LUTS – BPH, OAB, NOCTURIA

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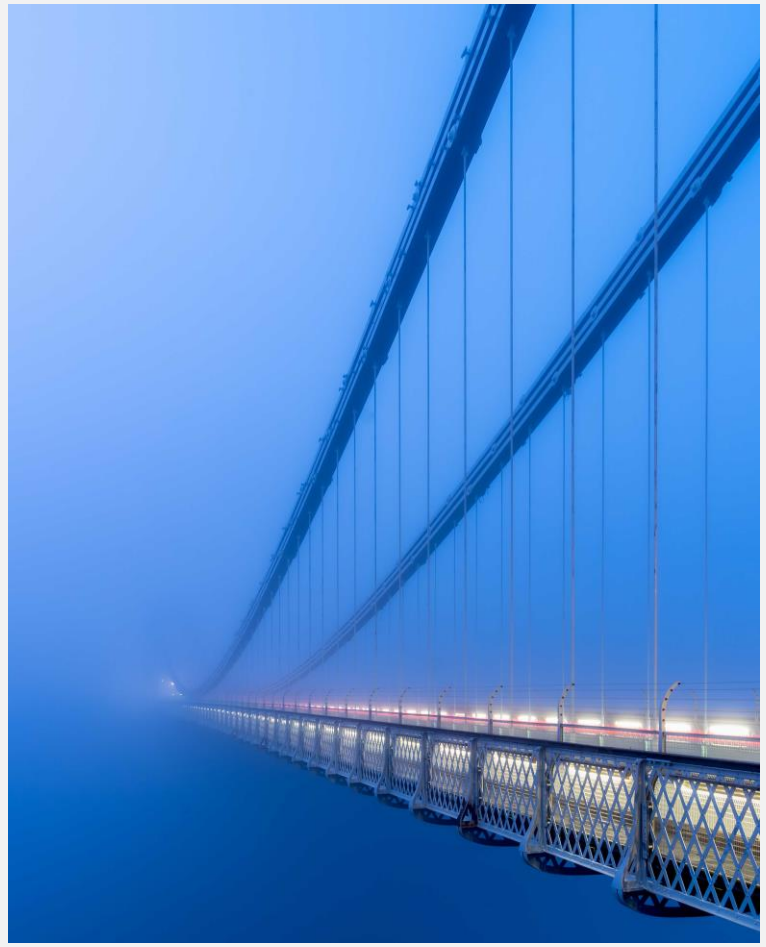
Community Urology

PCUS

Primary Care Urology Society



LUTS

"As man draws near the common goal
Can anything be sadder
Than he who, master of his soul
Is servant to his bladder"

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LUTS – WHAT DO WE WANT TO KNOW?

- What are the symptoms? **(NOT WHAT IS THE DIAGNOSIS?)**
- What is causing the BOTHER?
- What are they worried about?
- Is there anything we should be worried about?
- Are any lifestyle changes appropriate?
- Do they need / want medical treatment?
- Do they need follow-up in primary care?
- Do they need referral to secondary care?

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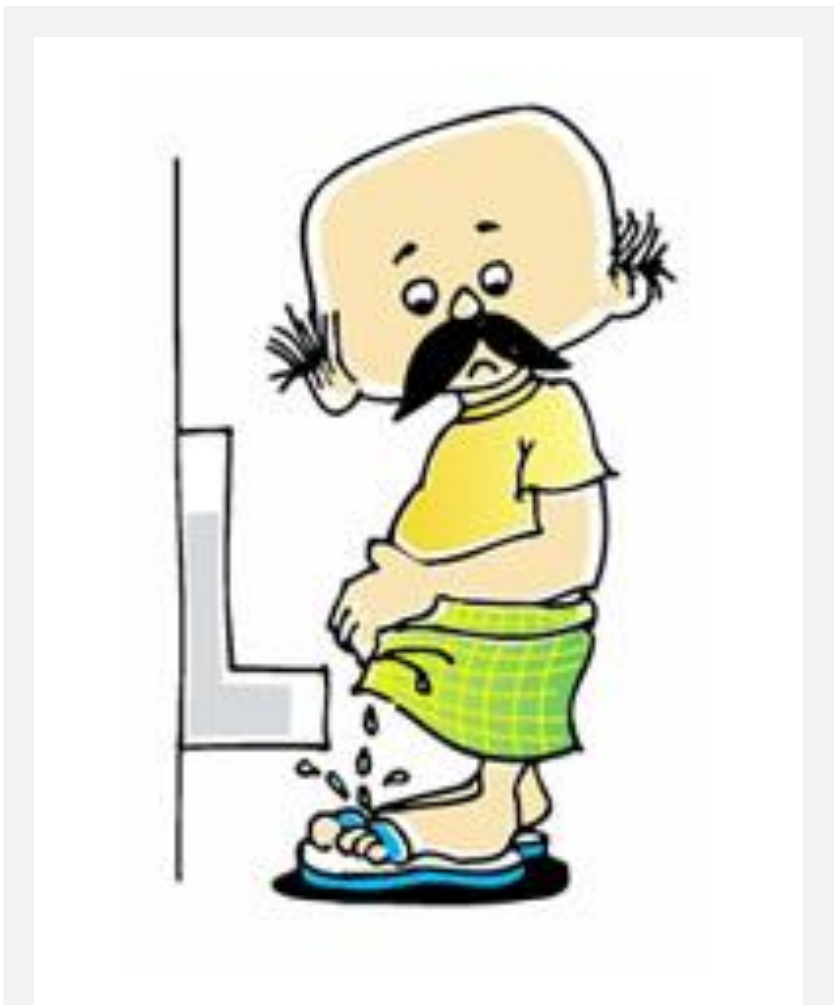
WHAT ARE THE SYMPTOMS?

STORAGE SYMPTOMS

- Urgency
- +/- Urgency Incontinence
- Frequency
- Nocturia

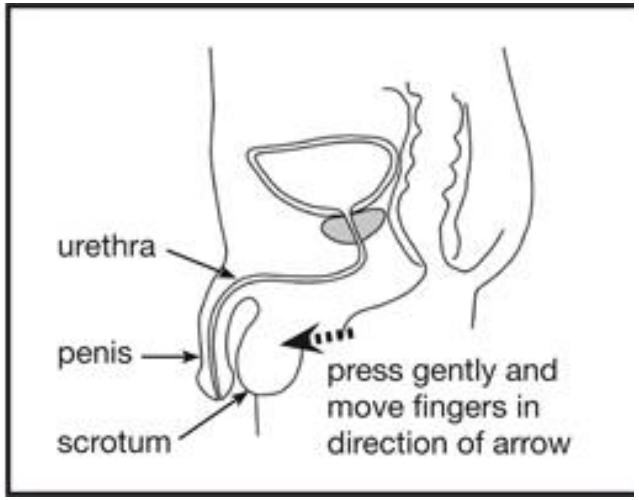
VOIDING SYMPTOMS

- Poor flow
- Intermittency
- Hesitancy
- Straining
- Terminal dribble



POST-MICTURITION SYMPTOMS

- Post micturition dribble
- Incomplete emptying



THE OAB SYMPTOM COMPLEX

STORAGE 	VOIDING 	POST-VOIDING 
Frequency **U**rgency **U**rgency incontinence **N**octuria	Hesitancy Intermittency Slow stream Splitting/spraying Straining Terminal dribble	Sensation of incomplete bladder emptying Double-voiding Post-voiding incontinence Post-micturition urgency

OAB symptoms

IPSS

Assess changes in severity

- with time
- **after intervention**

(Mild ≤ 7; Mod 8 – 19; Severe ≥ 20)

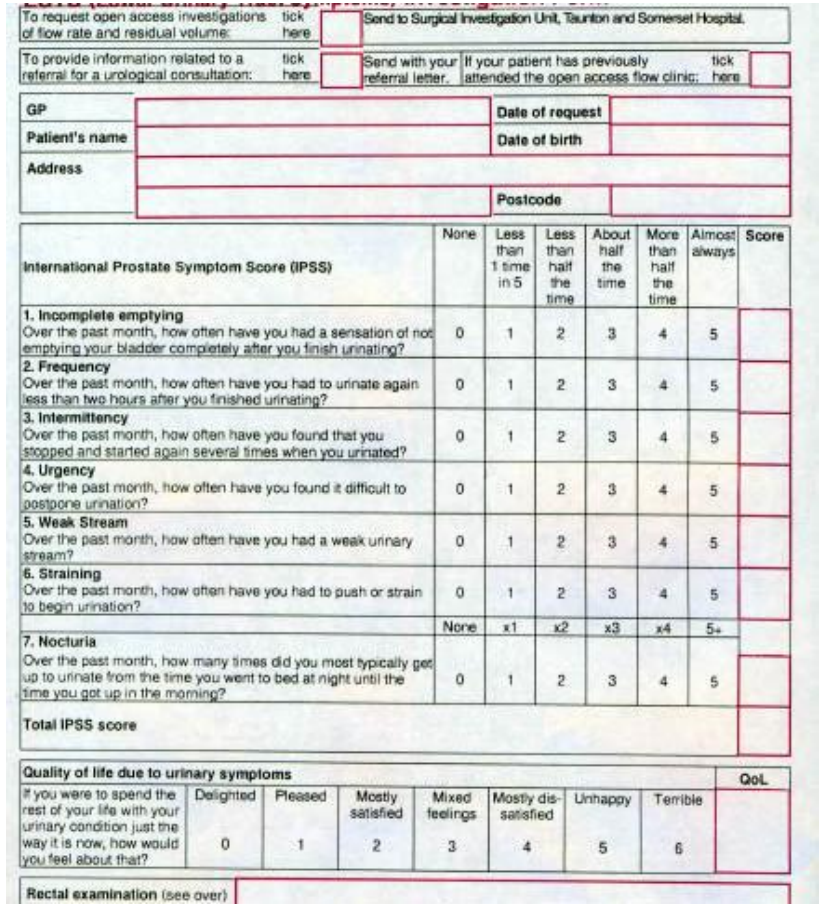
QoL question: If you were to spend the rest of your life with your urinary condition just the way it is now, how would you feel about that ?

Will not determine the consequences of other facets of BPH and its treatments:

worry about cancer

sexual dysfunction

effects upon relationships



To request open access investigations of flow rate and residual volume:	tick here		Send to Surgical Investigation Unit, Taunton and Somerset Hospital.
To provide information related to a referral for a urological consultation:	tick here	Send with your referral letter.	If your patient has previously attended the open access flow clinic: tick here

GP		Date of request	
Patient's name		Date of birth	
Address			
		Postcode	

International Prostate Symptom Score (IPSS)	None	Less than 1 time in 5	Less than half the time	About half the time	More than half the time	Almost always	Score
1. Incomplete emptying Over the past month, how often have you had a sensation of not emptying your bladder completely after you finish urinating?	0	1	2	3	4	5	
2. Frequency Over the past month, how often have you had to urinate again less than two hours after you finished urinating?	0	1	2	3	4	5	
3. Intermittency Over the past month, how often have you found that you stopped and started again several times when you urinated?	0	1	2	3	4	5	
4. Urgency Over the past month, how often have you found it difficult to postpone urination?	0	1	2	3	4	5	
5. Weak Stream Over the past month, how often have you had a weak urinary stream?	0	1	2	3	4	5	
6. Straining Over the past month, how often have you had to push or strain to begin urination?	0	1	2	3	4	5	
	None	x1	x2	x3	x4	5+	
7. Nocturia Over the past month, how many times did you most typically get up to urinate from the time you went to bed at night until the time you got up in the morning?	0	1	2	3	4	5	
Total IPSS score							

Quality of life due to urinary symptoms								QoL
If you were to spend the rest of your life with your urinary condition just the way it is now, how would you feel about that?	Delighted 0	Pleased 1	Mostly satisfied 2	Mixed feelings 3	Mostly dis-satisfied 4	Unhappy 5	Terrible 6	

Rectal examination (see over)

WHAT IS CAUSING THE BOTHER?

