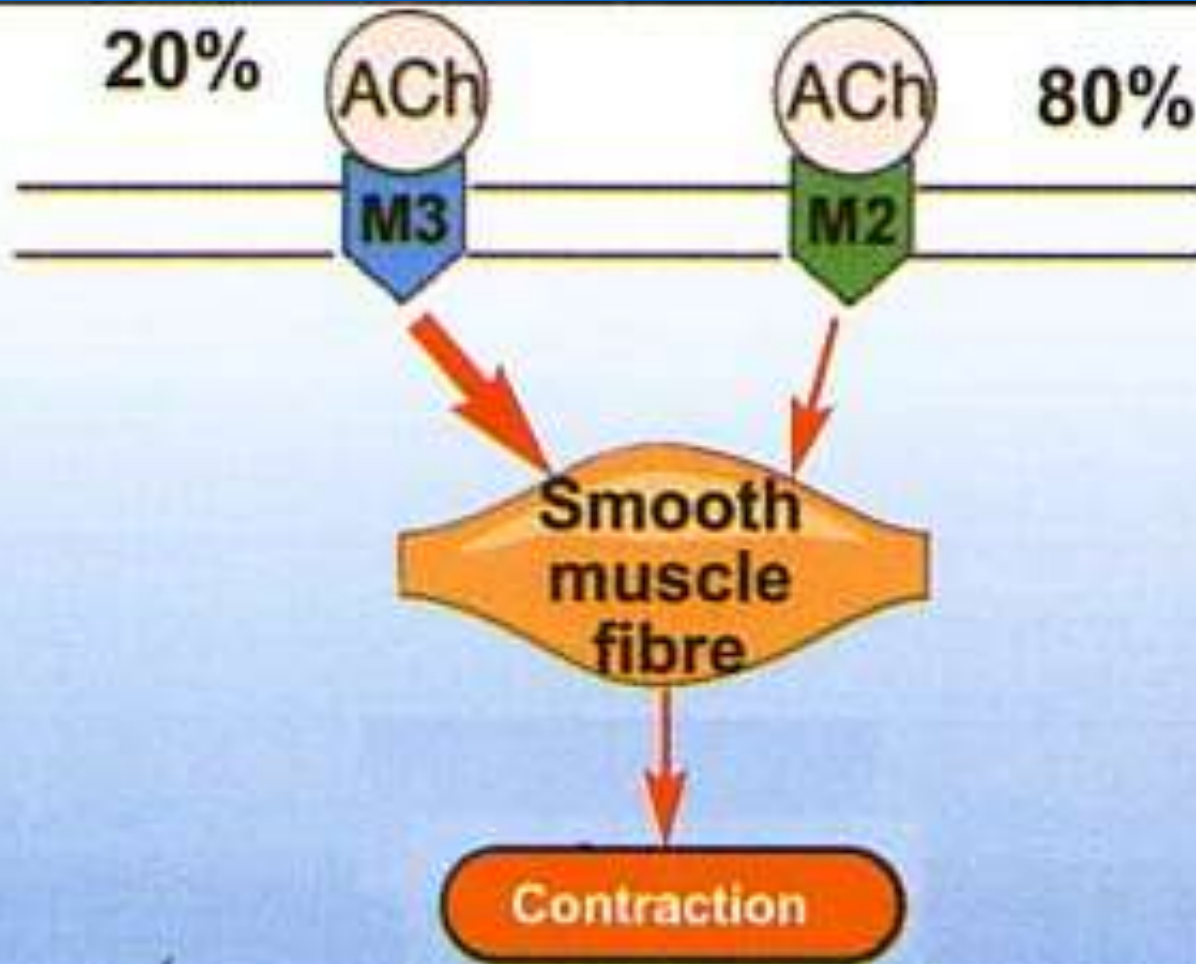
OAB: Urodynamics



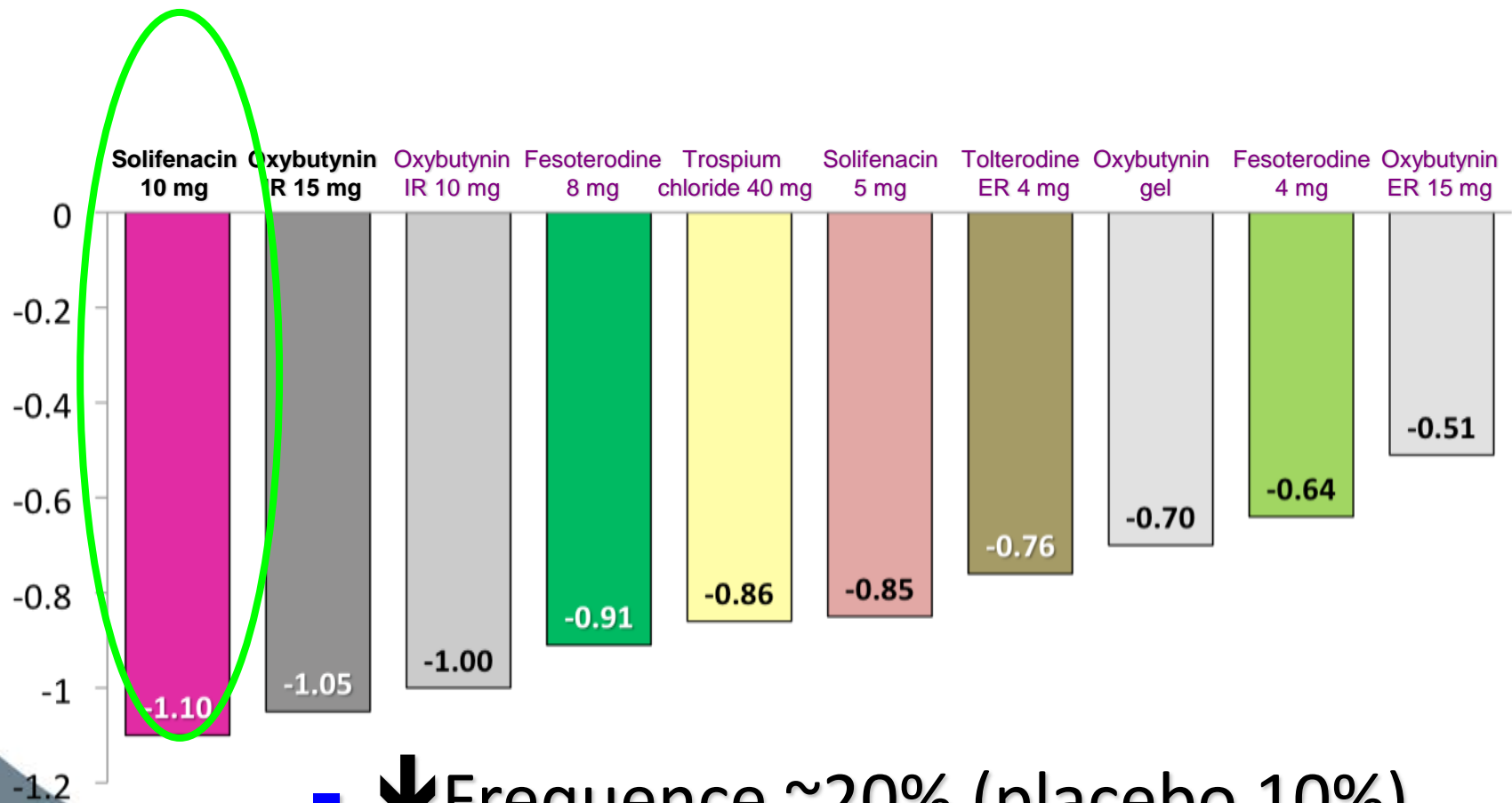
Conservative Therapy



Antimuscarinics: fonction

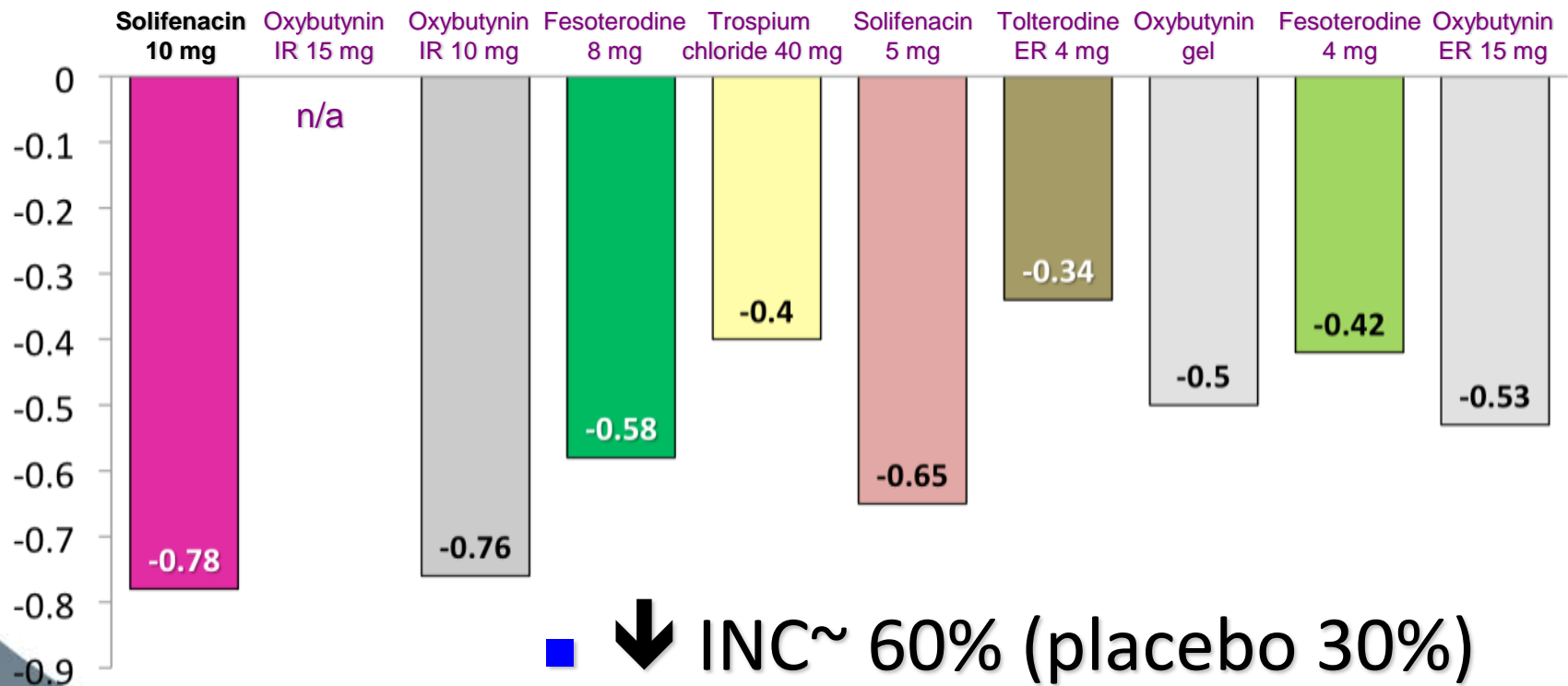


Réduction des épisodes de miction par période de 24 h (n=32 020)



épisodes d'incontinence par période de 24 heures

N=14 807 patients.



Anti-muscarinics: Interdit?

- glaucome angle fermé!
- Chez l'homme: si residu >150cc

Side effects: A function of receptor type

- Dry mouth
- Constipation
- Blurred vision



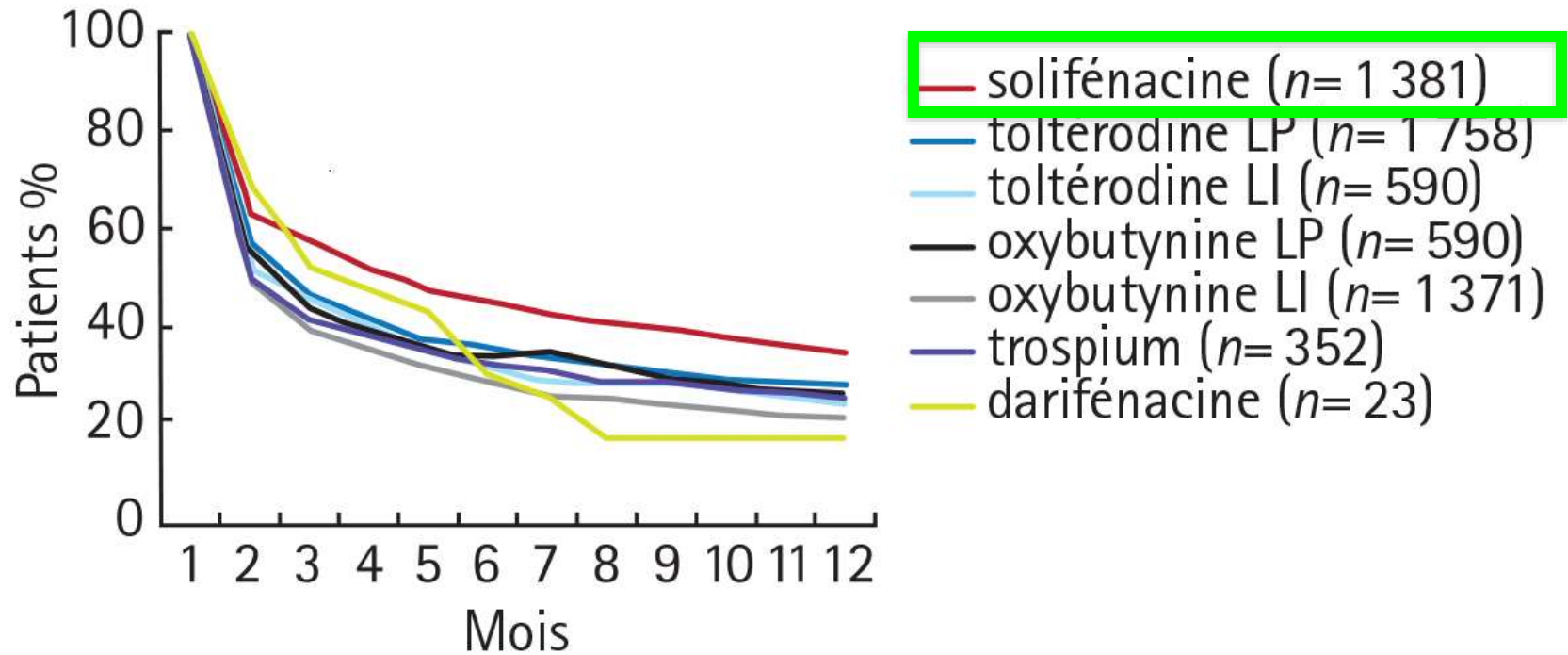
- Cognitive dysfunction
- Memory loss
- Attention deficits



Posologies et Effets secondaires courants des antimuscariniques

	Sécheresse buccale	Constipation	Sécheresse oculaire	Dyspepsie	Étourdissements
Oxybutynine (5-30 mg)	60,8 %	13,1%	6,1 %	6,8 %	6,3 %
Oxybutynine XL (5-30 mg)	64,0 %	5,1 %	2,5 %	5,1 %	6,4 %
Oxybutynine en timbre	4,1 %	3,3 %	s.o.	s.o.	s.o.
Toltérodine LP (4 mg .)	23,4 %	5,9 %	< 5 %	< 5 %	< 5 %
Solifénacine (5 mg)	10,9 %	5,4 %	0,3 %	1,4 %	1,9 %
Solifénacine (10 mg)	18.0%	9.2%	0.5%	2.0%	4.0%
trospium (20 mg BID)	20,1 %	9,6 %	1,2 %	1,2 %	s.o.
Darifénacine (7,5 mg)	20,2 %	14,8 %	2,1 %	2,7 %	0,9 %

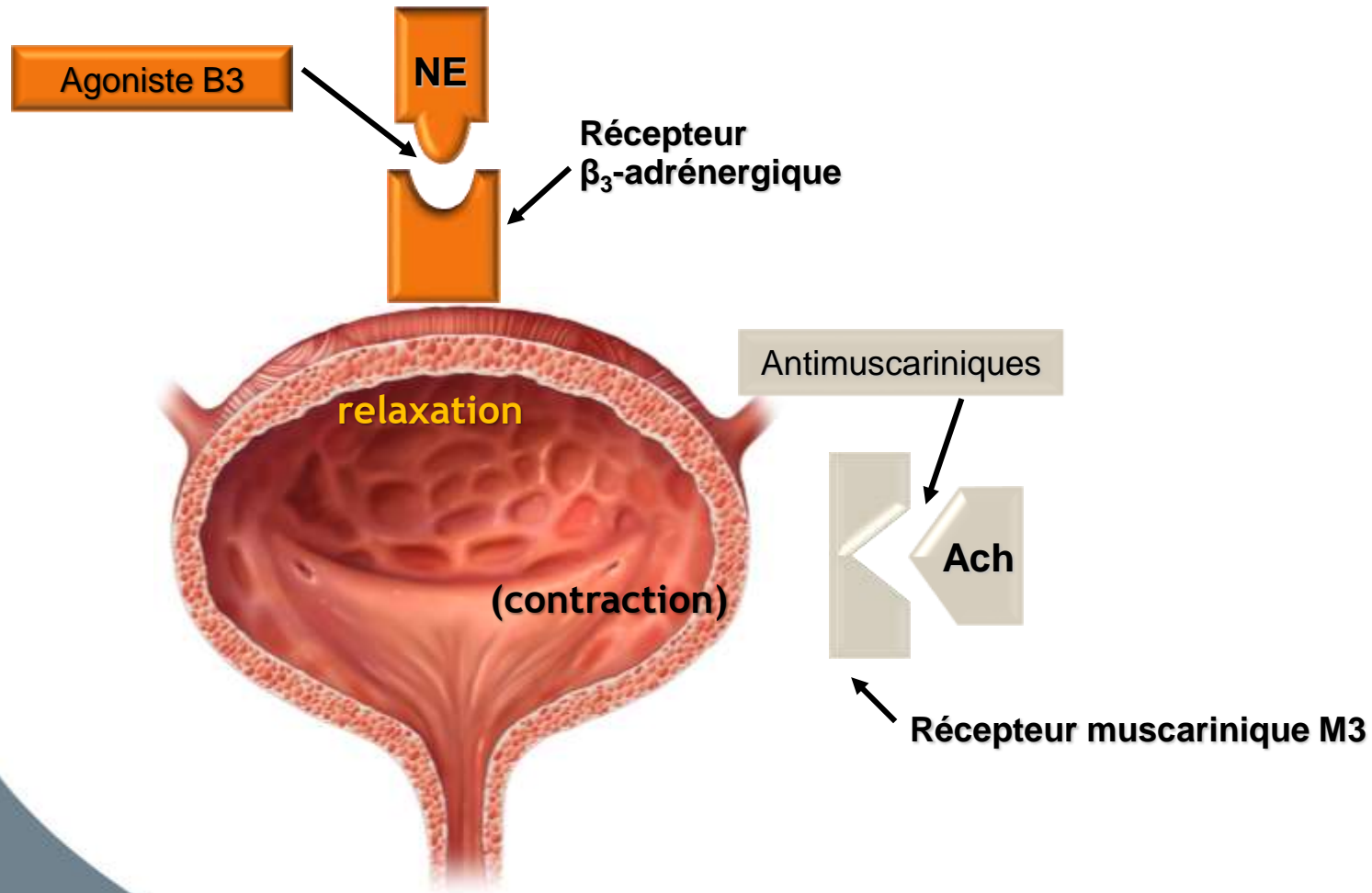
Compliance



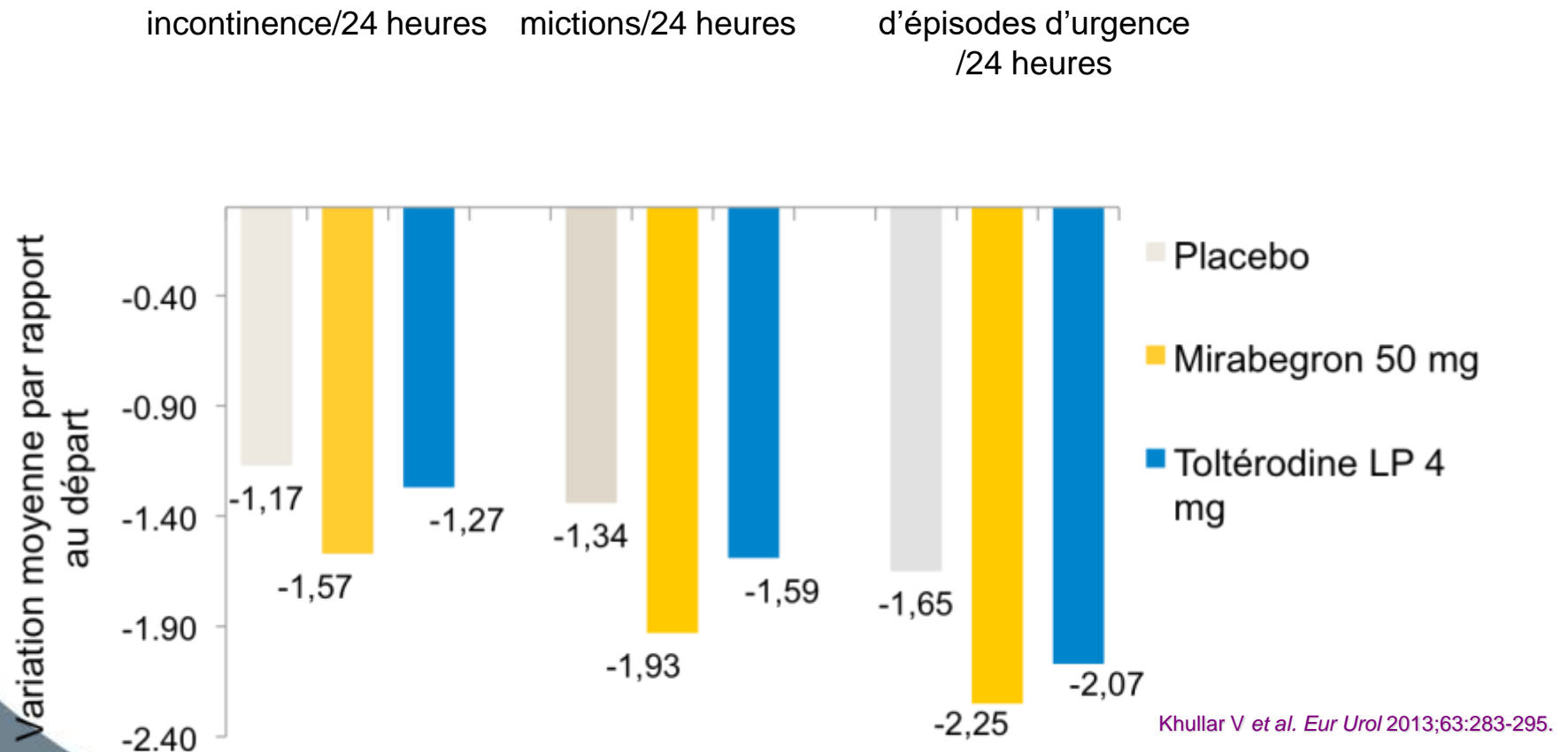
B3 receptor agonists

- Mirabegron (Myrbetriq)