STORAGE SYMPTOMS HIGHLY BOTHERSOME

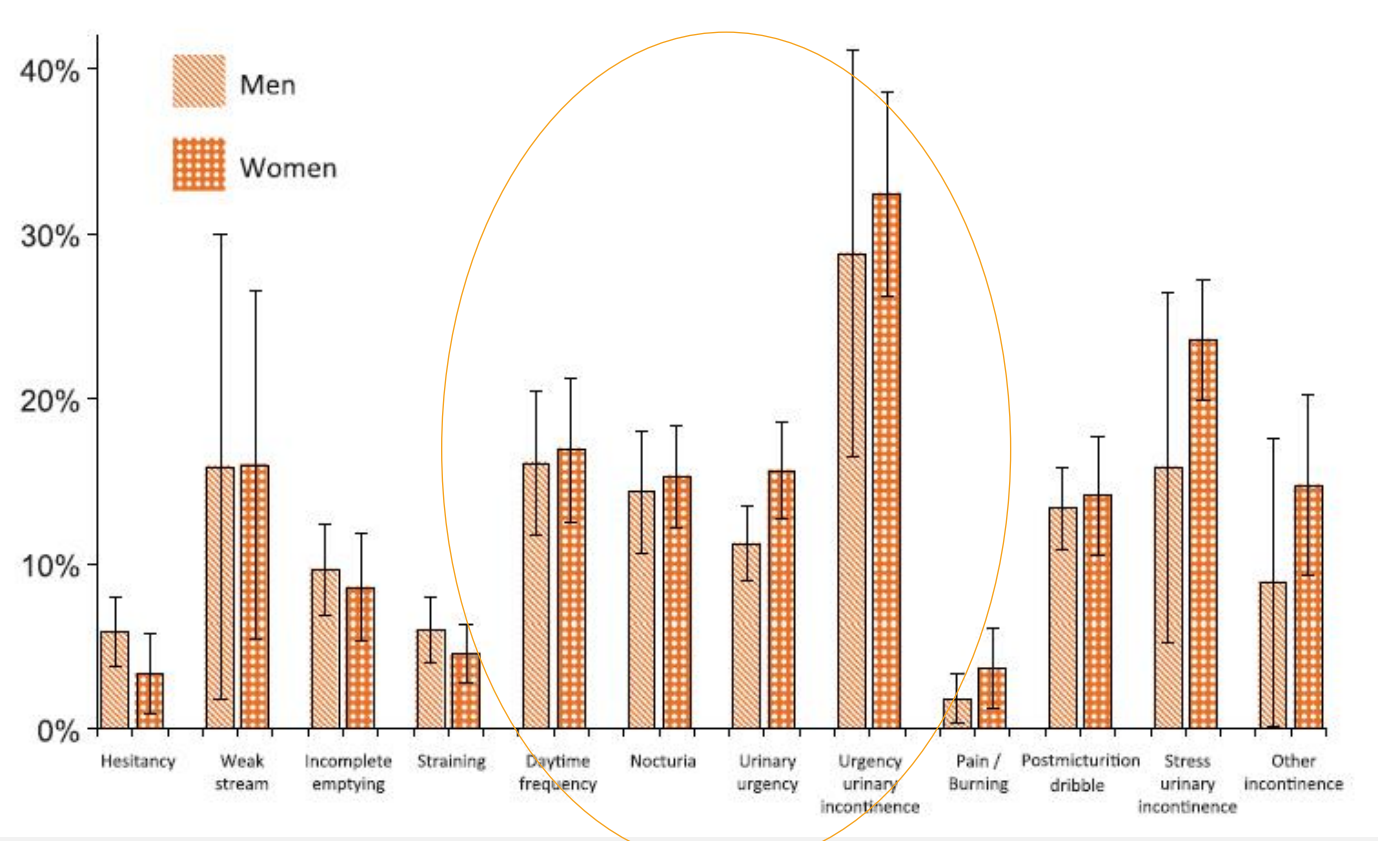
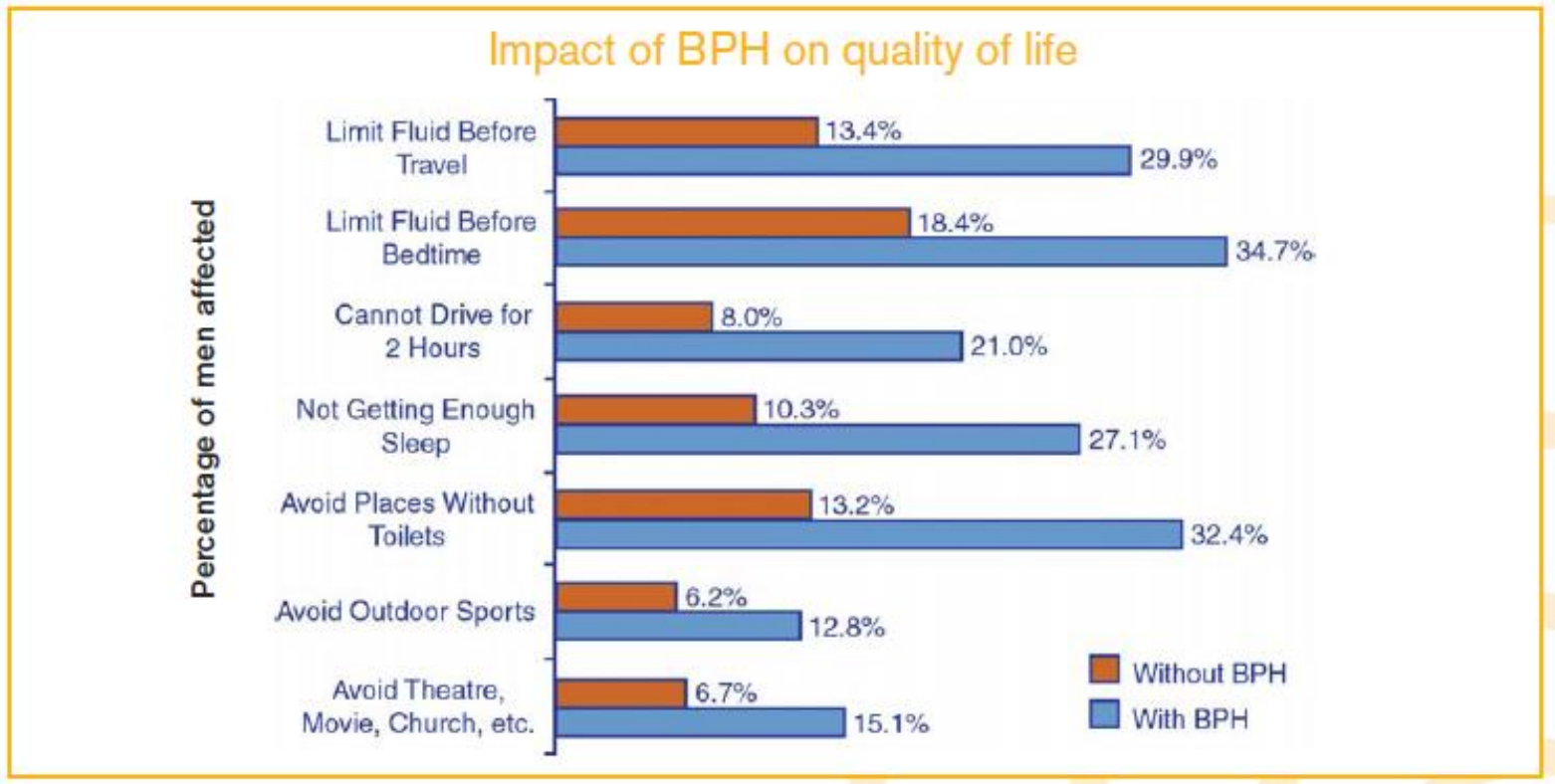


Fig. 3 – Individual perspective: age-standardized proportion (percentage) of subjects reporting at least moderate bother among symptomatic men and women. Error bars represent 95% confidence intervals.

Agarwal A et al Eur Urol 2014; 65: 1211-1217

WHAT ARE THEY WORRIED ABOUT?

WHAT DO PATIENTS SAY?



WHAT DO PARTNERS SAY?

Worry that patient may have cancer	71%
Worry about patient's need for surgery	66%
Deterioration in sex life due to symptoms	66%
Social life affected by patient's symptoms	47%
Become tired because of waking at night	42%

Sells, Donovan, Ewings & MacDonagh. BJU Int 2000, 85, 440-445

IS THERE ANYTHING WE SHOULD BE WORRIED ABOUT?

WHAT DO GP'S & UROLOGISTS SAY?

- GP's worry about missing prostate cancer - only 11% confident in distinguishing between BPH & Prostate Cancer
- 54% refer men before maximising medical therapy
- GP's seek specialist advice in 1/3 of men with LUTS
- Urologists feel that approx 40% of BPH referrals could be managed in primary care
- 68% of urologists agree that interpreting PSA results is difficult for GP's

ASSESSMENT OF LUTS

- Mandatory for ALL new patients:
  - General ‘focused’ physical examination
  - Abdominal examination
  - External genitalia
  - DRE
- Investigations:
  - Urine dipstick
  - ? Serum creatinine – only if clinical indications of renal impairment
  - ? PSA

ASSESSMENT OF LUTS – PSA TESTING

- Offer men information, advice and time to decide if they wish to have a PSA test if:
  - Their LUTS are suggestive of bladder outflow obstruction due to BPE
  - Their prostate feels abnormal on DRE
  - They are concerned about prostate cancer

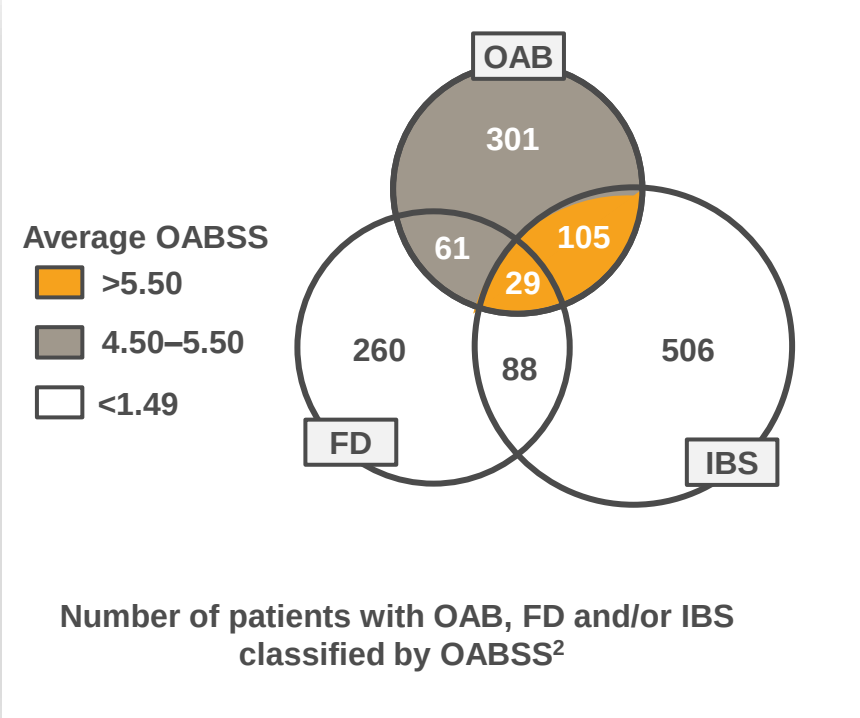
NICE
National Institute for Health and Care Excellence

DON'T FORGET BLADDER CANCER

- Be aware of combination of:
  - New storage symptoms
  - Unexplained dysuria
  - Haematuria

OPPORTUNITIES FOR DIAGNOSIS OF OAB
BOWEL DISORDERS

- "Cross talk"' / "cross organ sensitisation" between bowel & bladder[1]
- Think OAB when treating IBS…& *vice versa*
- Links with functional constipation, functional dyspepsia[2]
- Potential to worsen bowel symptoms with antimuscarinic medication



Number of patients with OAB, FD and/or IBS classified by OABSS[2]

FD = Functional Dyspepsia; IBS = Irritable Bowel Syndrome; OAB = Overactive Bladder; OABSS = Overactive Bladder Symptom Score

1. Kaplan SA, et al. *Int J Clin Pract.* 2013;67(3):205–16; 2. Matsuzaki J, et al. *Neurogastroenterol Motil.* 2012;24(9):821–7

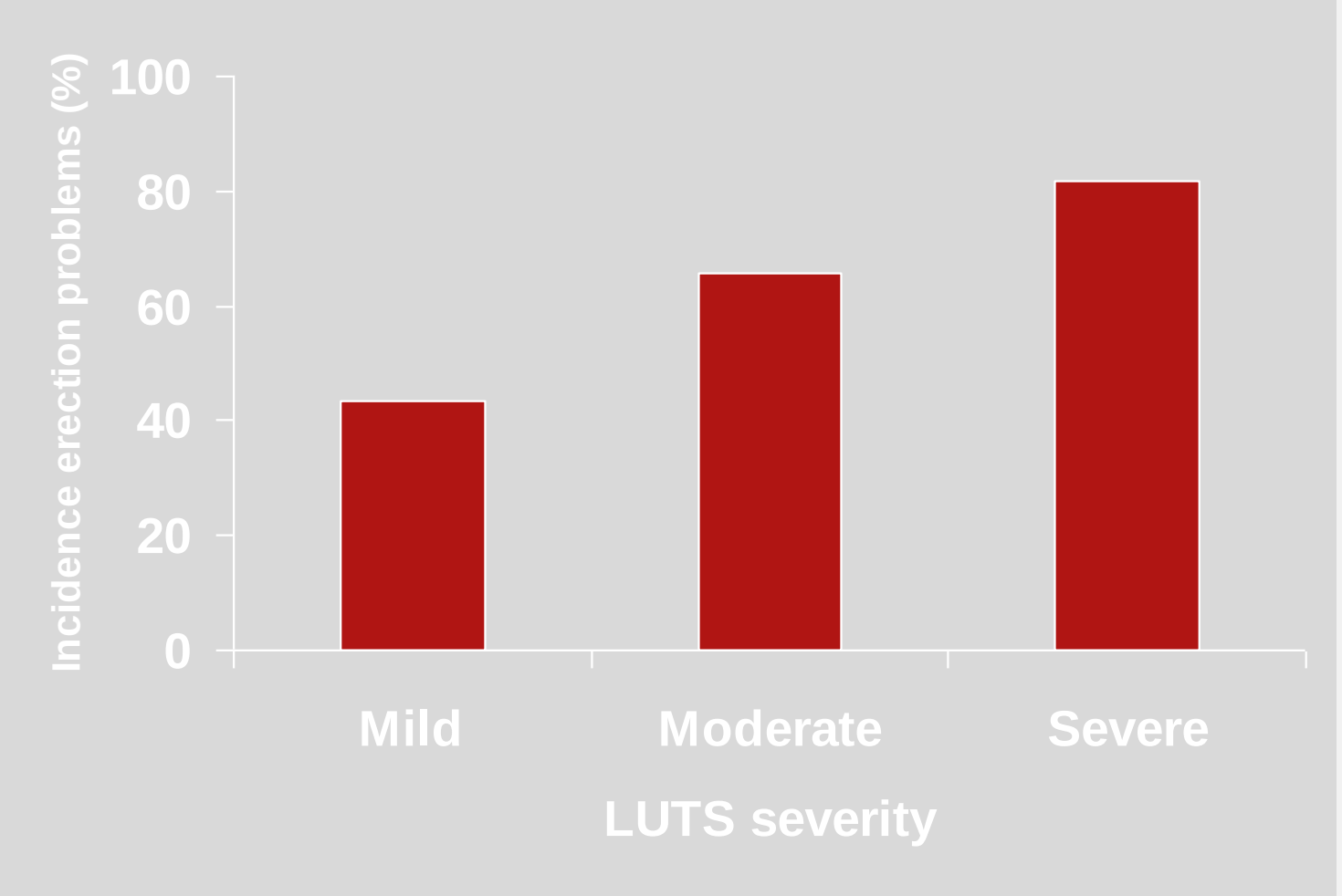
OPPORTUNITIES FOR DIAGNOSIS OF OAB
LIFESTYLE FACTORS

Lifestyle factor	OAB onset	
	Odds ratio (95% CI)	P-value
Physical activity (*vs* same level as others of same age)[a]		
More active	0.88 (0.69–1.11)	0.004
Less active	1.42 (1.07–1.89)	
Participation in vigorous activities (*vs* never/seldom)[a]		
Unable	1.47 (1.06–2.05)	0.08
1–2/week	1.05 (0.82–1.35)	
≥3/week	0.91 (0.69–1.19)	
Smoking (*vs* never smoked)		
Ex	1.22 (0.99–1.51)	0.02
Current	1.42 (1.08–1.87)	
Obesity (*vs* acceptable weight)		
Underweight	0.70 (0.42–1.18)	<0.001
Overweight	1.41 (1.11–1.79)	
Obese	1.60 (1.17–2.18)	
Missing	1.48 (1.13–1.94)	

[a]Adjusted for physical functioning (SF-36)

Dallosso HM, et al. *BJU Int.* 2003;92(1):69–77

CORRELATION BETWEEN SEVERITY OF LUTS & ED



- MSAM: Multinational survey of the ageing male
- N =12,815 men aged 50-80 years

Rosen R et al. Eur Urol 2003;44:637-49

ARE ANY LIFESTYLE CHANGES APPROPRIATE?

LIFESTYLE CHANGES

- Fluid intake:
  - type
  - volume
  - timing

- "In older men, central obesity and higher physical activity associated with increased & decreased risks of incident LUTS, respectively....."[1]
- "Prevention of chronic urinary symptoms represents another potential health benefit of exercise in elderly men....."[1]
- "Statin use associated with 6.5 to 7 year delay in the onset of moderate / severe LUTS...."[2]

1. Kellogg Parsons J et al Eur Urol 2011
2. St Sauver JL et al BJU Int 2010

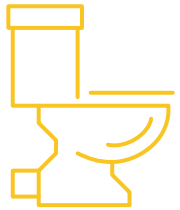
LIFESTYLE CHANGES ARE THE FIRST STEP IN OAB MANAGEMENT

Weight loss[1]

Smoking cessation[1]

PFMT and bladder training[1,2]

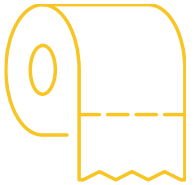
Reduce caffeine intake[1,2]



Regular voiding schedule[1]

Optimise treatment of comorbidities[1]

Review fluid intake[1]



Address constipation[1]

OAB, overactive bladder; PFMT, pelvic floor muscle training.

1. EAU Guidelines on Urinary Incontinence in Adults 2020. Available at: https://uroweb.org/guideline/urinary-incontinence/ (Accessed: August 2020);
2. NICE Guideline NG123: Urinary incontinence and pelvic organ prolapse in women: management. Available at: https://www.nice.org.uk/guidance/ng123/resources/urinary-incontinence-and-pelvic-organ-prolapse-in-women-management-pdf-66141657205189 (Accessed: September 2020).

DO THEY NEED / WANT MEDICAL TREATMENT?

MEDICAL THERAPY OF LUTS
SYMPTOM-BASED APPROACH

VOIDING

- Alpha Blockers
- 5-ARI

STORAGE

- Anti-muscarinics
- Beta-3 Agonist

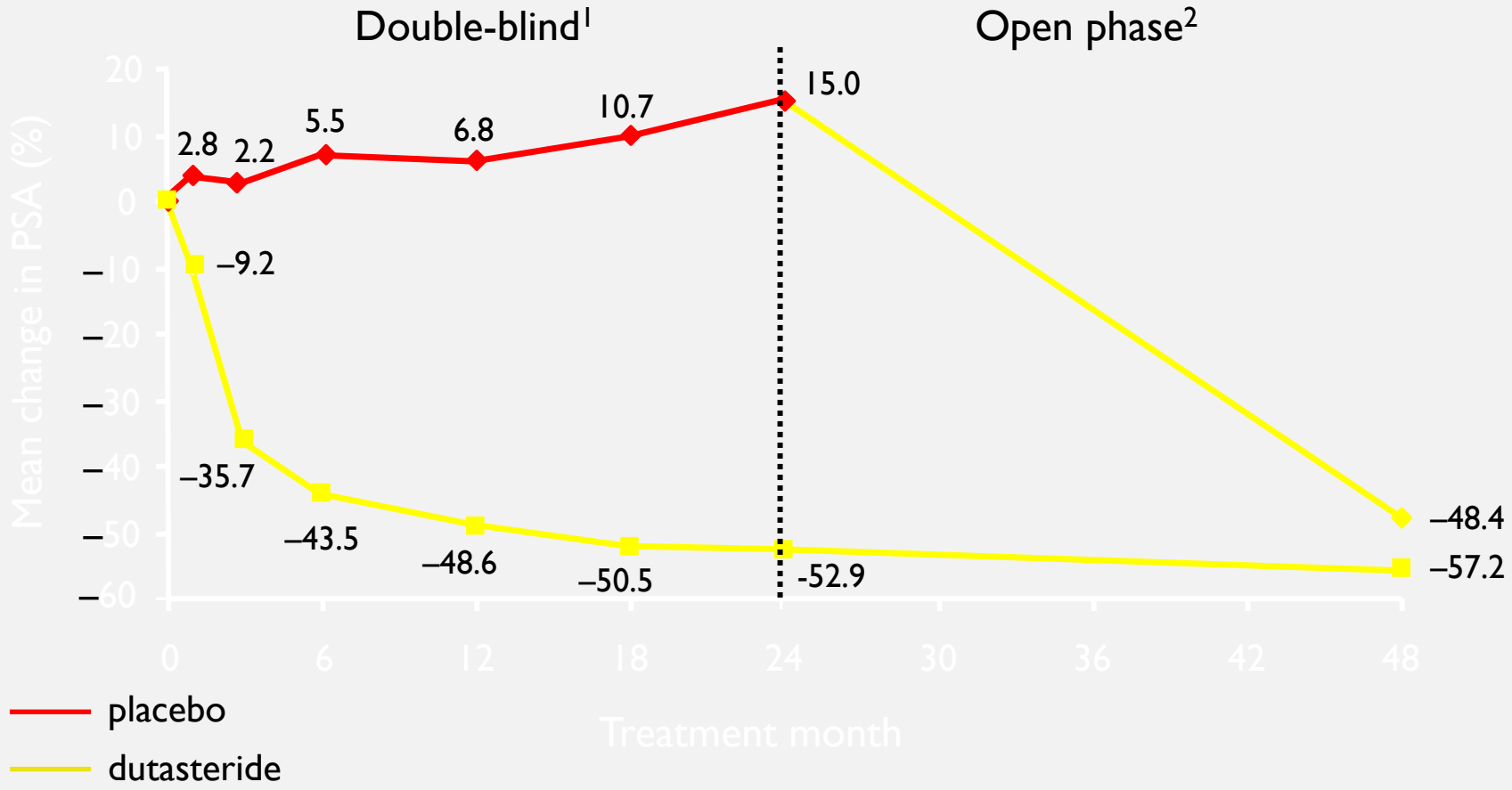
ALPHA - BLOCKERS

- E.g. Tamsulosin, Alfuzosin, Doxazosin
- Reduce tone of bladder neck / prostate
- Ideal first line drug in primary care for 'mixed LUTS'
- Rapid onset 4-6 weeks
- Symptom control quickly achieved
- No effect on PSA level or prostate size
- BUT do not prevent progression of BPH (AUR / surgery)

5-ALPHA REDUCTASE INHIBITORS

- e.g. Finasteride or Dutasteride (Avodart/Combodart)
- Inhibit conversion of testosterone to DHT
- Reduce prostate volume
- Most effective in prostates >40g
- Improves symptoms and decreased rate of AUR / surgery
- S/E: fatigue, ED, loss of libido, gynaecomastia
- Full effects take ≥ 6 months to develop

5ARIS REDUCE PSA LEVEL

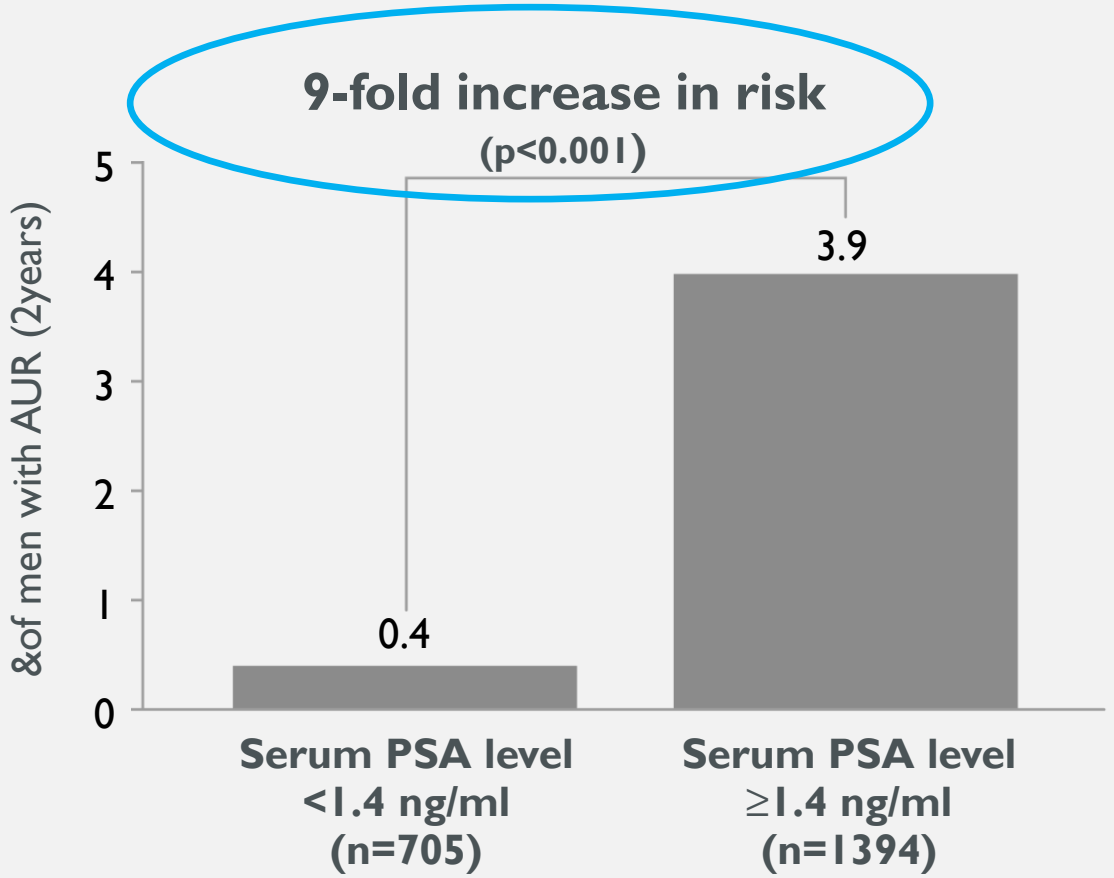


1. Adapted from Roehrborn CG et al. Urology 2002; 60: 434-441.
2. Adapted from Debruyne F et al. Eur Urol 2004; 46: 488-495.

RISK FACTORS FOR PROGRESSION

- Progression:
  - Deterioration in symptoms
  - Acute retention
  - BPH related surgery
- Age over 70 with LUTS
- Moderate to severe symptoms i.e. IPSS > 7
- **PSA > 1.4 ng/ml**
- Prostate volume over 30ccs (i.e. feels enlarged on DRE)
- Flow rate <12 ml/sec

Risk of AUR by Baseline Serum PSA in Untreated Men (Placebo Group)



Adapted from Marberger MJ et al *Eur Urol* 2000;38:563-568.

NICE 2010

Indication	Treatment	Review*
Moderate to severe LUTS	Offer an alpha blocker (alfuzosin, doxazosin, tamsulosin or terazosin)	• At 4–6 weeks, then every 6–12 months
OAB	Offer an anticholinergic	• At 4–6 weeks until stable, then every 6–12 months
LUTS and a prostate estimated to be larger than 30 g or PSA greater than 1.4 ng/ml, and high risk of progression	Offer a 5-alpha reductase inhibitor	• At 3–6 months, then every 6–12 months
Bothersome moderate to severe LUTS, and a prostate estimated to be larger than 30 g or PSA greater than 1.4 ng/ml	Consider an alpha blocker plus a 5-alpha reductase inhibitor	• At 4–6 weeks, then every 6–12 months for the alpha blocker • At 3–6 months, then every 6–12 months for the 5-alpha reductase inhibitor
Storage symptoms despite treatment with an alpha blocker alone	Consider adding an anticholinergic	• At 4–6 weeks until stable, then every 6–12 months

* Review to assess symptoms and the effect of the drugs on the man's quality of life, and to ask about any adverse effects.

COMBINATION THERAPY

What combinations?

- **Alpha blocker plus 5-alpha reductase inhibitor**
- Alpha blocker plus PDE5 inhibitor
- PDE5 inhibitor plus 5-alpha reductase inhibitor
- Alpha blocker plus anti-muscarinic / Beta-3 Agonist
- Anti-muscarinic plus Beta-3 Agonist
- Triple therapy – AB/AM/B3?

Why combination therapy?