Mécanisme d'action sur la vessie



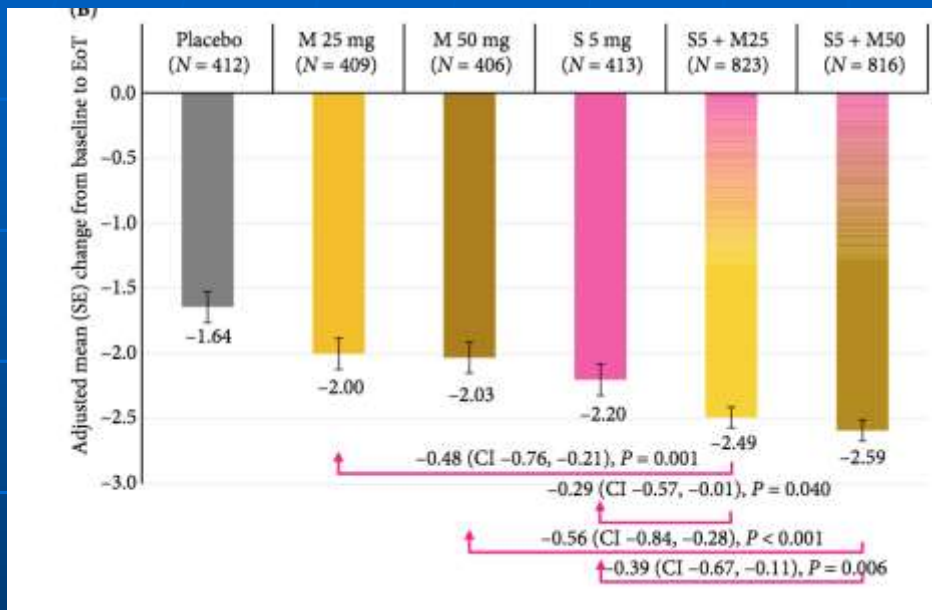
Efficacité: mirabegron vs. Tolterodine



Mirabegron : Effets secondaires

	Placebo (%)	Mirabegron 50 mg (%)	Toltérodine LP 4 mg (%)
EICT courants			
Hypertension	7,7%	5,9%	8,1%
Sécheresse buccale	2,6%	2,8%	10,1%
Céphalées	2,8%	3,7%	3,6%
Constipation	1,4%	1,6%	2,0%
EICT cardiovasculaires			
Allongement de l'intervalle QTc ou ses séquelles	0	0	0,4%
Arythmie	1,0%	2,2%	3,2%

Efficacy and safety of combinations of mirabegron and solifenacin compared with monotherapy and placebo in patients with overactive bladder (SYNERGY study)



Pulse, pressure and QT same as monotherapy

HBP: Définition

- Clinique: *symptômes obstructive/irritative qui sont attribuées à l'HBP*

Cas clinique

- Homme 55 ans
 - Frequence/nycturie
 - *Question cle?*
-
- Jet urinaire?
 - *Si normal: Dx*
 - *Si lent: Dx?*

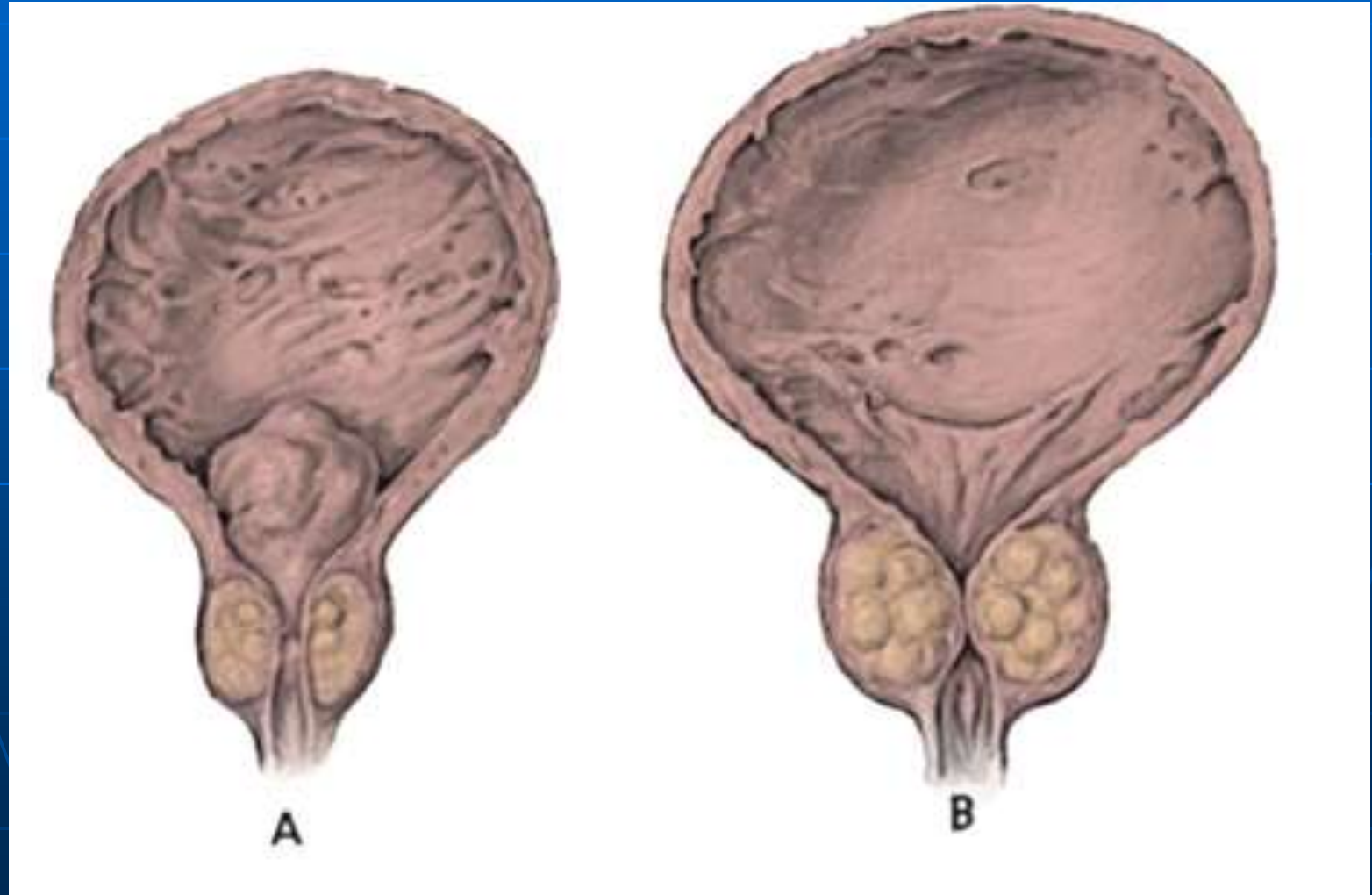


Evaluation initiale

HMA

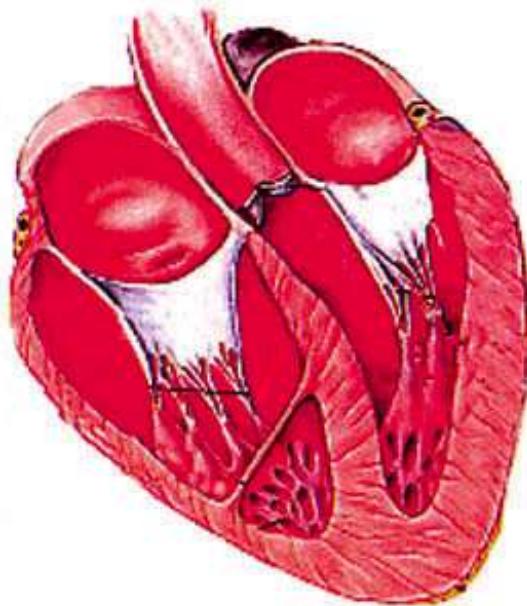
- hématurie, UTI, pelvic CHX, Db, neuro, sténose, α-cholinergique,
- TR
- A+C urine:
 - r/o UTI, hématurie
- PSA si 50-69