- Inadequate symptom control on monotherapy
- Prevention of disease progression
  - Worsening symptoms
  - Acute Urinary Retention
  - BPH-related surgery

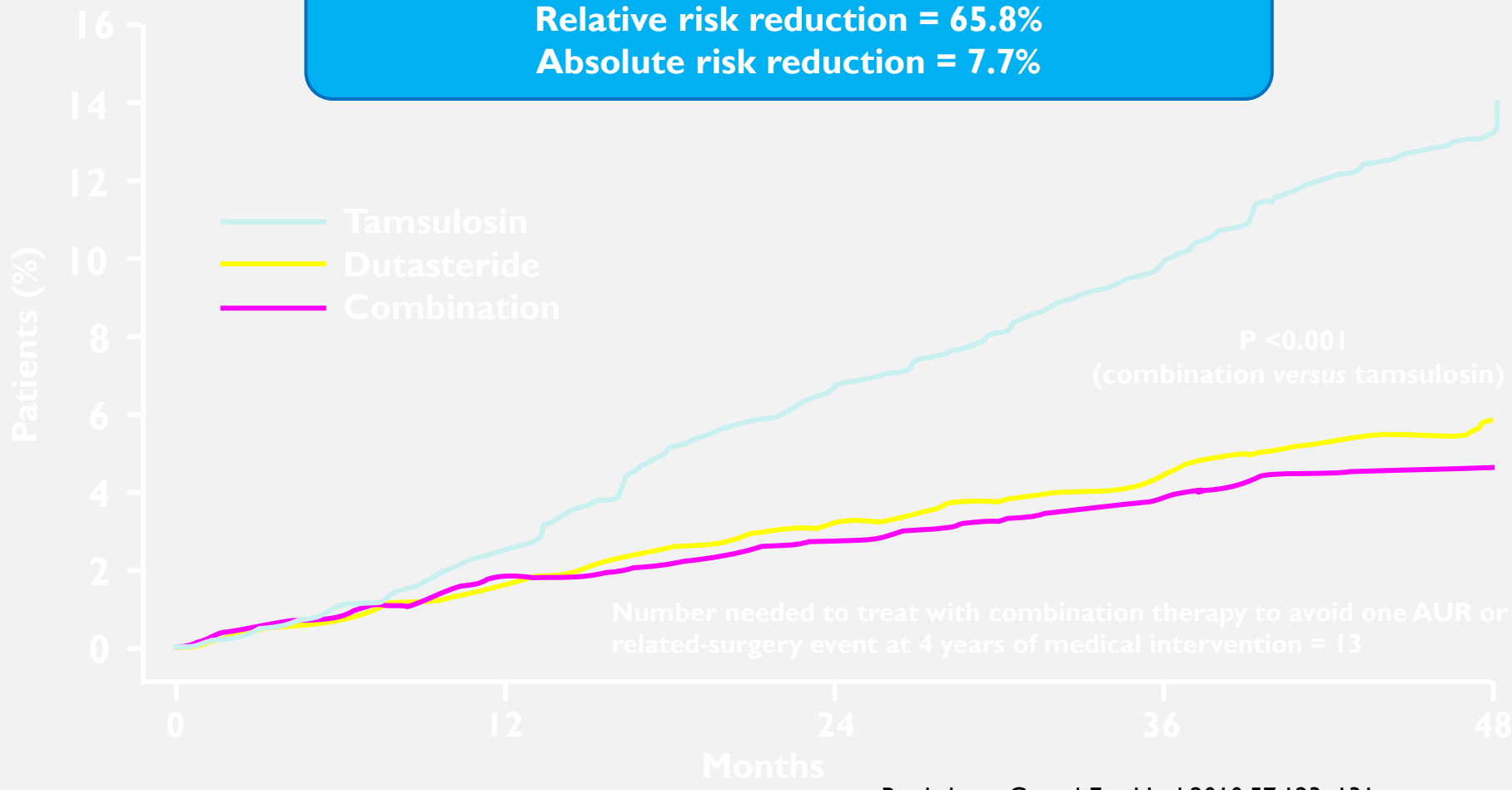
COMBINATION THERAPY

- MTOPS & CombAT
- Most effective for controlling symptoms
- Most effective for reducing progression to AUR or surgery
- At 4 years in CombAT combination reduced relative risk AUR / surgery by 70% vs tamsulosin
- 7.7% actual risk reduction (NNT=13)

Roehrborn CG et al. J Urol 2008;179:616–21;
Siami P et al. Contemp Clin Trials 2007;28:770–9
McConnell JD *et al.* NEJM 2003;349:2387–98

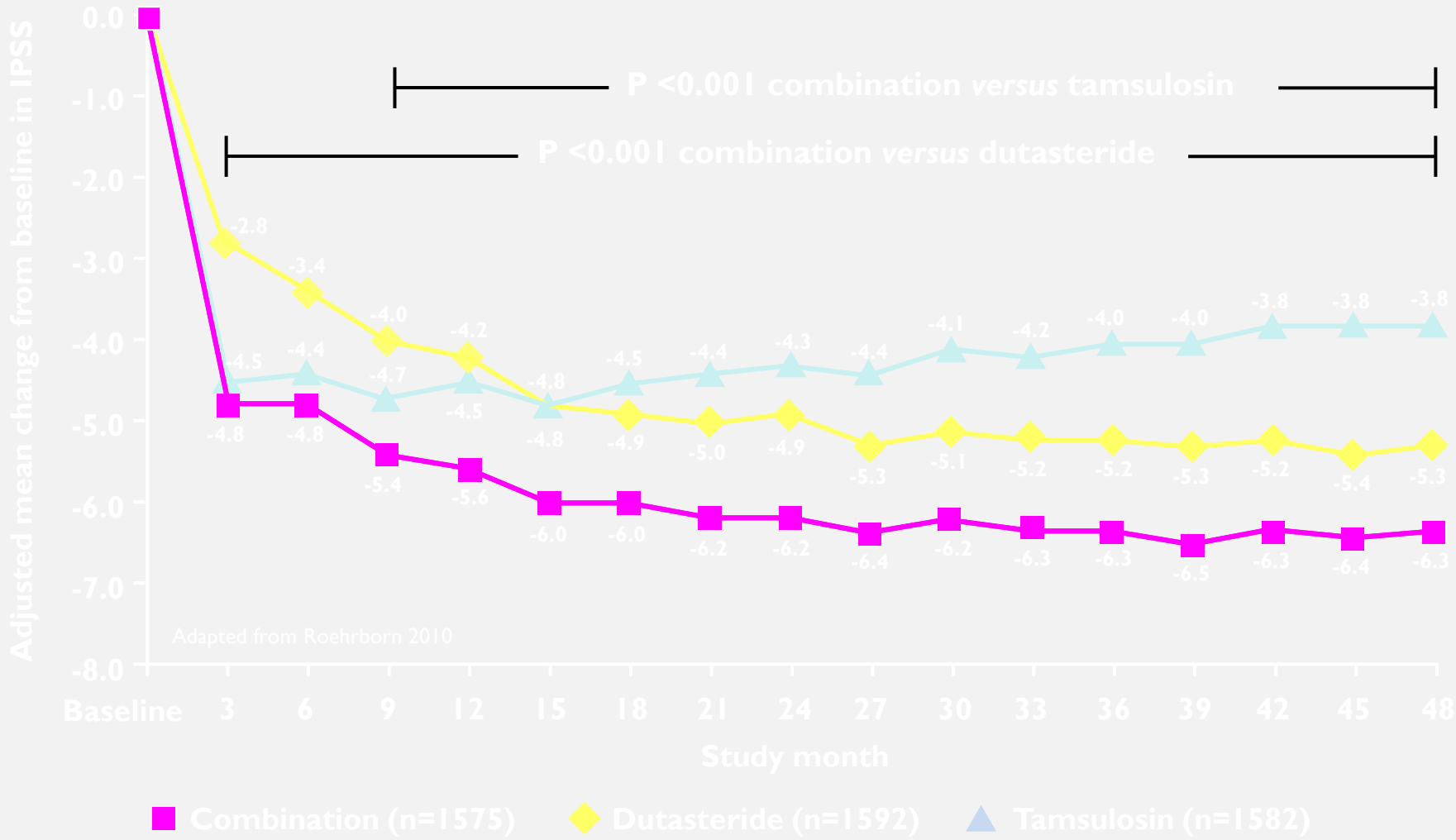
COMBAT: THE RELATIVE RISK OF AUR AND/OR BPH-RELATED SURGERY VERSUS TAMSULOSIN AT 4 YEARS

For combination *versus* tamsulosin at year 4 :
Relative risk reduction = 65.8%
Absolute risk reduction = 7.7%



Roehrborn C *et al.* Eur Urol 2010;57:123–131.

COMBAT: MEAN CHANGE FROM BASELINE IN IPSS



Roehrborn C *et al.* Eur Urol 2010;57:123–131.

ALPHA BLOCKER WITHDRAWAL

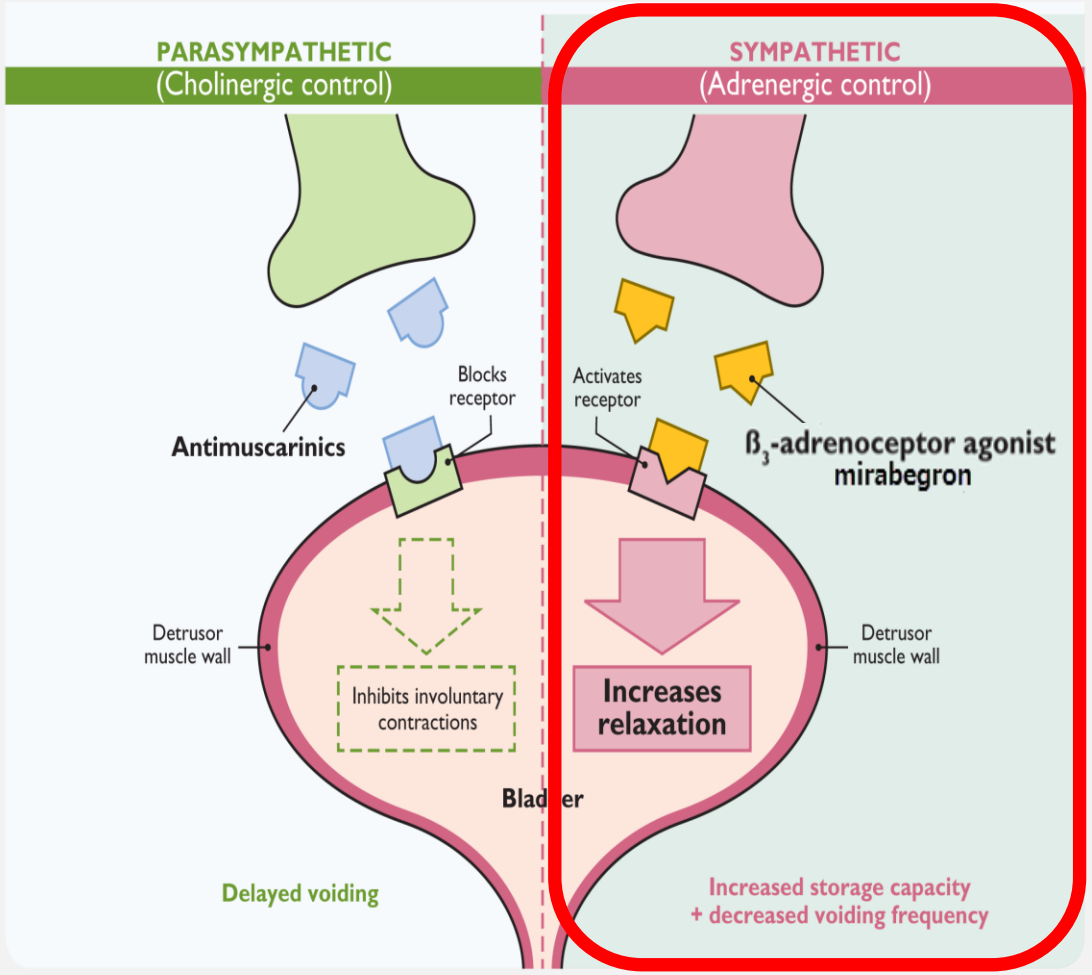
- Symptom Management after Reducing Treatment (SMART) trial
  - 327 BPH patients randomised:
    - 0.5mg dutasteride & 400 mcg tamsulosin for 36 weeks (DT36)
    - 0.5 mg dutasteride & 0.4 mg tamsulosin for 24 weeks followed by dutasteride & tamsulosin matched placebo for the remaining 12 weeks (DT24+D12).
  - In the men with an IPSS <20 who changed to dutasteride monotherapy at week 24, 84% switched without a noticeable deterioration in their symptoms.
  - In the 27% of men with severe baseline symptoms (IPSS ≥20) who had withdrawal of tamsulosin therapy at week 24, 42.5% reported a worsening of their symptoms compared with 14% in the DT36 group.

Barkin J et al. a-Blocker therapy can be withdrawn in the majority of men following initial combination therapy with the dual 5alpha-reductase inhibitor dutasteride. Eur Urol 2003;44: 461–6.

SURGERY FOR BPH

- TURP remains gold standard
- Promising laser interventions:
  - Holmium laser enucleation
  - Green light laser
- Minimally invasive treatments
  - TUNA, TUMT, TEAP, HIFU

MODE OF ACTION: ANTIMUSCARINICS & MIRABEGRON



Adapted from Betmiga Summary of Product Characteristics, December 2012 and Chu et al., 2006.
Betmiga Summary of Product Characteristics, December 2012

Gras J. Drugs of Today 2012;48(1):25-32
Chu F, Dmochowski R. Am J Med 2006;119(3A):3S–8S

MEDICAL TREATMENT OF STORAGE SYMPTOMS

Anti-muscarinics

- E.g. Oxybutynin, Tolterodine, Solifenacin
- No compelling evidence of difference in efficacy within class
- Side effect profiles may differ
- Caution in initiating in elderly with significant voiding symptoms – assess PVR first (ok if <250mls)
- Use alongside alpha blocker in BPH if storage symptoms not controlled
- Caution with immediate release in elderly – effect on cognitive function

β-3 Adrenoceptor Agonists

- E.g. Mirabegron (Betmiga)
- Studies suggest similar efficacy to anti-cholinergics, although no published head to head comparisons
- Side effect profile may be better (e.g. dry mouth in <3%)
- NICE 2013 recommend only use when anti-cholinergics:
  - Contra-indicated
  - Not tolerated
  - Ineffective

DO THEY NEED FOLLOW-UP IN PRIMARY CARE?

PRIMARY CARE FOLLOW-UP

- Conservative management – patient initiated?
- Alpha blocker / Anti-muscarinic / Beta-3 – 1m, then as part of routine meds review?
- 5ARI – 1m, then 6m then as part of routine meds review?
- Mirabegron – "Blood pressure should be monitored before starting treatment and regularly during treatment, especially in patients with pre-existing hypertension".

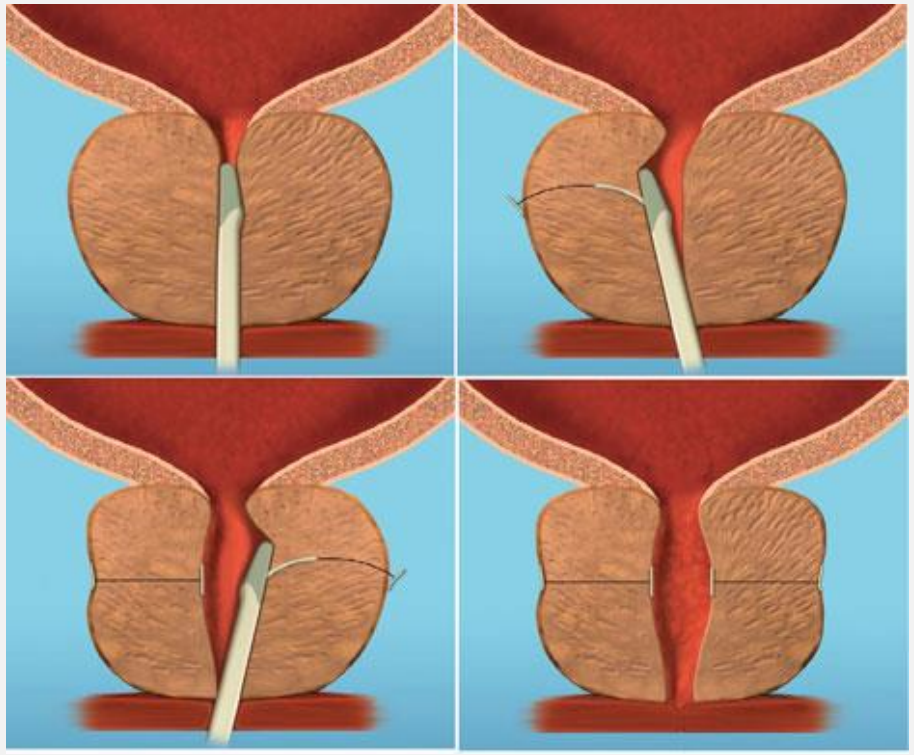
DO THEY NEED REFERRAL TO SECONDARY CARE?

UROLOGICAL REFERRAL

- **DIAGNOSTIC UNCERTAINTY**
- **RED FLAGS**
  - HAEMATURIA
  - RAISED PSA
  - RECURRENT UTI
- **TREATMENT FAILURE**
  - NOT RESPONDING ADEQUATELY
  - UNABLE TO TOLERATE MEDICATION
  - UNWILLING TO TRY MEDICATION
  - PATIENT REQUEST??

- **POSSIBLE OPTIONS**
  - **DIAGNOSTIC**
    - FLOW TEST & PVR
    - URODYNAMICS
    - FLEXIBLE CYSTOSCOPY
  - **THERAPEUTIC**
    - TURP
    - LASER
    - MINIMALLY INVASIVE SURGERY
    - UROLIFT / PAE / REZUM
    - INTRAVESICAL BOTULINUM

‘UROLIFT’ – THE PROSTATIC URETHRAL LIFT



Insertion of prostatic urethral lift implants to treat LUTS secondary to BPH: NICE guidance.nice.org.uk/ipg475 January 2014

NOCTURIA

"Anyone can carry their burden, however hard, until nightfall…"

Robert Louis Stevenson

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Primary Care Urology Society

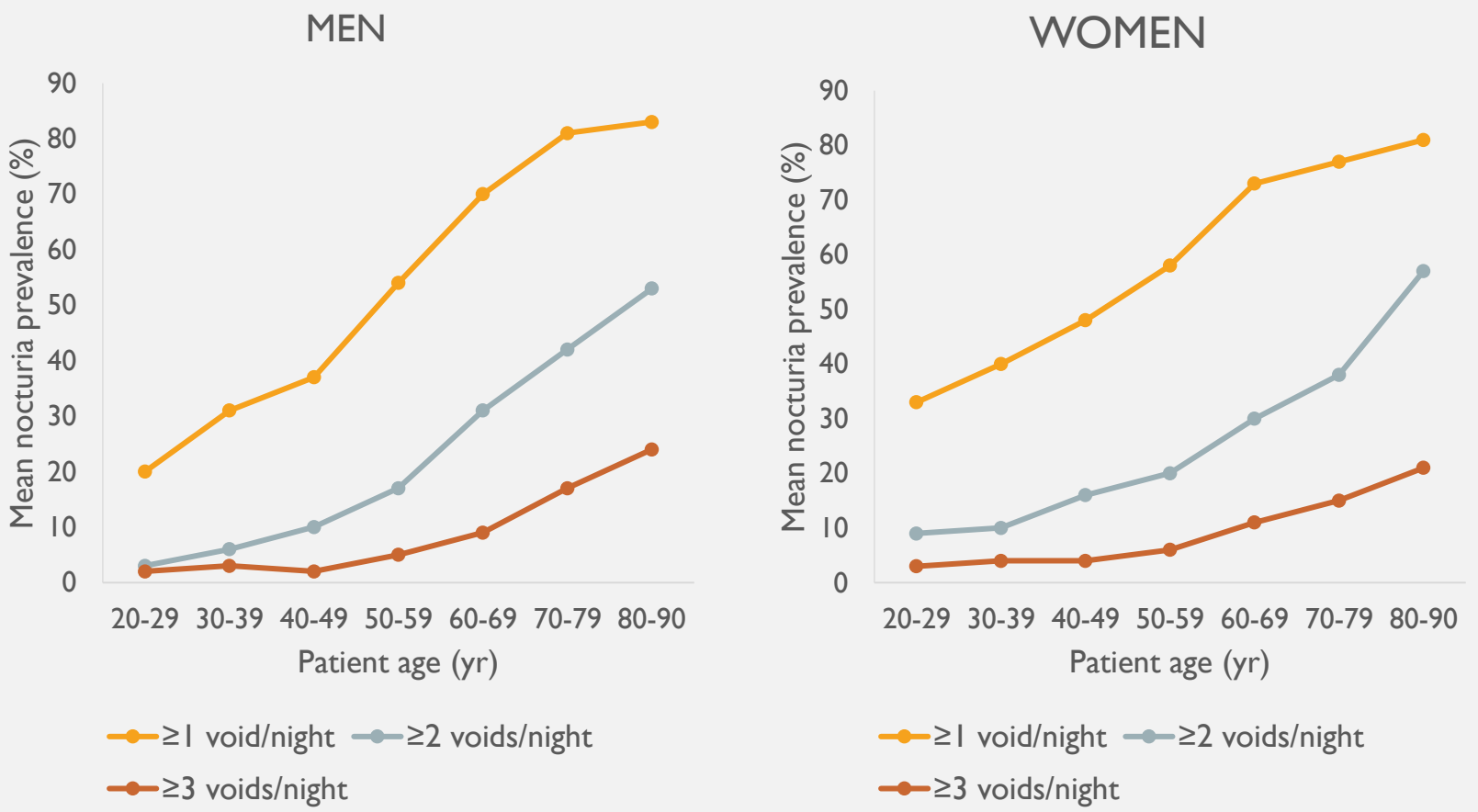
NOCTURIA

ICS Definition:

"The number of times urine is passed during the main sleep period. Having woken to pass urine, each urination must be followed by sleep or the intention to sleep"

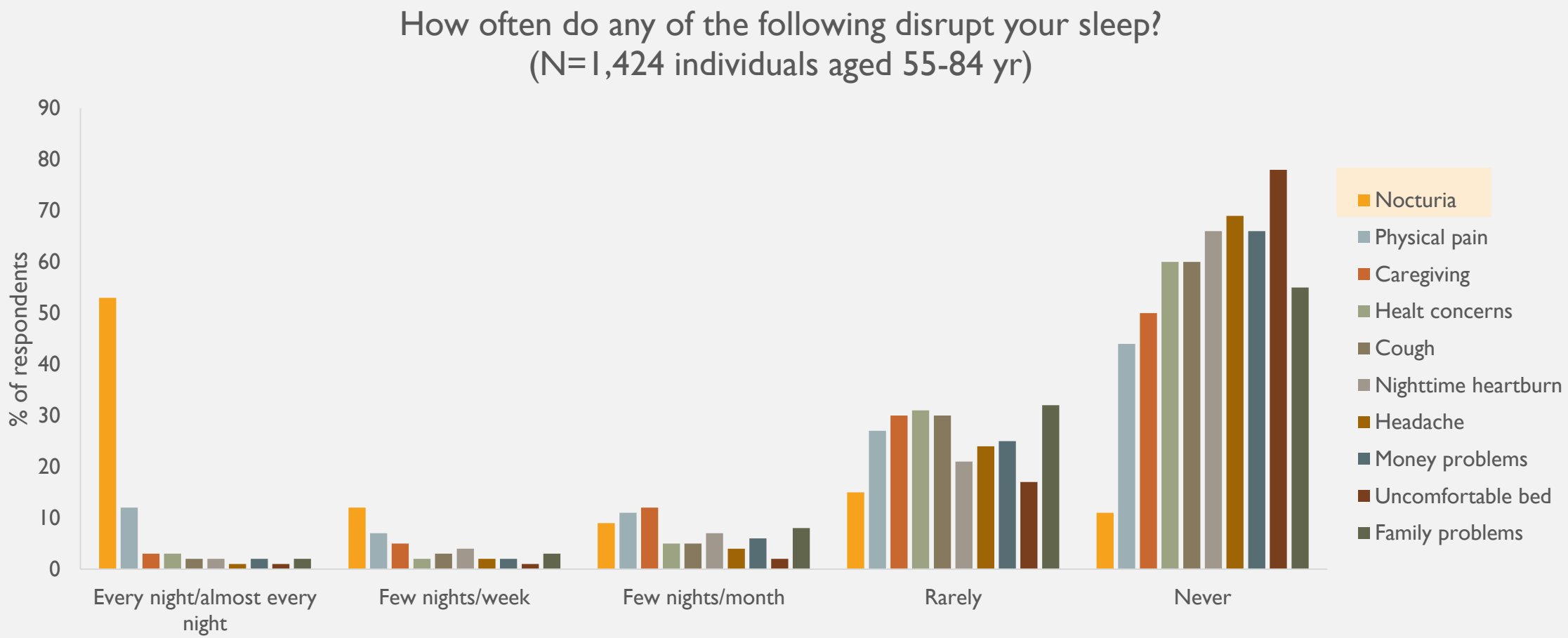
Hashim H et al, Neurourol Urodyn 2019; 38: 499-508

NOCTURIA IS COMMON ACROSS ALL AGE GROUPS IN BOTH MEN AND WOMEN



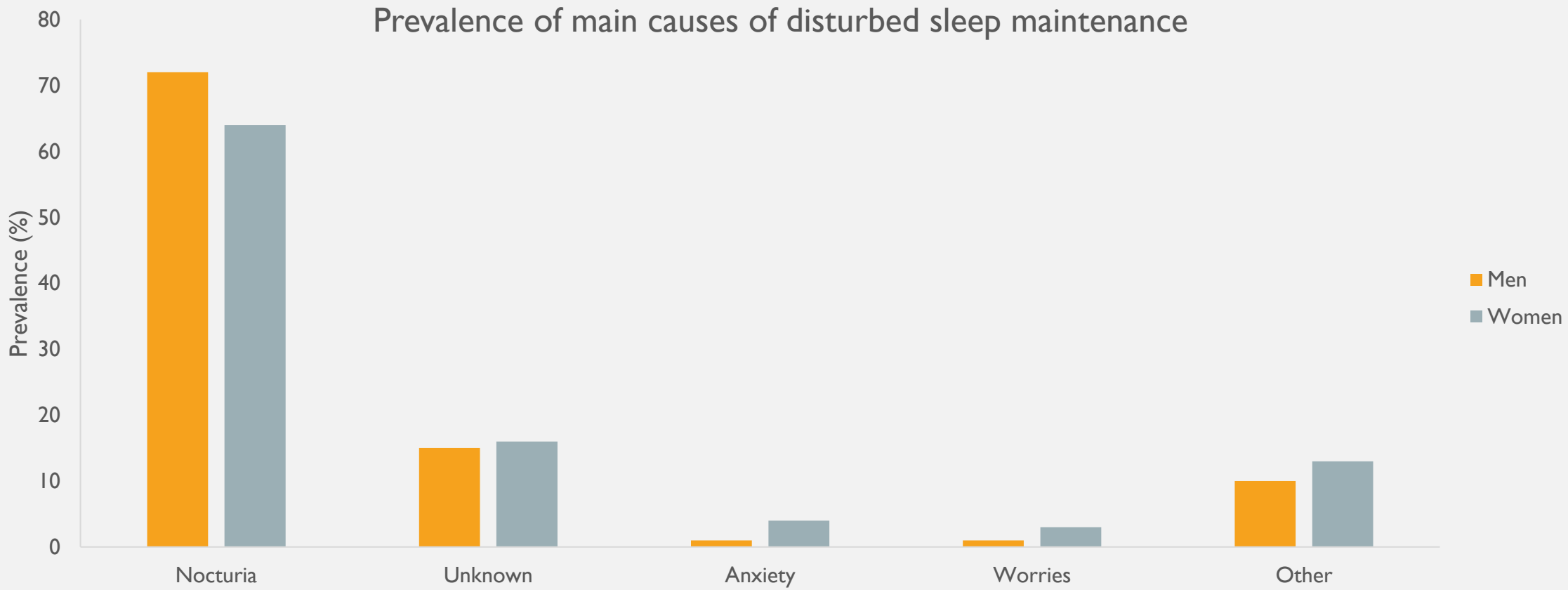
Cornu JN et al. Eur Urol 2012;62:877-90

NOCTURIA IS THE MOST COMMON CAUSE OF DISTURBED SLEEP IN THE ELDERLY



Bliwise DL et al. Sleep Med 2009;10:540-8

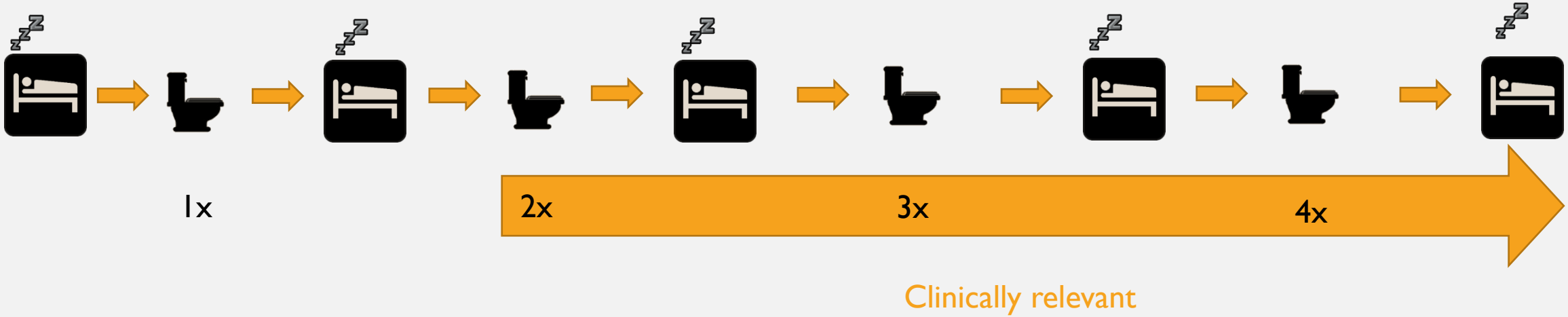
NOCTURIA IS THE MOST COMMON CAUSE OF DISTURBED SLEEP IN BOTH MEN AND WOMEN



Middelkoop HA et al. J Gerontol A Biol Sci Med Sci 1996;51:M108-15

WHAT IS CLINICALLY RELEVANT NOCTURIA?