Cause des symptômes obstructive

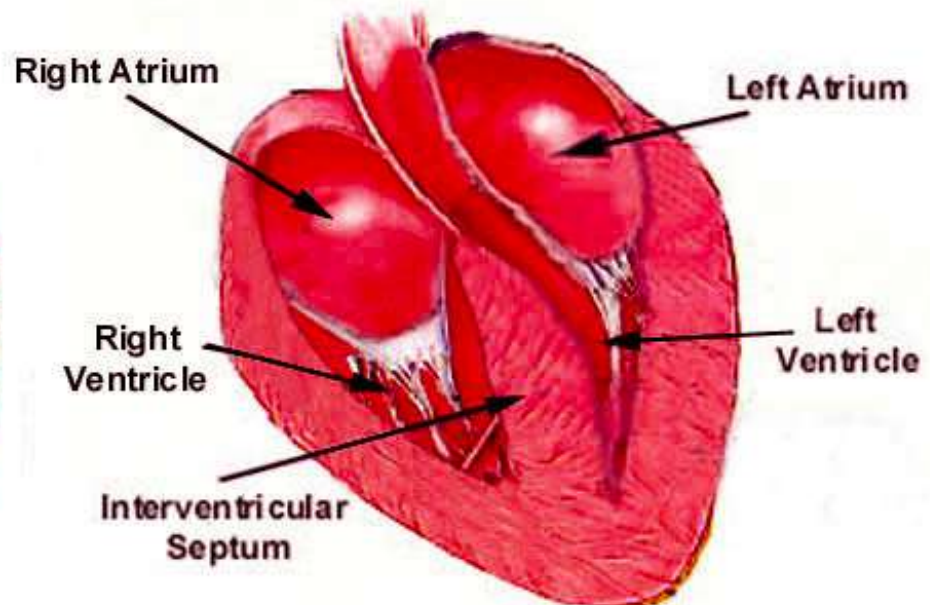


La vessie est comme le coeur!