- ≥2 nightly voids
  - Many studies on nocturia only consider patients with ≥2 nightly voids
  - Threshold value where nocturia is reported to be bothersome and significantly impact QoL



Cornu JN et al. Eur Urol 2012;62:877-90; Oelke M et al. World J Urol 2014;32:1109-17

THE BLADDER DIARY IS UNDERUSED IN THE DIAGNOSIS OF NOCTURIA

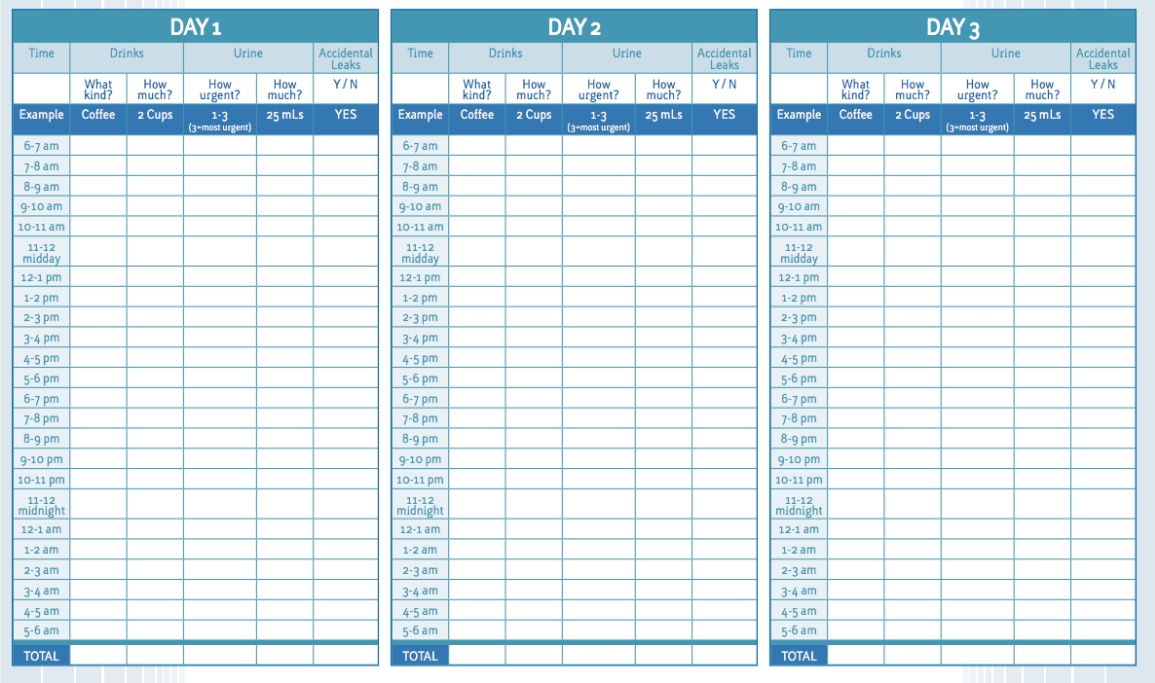
	Number of patients (N)	Use of bladder diary (%)
Any nocturia diagnosis	2,233	43
Consulting primary care physician	862	34
Consulting urologist	1,032	45
Consulting gynaecologist	339	60
Male nocturia pts	1,309	37
Female nocturia pts	924	52
All pts with ≥1 void/night + bother (without dx of nocturia)	1,212	40
All pts with ≥2 voids/night (without dx of nocturia)	2,433	37
First consulted due to tiredness (without dx of nocturia)	286	35
Diagnosis of nocturnal polyuria by physician	589	55

Oelke M et al. Int J Clin Pract 2016;70:940-9

dx: diagnosis

FREQUENCY VOLUME CHART

- **Normal urinary frequency, normal voided volumes**
- **Increased urinary frequency with normal volumes**
  - ?fluid intake but exclude other causes of polyuria, e.g. T2DM
- **Increased nocturnal fluid output**
  - ? XS fluid intake during the evening.
  - Consider nocturnal polyuria
- **Reduced volume voids with marked variation in voided volume**
  - characteristic of overactive bladder syndrome (OAB)
- **Reduced volume voids without significant variation in voided volume**
  - 'red flag' finding, suggestive of bladder wall pathology (e.g. carcinoma in situ).



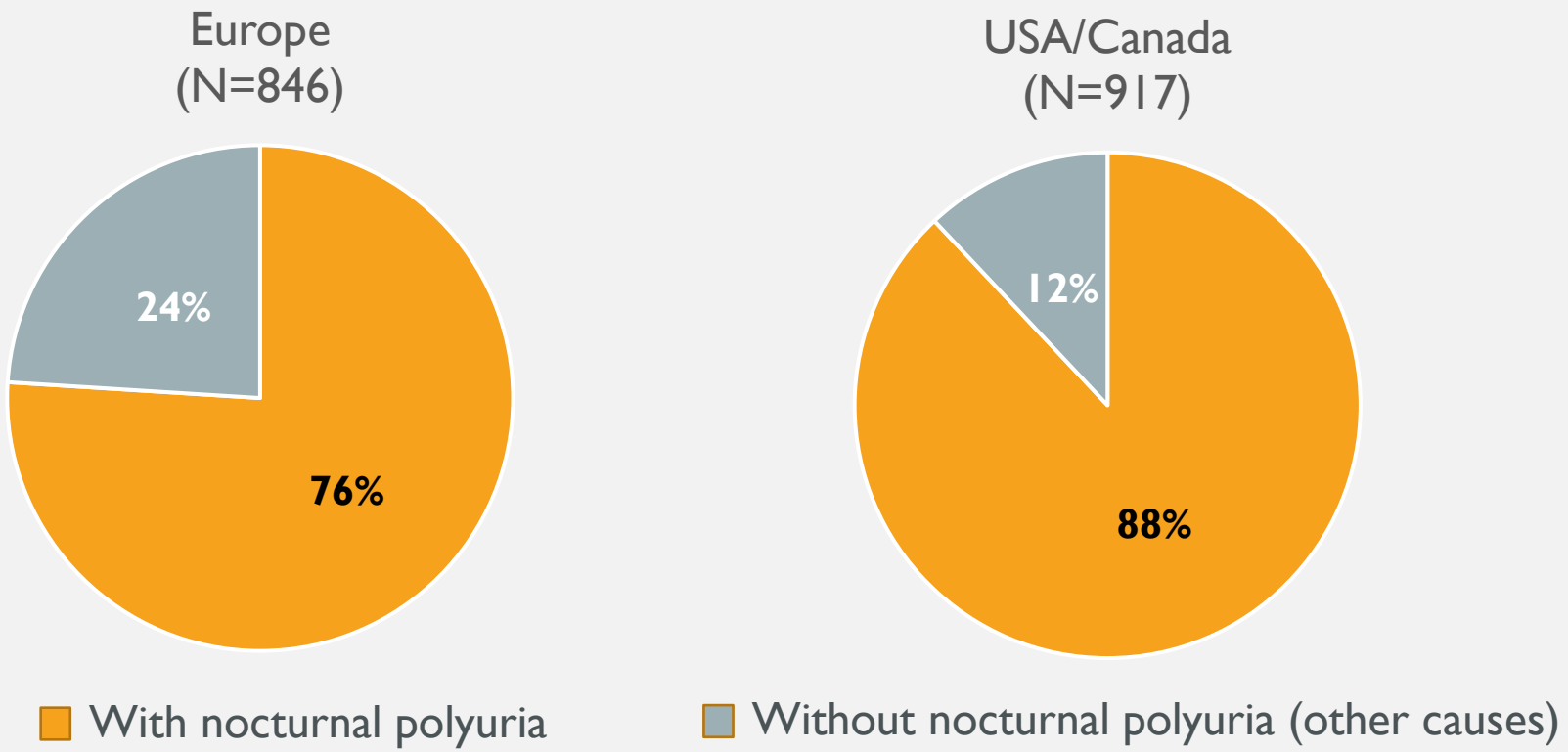
DAY 1					
Time	Drinks		Urine		Accidental Leaks
	What kind?	How much?	How urgent?	How much?	Y / N
Example	Coffee	2 Cups	1-3 (3=most urgent)	25 mLs	YES
6-7 am					
7-8 am					
8-9 am					
9-10 am					
10-11 am					
11-12 midday					
12-1 pm					
1-2 pm					
2-3 pm					
3-4 pm					
4-5 pm					
5-6 pm					
6-7 pm					
7-8 pm					
8-9 pm					
9-10 pm					
10-11 pm					
11-12 midnight					
12-1 am					
1-2 am					
2-3 am					
3-4 am					
4-5 am					
5-6 am					
TOTAL					

DAY 2					
Time	Drinks		Urine		Accidental Leaks
	What kind?	How much?	How urgent?	How much?	Y / N
Example	Coffee	2 Cups	1-3 (3=most urgent)	25 mLs	YES
6-7 am					
7-8 am					
8-9 am					
9-10 am					
10-11 am					
11-12 midday					
12-1 pm					
1-2 pm					
2-3 pm					
3-4 pm					
4-5 pm					
5-6 pm					
6-7 pm					
7-8 pm					
8-9 pm					
9-10 pm					
10-11 pm					
11-12 midnight					
12-1 am					
1-2 am					
2-3 am					
3-4 am					
4-5 am					
5-6 am					
TOTAL					

DAY 3					
Time	Drinks		Urine		Accidental Leaks
	What kind?	How much?	How urgent?	How much?	Y / N
Example	Coffee	2 Cups	1-3 (3=most urgent)	25 mLs	YES
6-7 am					
7-8 am					
8-9 am					
9-10 am					
10-11 am					
11-12 midday					
12-1 pm					
1-2 pm					
2-3 pm					
3-4 pm					
4-5 pm					
5-6 pm					
6-7 pm					
7-8 pm					
8-9 pm					
9-10 pm					
10-11 pm					
11-12 midnight					
12-1 am					
1-2 am					
2-3 am					
3-4 am					
4-5 am					
5-6 am					
TOTAL					

PCUS
Primary Care Urology Society

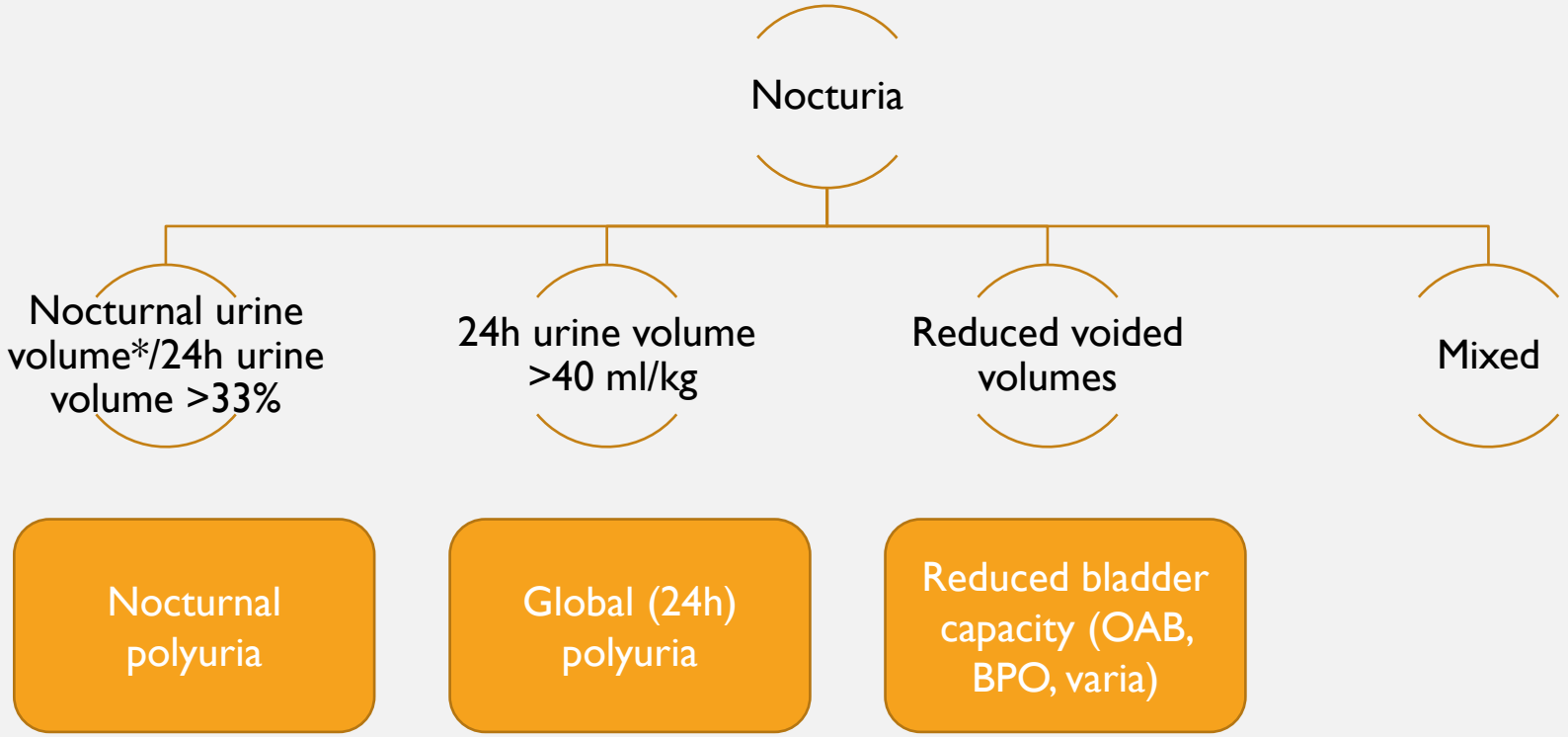
NOCTURIA IS PRIMARILY CAUSED BY NOCTURNAL POLYURIA



Nocturnal polyuria based on data from 3- or 7-day frequency-volume charts completed by patients as part of screening for inclusion in subsequent trials of nocturia therapy