Hypertrophic Cardiomyopathy

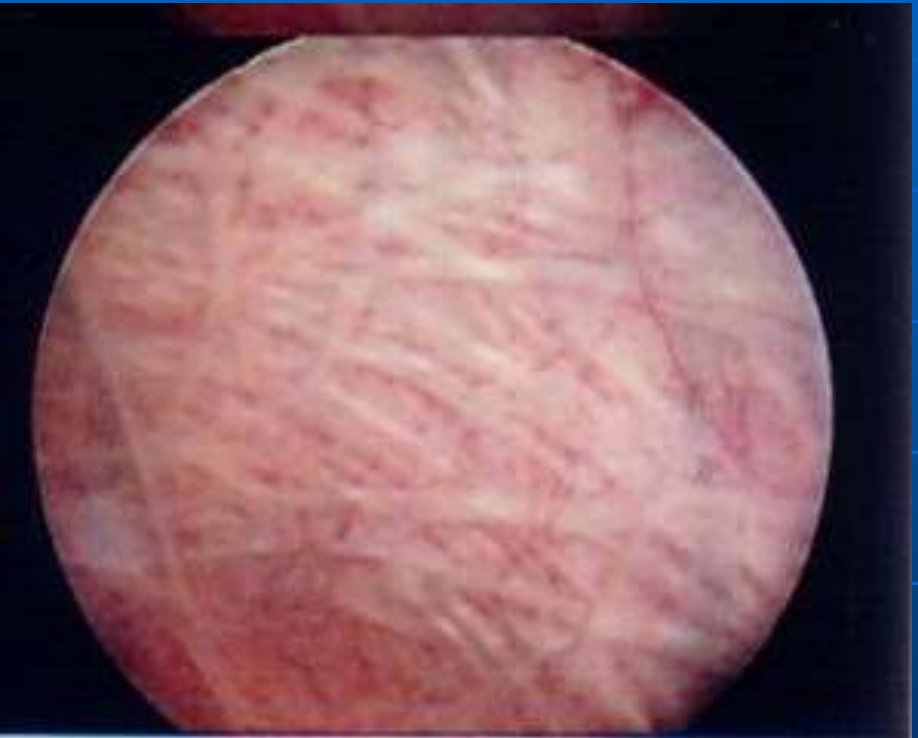


Normal Heart

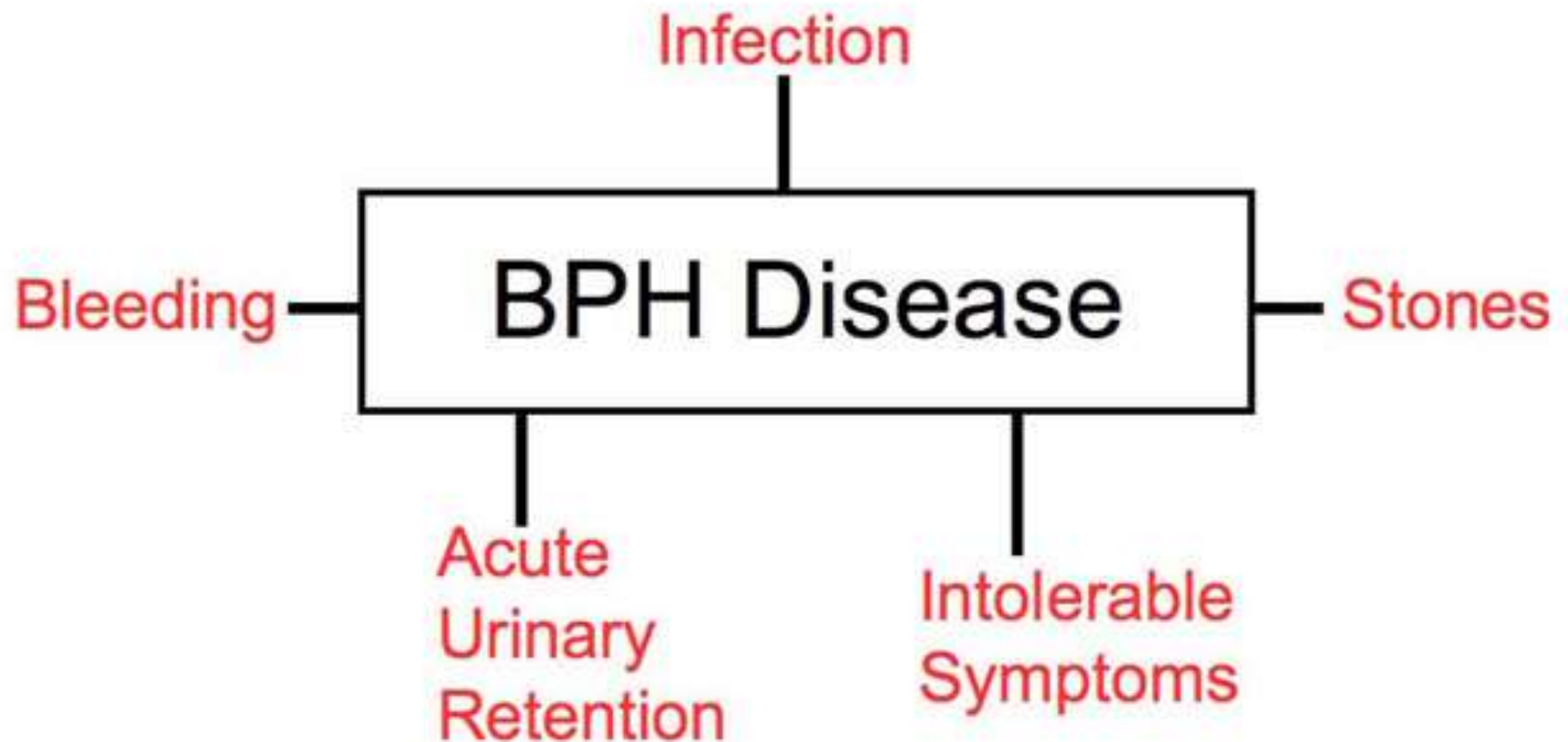


Hypertrophied Heart

Cause des symptômes irritatives



HBP: complications

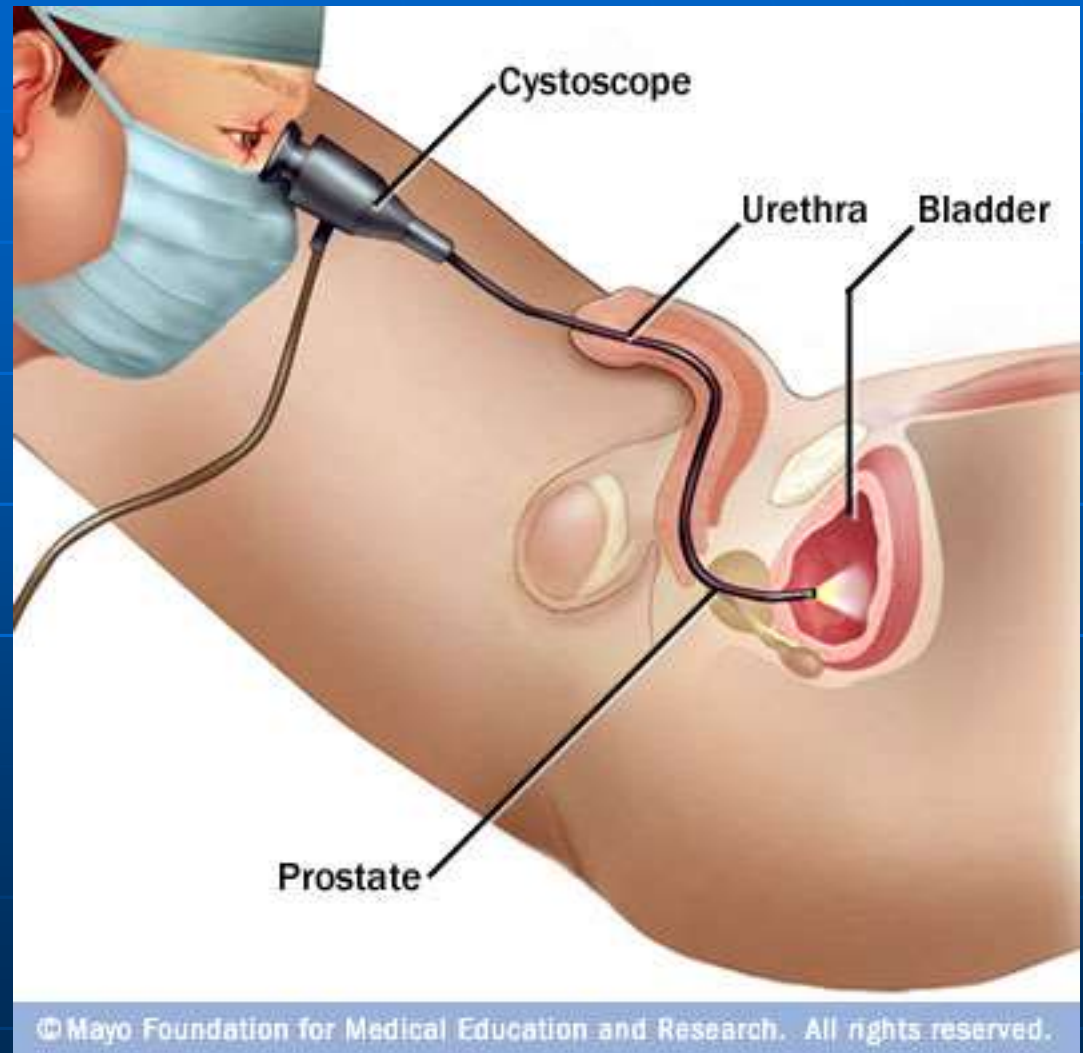


Progression de l'HBP/Annee: MTOPS

■ Clinical progression overall	4.5%
■ retention	0.6%
■ incontinence	0.3%
■ UTIs	0.1%
■ TURP	1.3%

cystoscopie

- Sténose uretre?
- Planification chirurgicale

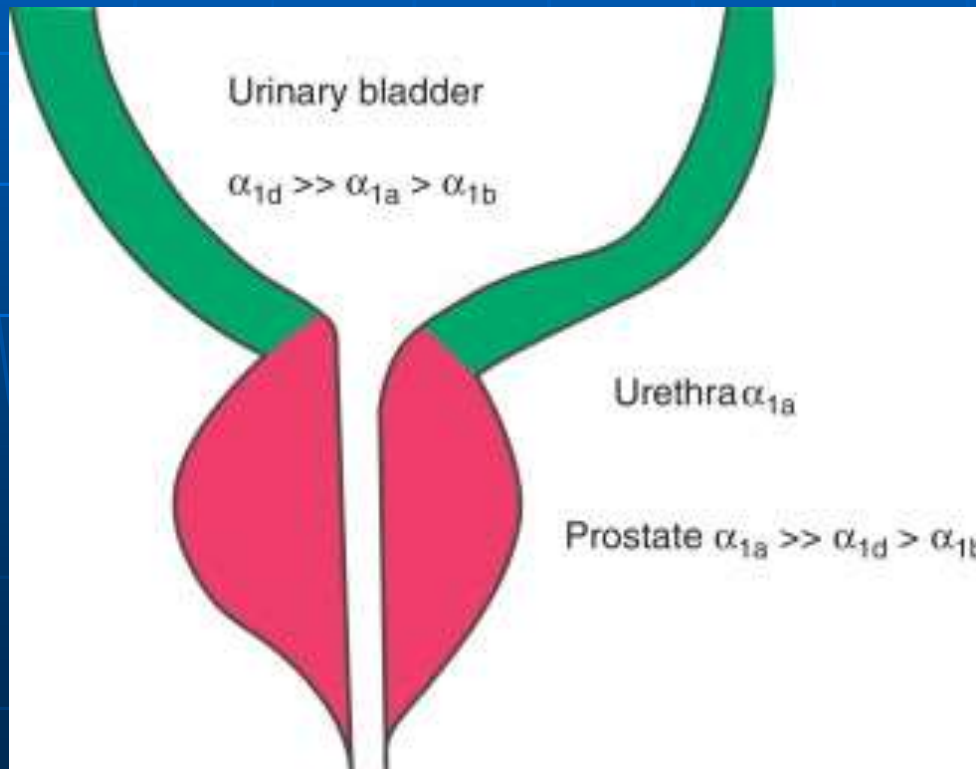


Rx: Plan

- Rx Médical
 - Alpha bloqueurs
 - Inhibiteurs de la 5 alpha réductase
 - Anti-cholinérgiques
 - PDE5-I
- Rx Chirurgical
 - RTUP