Weiss JP et al. J Urol 2011;196:1358-63

THE BLADDER DIARY IS AN ESSENTIAL EVALUATION TOOL FOR CLASSIFICATION OF NOCTURIA



*First morning void included. Threshold value of 33% if for elderly patients. Younger patients have definitions of nocturnal polyuria with lower threshold values

Van Kerrebroeck P et al. Neurourol Urodyn 2014;33:S2-5

BPO: benign prostatic obstruction; OAB: overactive bladder

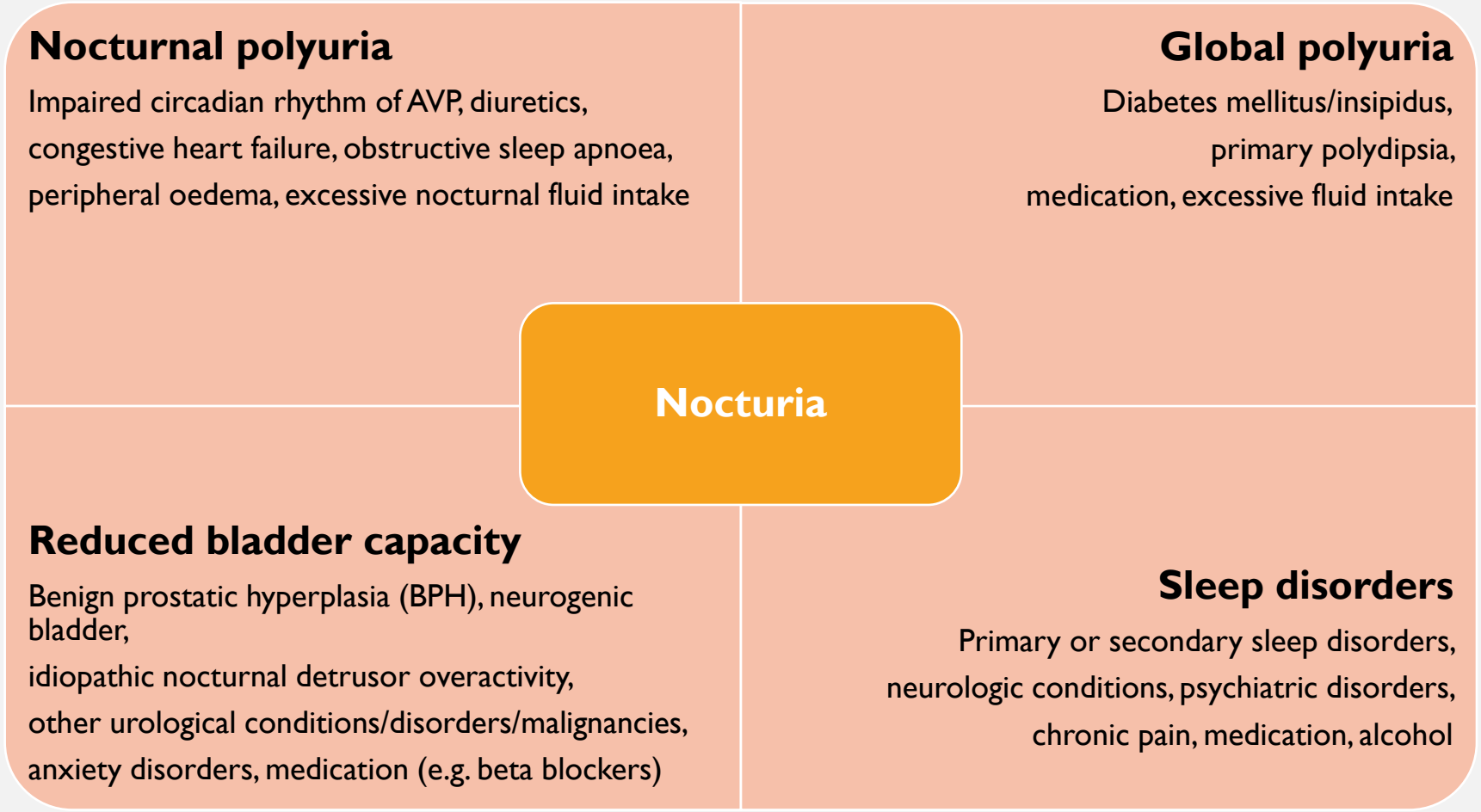
Editorial

Nocturia Is an Orphan Symptom Seeking Caring Specialties Willing To Adopt

Marcus J. Drake [a,b,*], *Jonathan Rees* [c], *Emily J. Henderson* [d,e]

[a] *Bristol Urological Institute, North Bristol NHS Trust, Bristol, UK*; [b] *Translational Health Sciences, Bristol Medical School, University of Bristol, Bristol, UK*; [c] *Tyntesfield Medical Group, Bristol, UK*; [d] *Population Health Sciences, Bristol Medical School, University of Bristol, Bristol, UK*; [e] *Older People's Unit, Royal United Hospital NHS Foundation Trust, Bath, UK*

NOCTURIA IS A MULTIFACTORIAL MEDICAL CONDITION

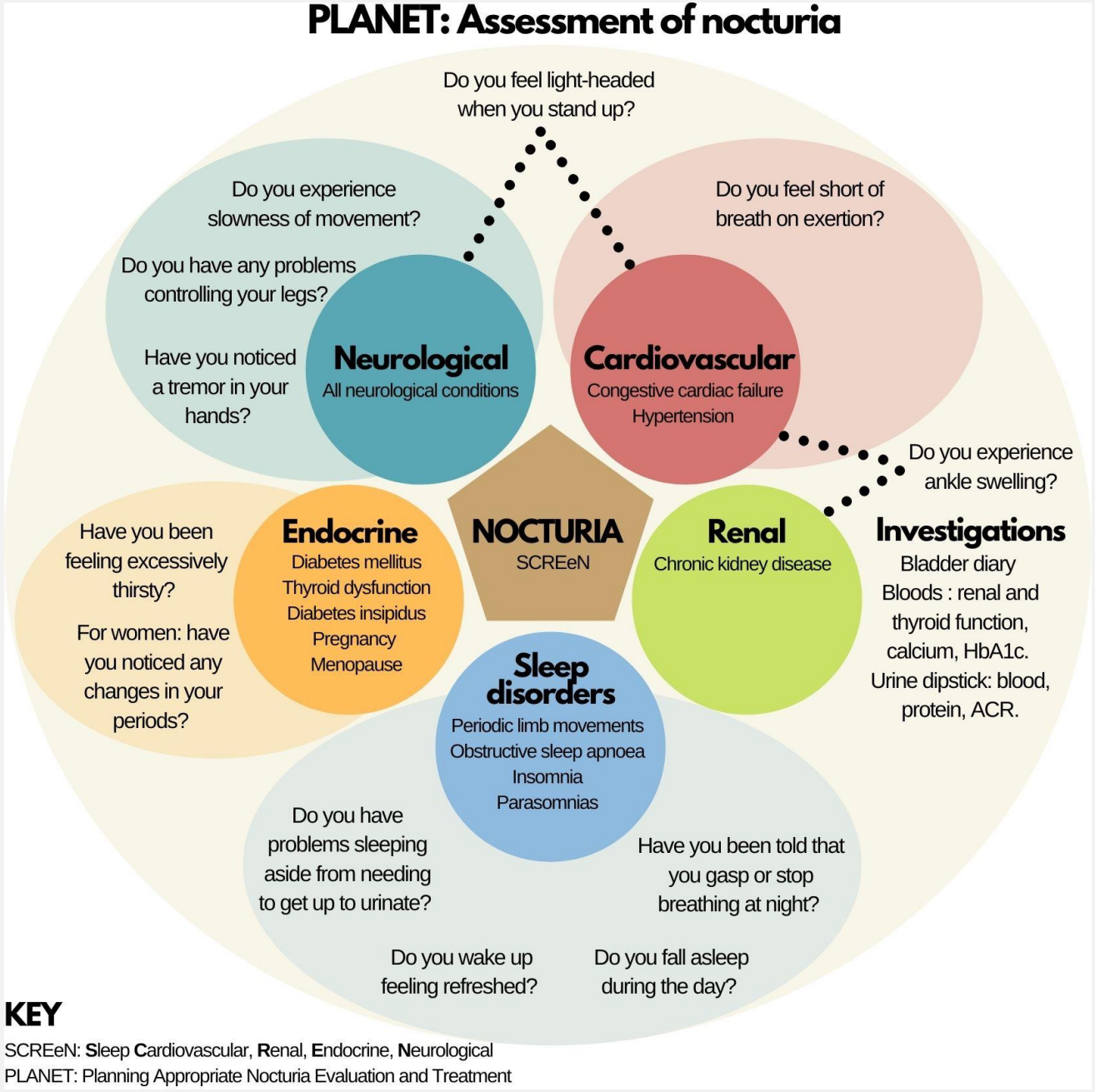


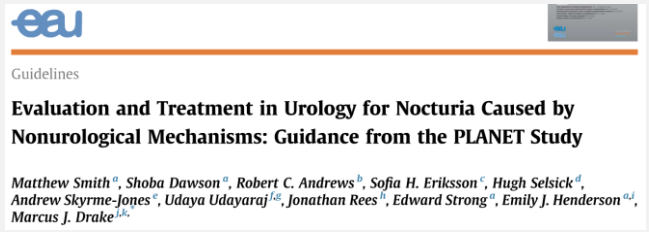
Dani H et al. Nat Rev Urol 2016;13:573-83; Nimeh T et al. Curr Urol Rep 2015;16:66

AVP: arginine-vasopressin

NOCTURIA SCREENING QUESTIONS?

(FOR NON-UROLOGICAL CAUSES)





eau

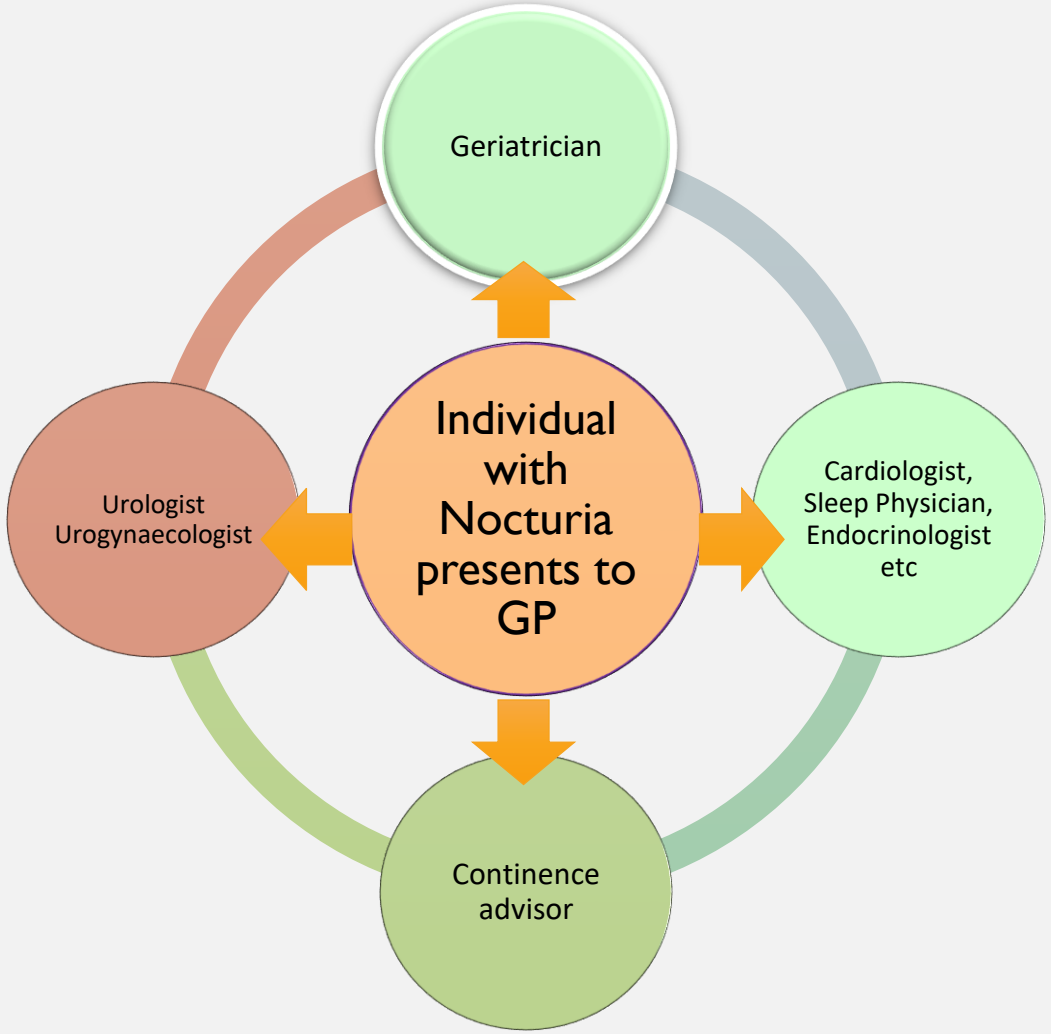
Guidelines

Evaluation and Treatment in Urology for Nocturia Caused by Nonurological Mechanisms: Guidance from the PLANET Study

Matthew Smith [a], Shoba Dawson [a], Robert C. Andrews [b], Sofia H. Eriksson [c], Hugh Selsick [d], Andrew Skyrme-Jones [e], Udaya Udayaraj [f,g], Jonathan Rees [h], Edward Strong [a], Emily J. Henderson [a,i], Marcus J. Drake [j,k].