Alpha bloqueurs

- Logic
 - Obstruction 2° smooth muscle tone médié par α_1 AR



Alpha bloqueurs : Classification

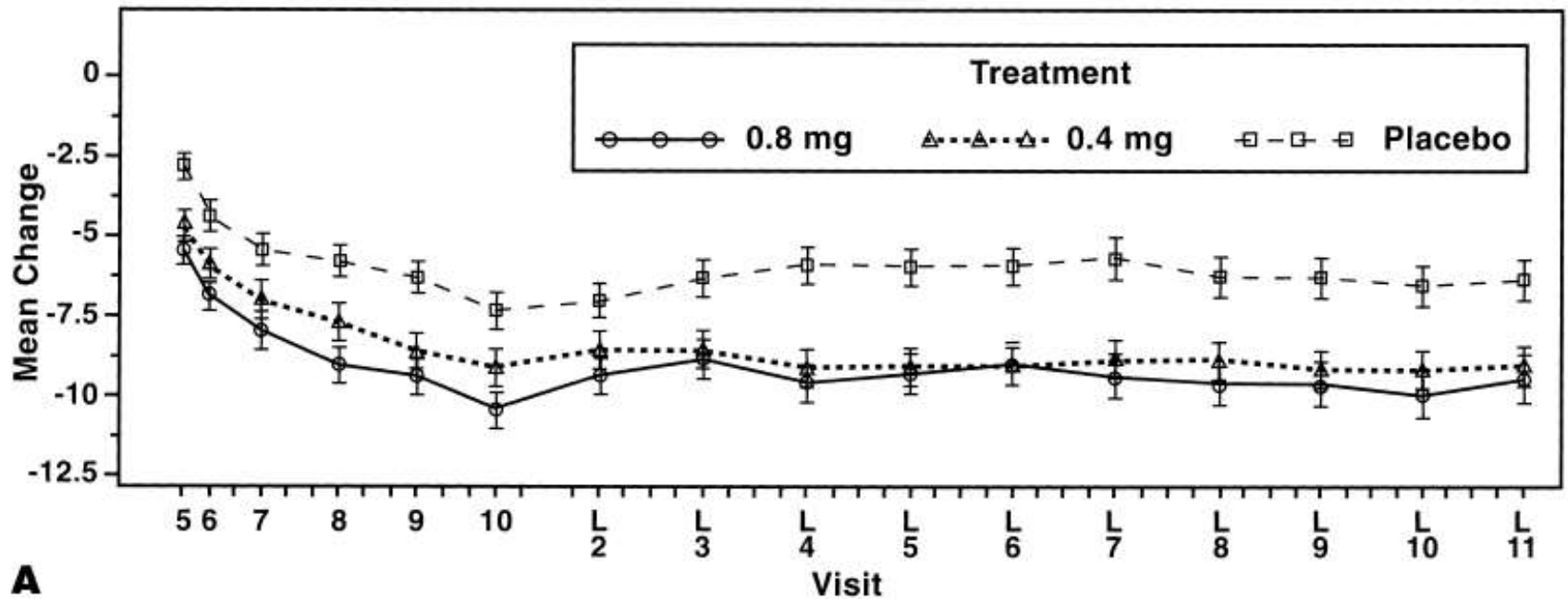
- α_1 Long action
 - Terazosin (Hytrin)
 - Doxazosin (cardura)
 - **Alfuzosin SR 10 (xatral)**
- α_{1a}
 - **Tamsulosin 0.4(flomax)**
 - **Silodosin 8 (rapaflow)**

Alpha bloqueurs: Effets secondaires?

- HypoTA orthostatique/syncope (1b)
- Éjaculation rétrograde (1a)
- Congestion nasale (1d)

FLOMAX

sur les Sx LUTS (IPSS)



Direct Effects of Tadalafil on Lower Urinary Tract Symptoms versus Indirect Effects Mediated through Erectile Dysfunction Symptom Improvement: Integrated Data Analyses from 4 Placebo Controlled Clinical Studies

Table 2. *Changes in total I-PSS by ED status*

ED Status	Tadalafil 5 mg			Placebo		
Yes:	No.*	Mean	SD	No.*	Mean	SD
Baseline	579	17.7	5.5	566	17.5	5.8
End point	579	11.8	6.9	566	14.0	7.1
Change	579	-5.9	6.5	566	-3.5	6.0
No:	No.*	Mean	SD	No.*	Mean	SD
Baseline	163	17.1	6.3	167	16.8	6.4
End point	163	11.7	6.8	167	13.6	7.7
Change	163	-5.4	5.9	167	-3.3	6.1

Inhibiteurs de 5 α reductase

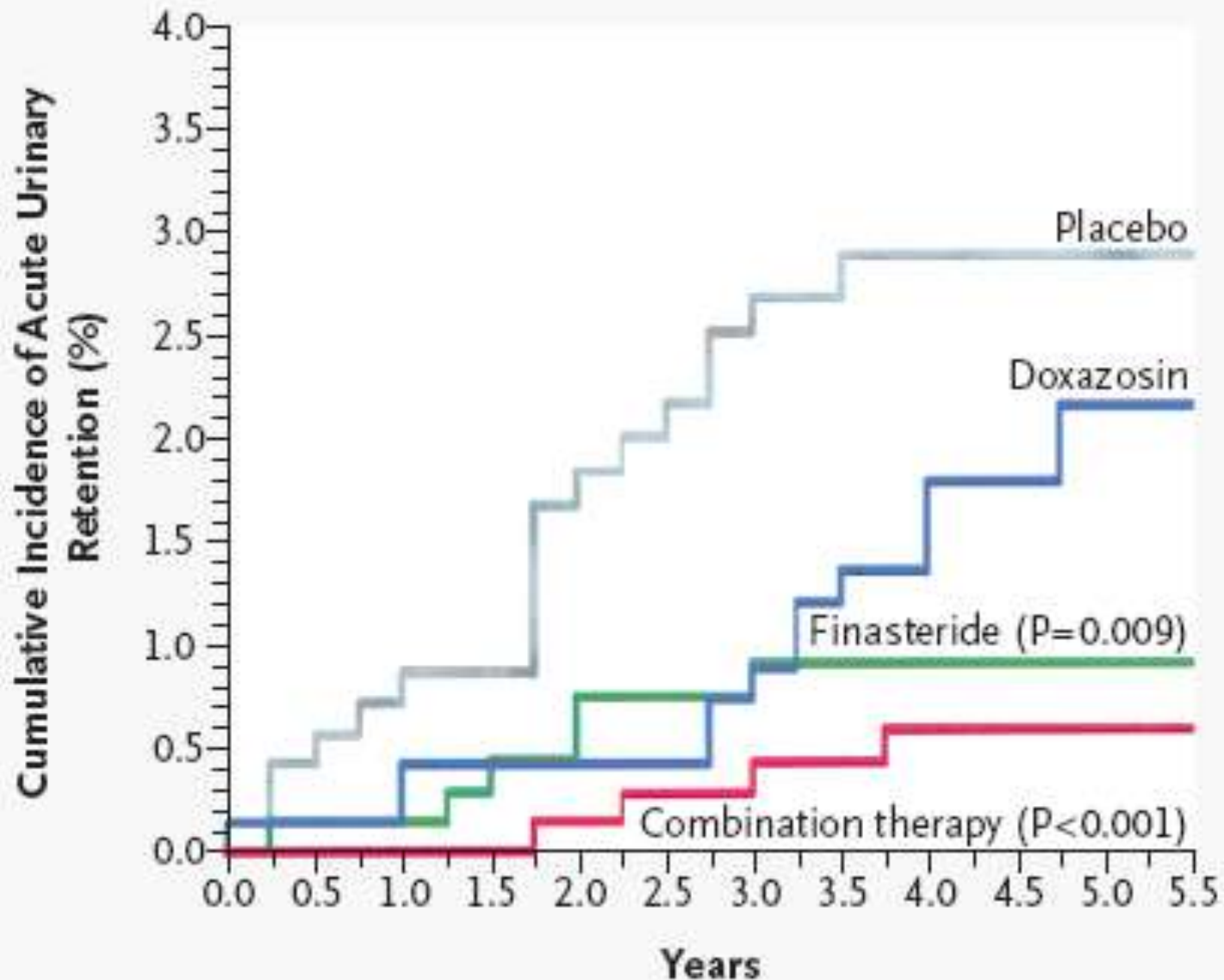
Finasteride (proscar)

Dutasteride (Avodart)

Propecia (Finasteride)