European Urology Focus 2022

Nocturia is best assessed & initially managed by GP's



Expert generalists

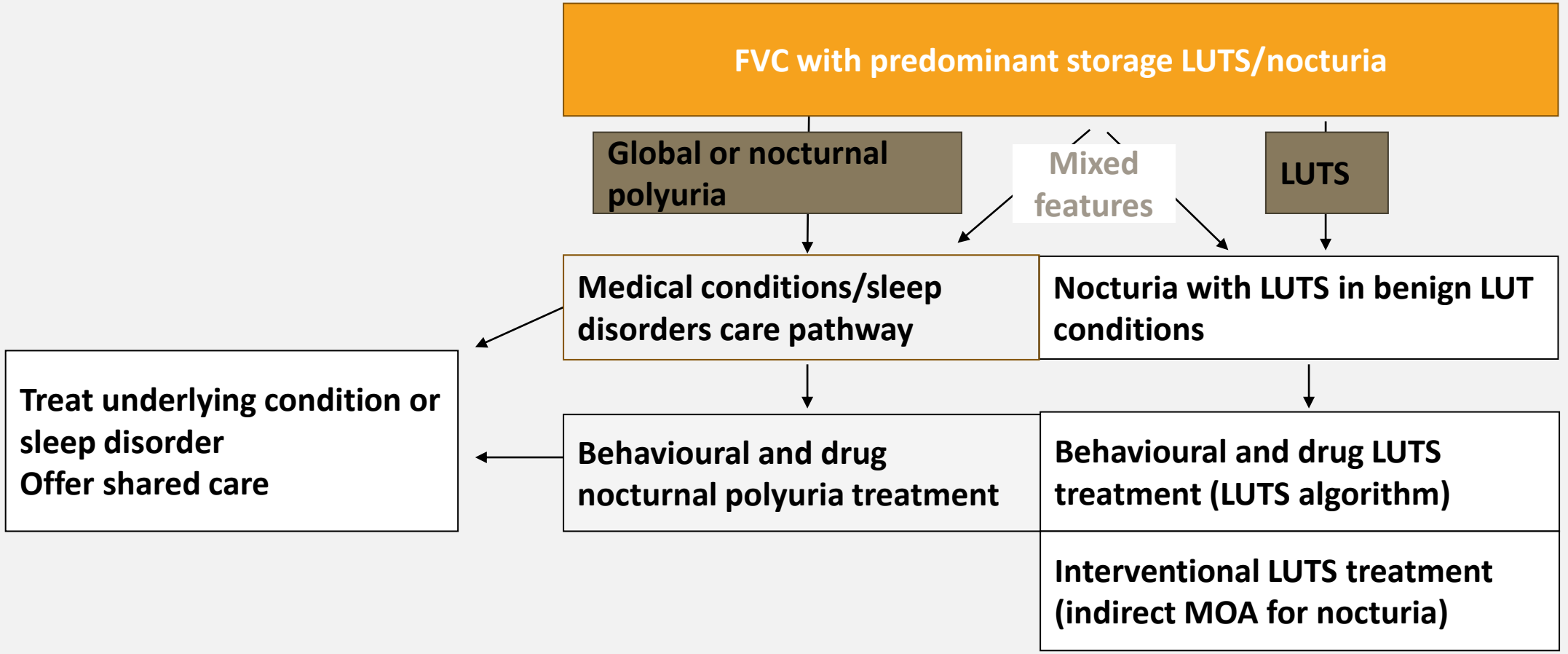
-Lifestyle change
-Medical causes
-Co-morbidities
-Polypharmacy

BEHAVIOURAL MODIFICATIONS SHOULD BE THE FIRST STEP IN THE MANAGEMENT OF NOCTURIA

- Pre-emptive voiding before going to bed
- Take time for voiding until bladder is completely empty
- Modify diet and restrict fluids prior to bed time
  - Avoid caffeinated beverages
  - Avoid alchohol
- Change time of diuretic use from evening to mid afternoon (if applicable)
- Elevate the legs in the evening to mobilise fluids (if applicable)
  - For patients with peripheral oedema, congestive heart failure

Barkin J. Can J Urol 2016;23(Suppl 1):16-9; Nimeh T et al. Curr Urol Rep 2015;16:66

MANAGEMENT SHOULD BE TAILORED DEPENDING ON THE AETIOLOGY OF NOCTURIA



FVC: frequency volume chart; LUT(S): lower urinary tract (symptoms); MOA: mode of action

Adapted from Gravas S et al. EAU guidelines on non-neurogenic LUTS. Update 2017 (available at www.uroweb.org/guidelines - last accessed April 2017)

CASE HISTORY

- 52 year old man – seen in Community Urology clinic
- On tamsulosin & finasteride for LUTS – not working - ?needs TURP

- Only symptom = NOCTURIA x4-5
- No FVC (but suspicion of NP based on history)
- Drinking >1L coke in evening after work
- Overweight++, no exercise
- Not been assessed for diabetes
- Snores+++, daytime somnolence
- On amlodipine for hypertension – bilateral SOA

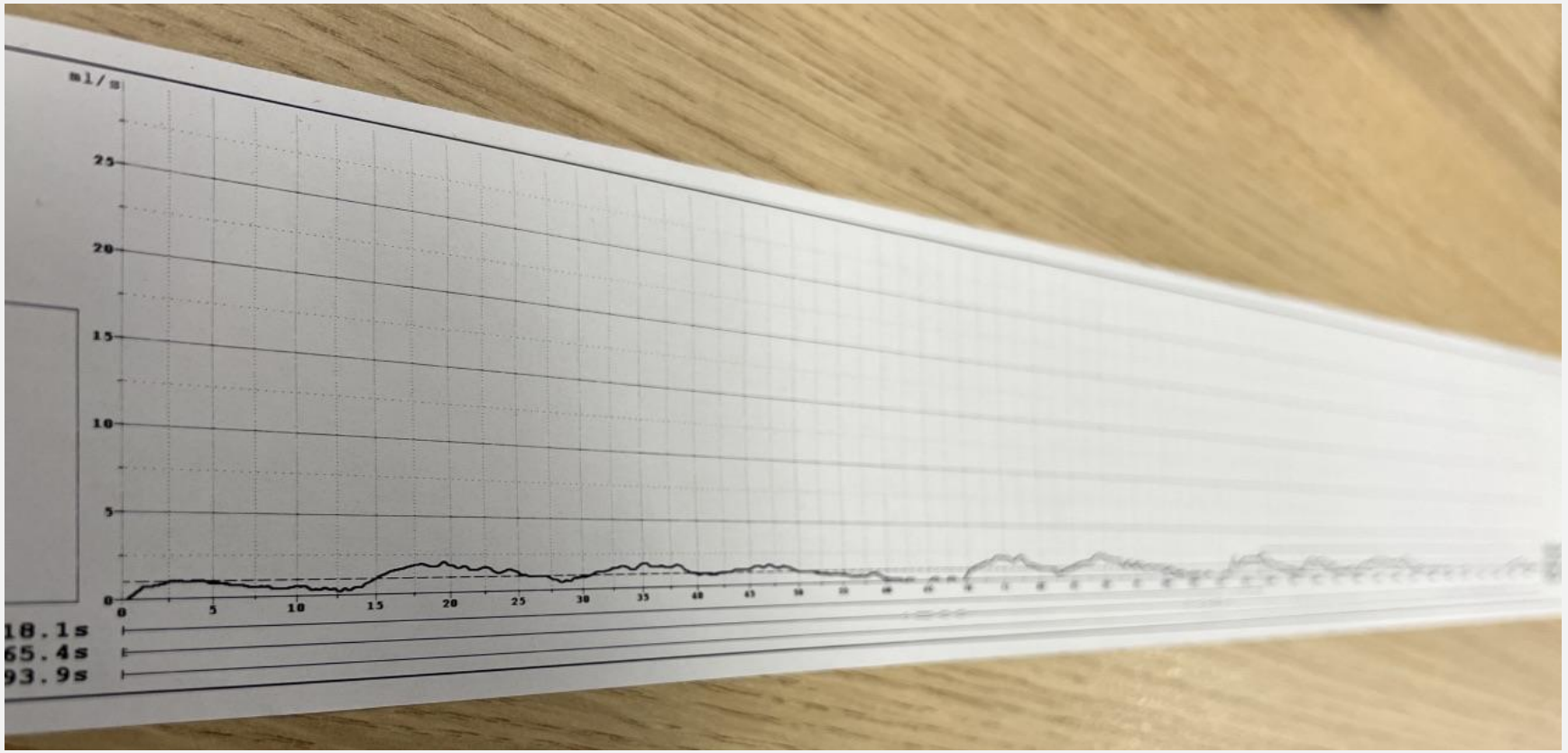
- Didn't need a specialist – needed a good generalist!

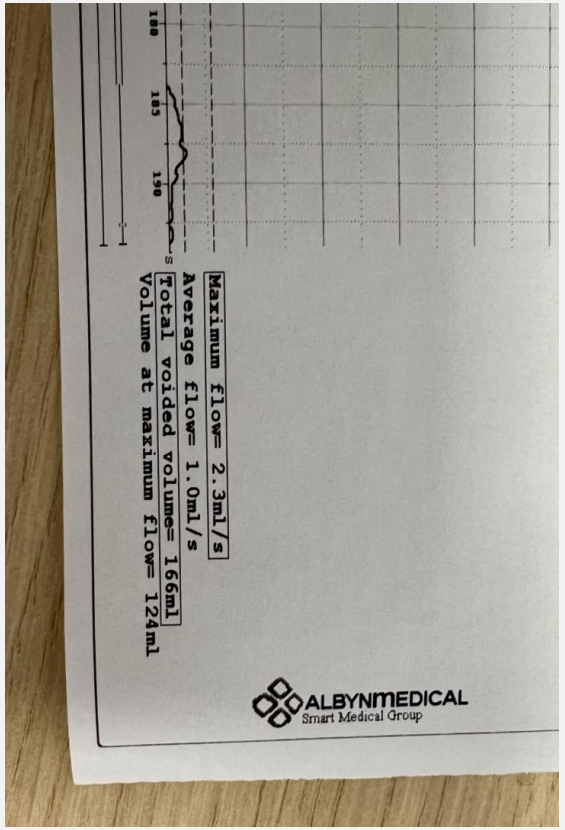
CASE STUDIES

CASE STUDY 1

- GH 56yr old male
- Several months worsening flow – now ‘terrible’
- Urinary frequency
- PSA 0.8
- FVC – frequent voids, fairly small volume, generally 100-200ml
- No response to tamsulosin at all
- Highly bothersome symptoms

CASE STUDY 1


ml/s
25
20
15
10
5
0
0
5
10
15
20
25
30
35
18.1s
65.4s
93.9s


Maximum flow= 2.3ml/s
Average flow= 1.0ml/s
Total voided volume= 166ml
Volume at maximum flow= 124ml
ALBYNMEDICAL
Smart Medical Group

CASE STUDY 2

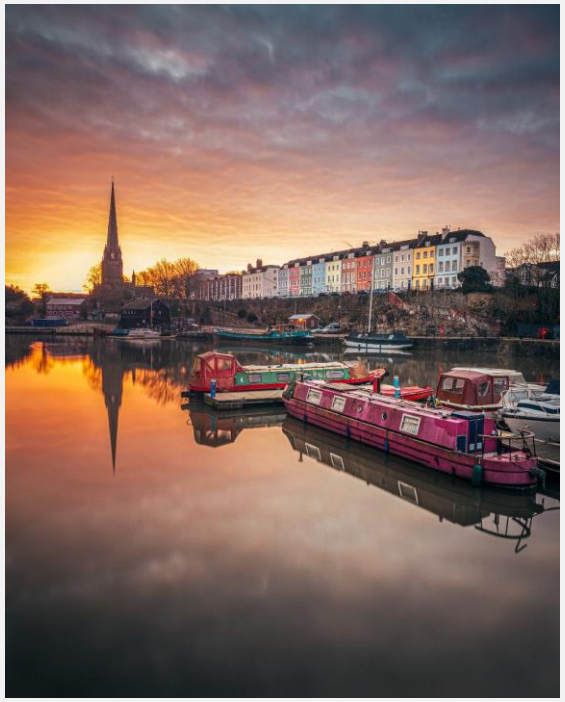
- AJ, 56 year old female – telephone consultation
- 3-6 months worsening urinary symptoms
- Frequency and urgency – managed to cope during lockdown as working from home, but now going to return to office work and worried.
- Otherwise f&w, no regular medication

- What would you do?

CASE STUDY

- Overweight – gained weight during 2020!
- Urinalysis – negative
- Bladder diary – 10 voids during day, nocturia x 1-2
- Drinking tea++

- Advice re impact of weight gain, caffeine reduction, simple bladder training, arrange review?



QUESTIONS?