Finasteride: Retention

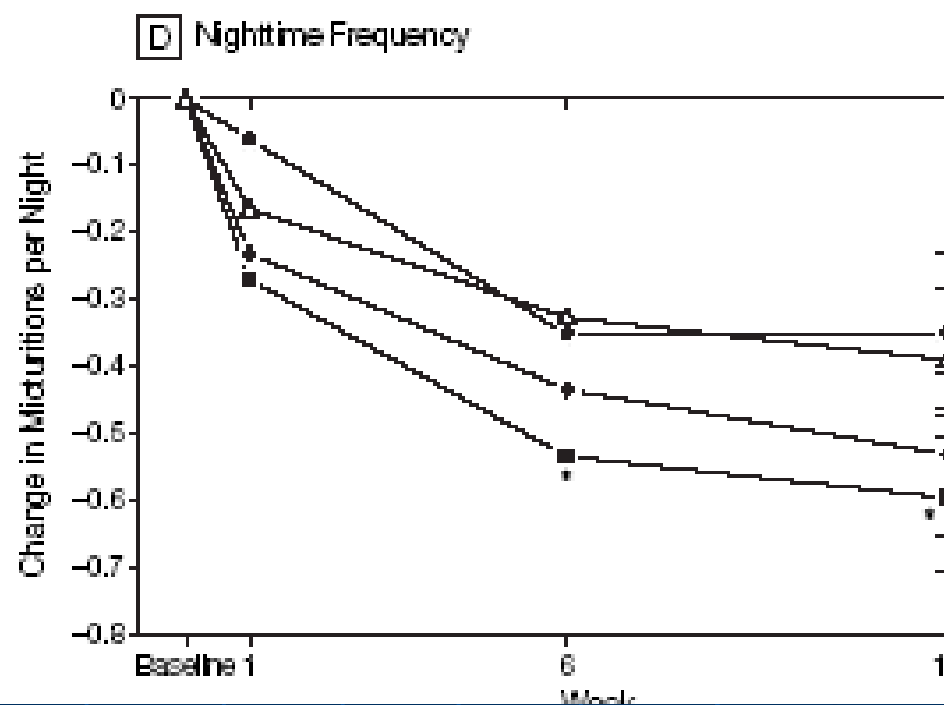
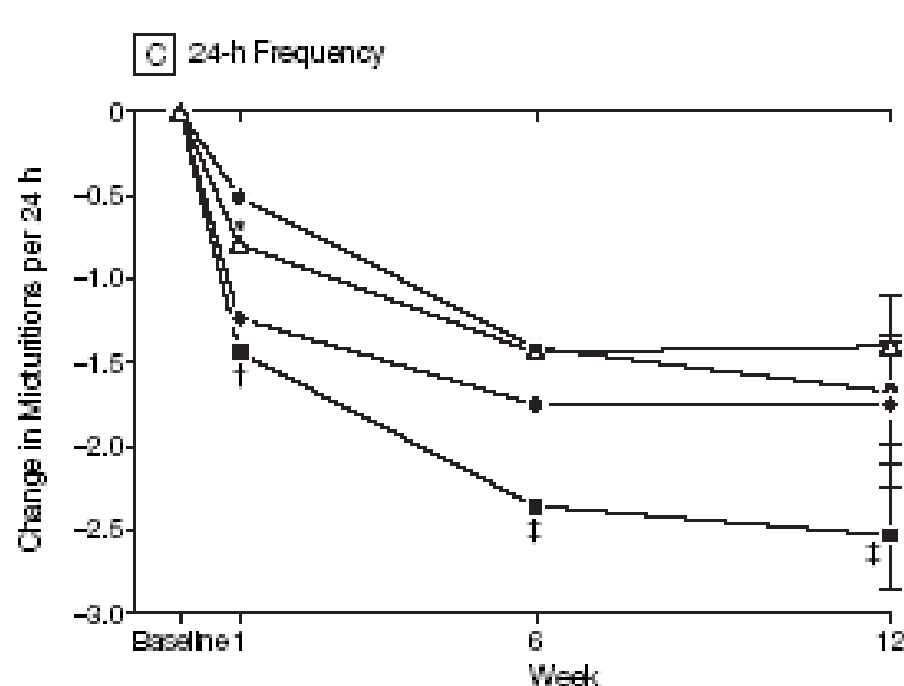


Finastéride : Effets secondaires

- Libido 6%
- ED 8%
- Hypoejaculate 4%

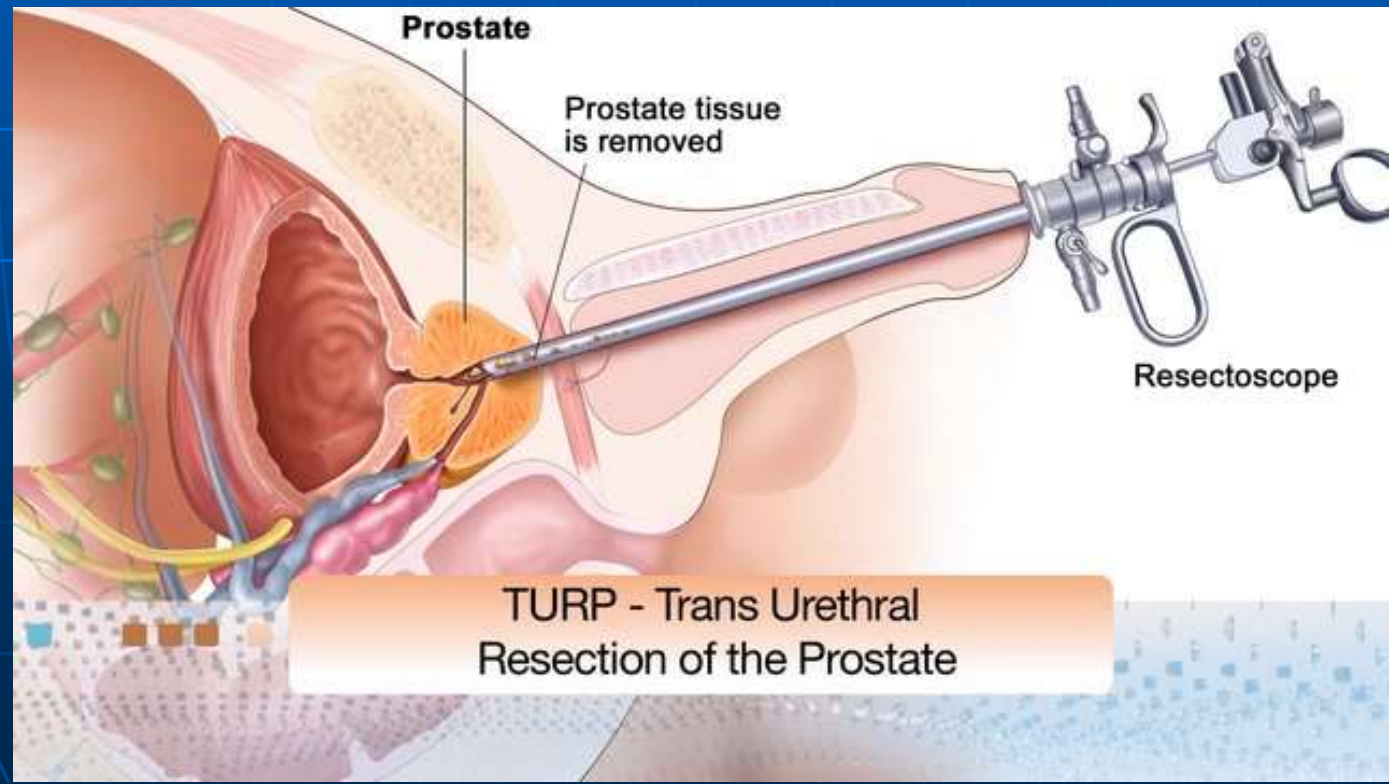
Tolterodine and Tamsulosin for Treatment of Men With Lower Urinary Tract Symptoms and Overactive Bladder

A Randomized Controlled Trial



RTUP

- Standard
- Green light
- Holep



RTUP

