

# NOCTURIA

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UROLOGY  
FARGO, ND VA

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"Nocturia tiredness"

IF YOU CAN'T  
LAUGH IN  
UROLOGY, WHERE  
CAN YOU LAUGH!



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## WHAT WE ARE GOING TO TRY AND ACCOMPLISH!

1. DEFINITIONS OF NOCTURIA
2. PHYSICAL EXAM AND LAB TESTS
3. TYPICAL BPH THERAPIES FOR NOCTURIA
4. OTHER ATYPICAL THERAPIES FOR NOCTURIA
5. PEARLS



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### NOCTURIA - DEFINED

GREATER THAN, OR EQUAL TO, 2 TIMES DURING SLEEPING HOURS.

ONE TIME OR LESS IS CONSIDERED NORMAL, HOWEVER IT MAY BE UNCOMFORTABLE FOR SOME EVEN AT ONE TIME

SOME PATIENTS MAY BE FINE WITH WAKING UP 2 OR MORE TIMES AND IT DOESN'T RUIN THEIR QUALITY OF LIFE. (CAUTION – SYSTEM WISE IT COULD BE HURTING THEM)

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### ONCE YOU ESTABLISH IT IS AN ISSUE....



**QUESTIONS TO ASK:**

- HOW MANY TIMES?
- LARGE OR SMALL VOLUME? (LARGE = FILL A URINE CUP; SMALL = FEW DROPS OR SO)
- DO YOU WAKE BECAUSE YOU HAVE TO URINATE OR DO YOU WAKE DUE TO OTHER REASONS?
- NIGHTMARES – PTSD, CHRONIC PAIN – ARTHRITIS, INSOMNIA, PETS, ETC...

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### NEXT IN LINE-PHYSICAL TIME!

1. OH, THE DREADED DRE FOR MALES....
2. CHECK FOR LOWER EXTREMITY EDEMA
3. POST VOID RESIDUAL (PVR):
  - DO WITHIN 20 MINUTES OF VOIDING. <50 ML IS CONSIDERED NORMAL



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### AFTER PHYSICAL EXAM-LABS

URINALYSIS : CHECK FOR INFECTION.

-INFECTIONS WILL LIKELY CAUSE THE INCREASE IN NOCTURIA AND THE OLDER GENTLEMEN SOMETIMES DON'T HAVE THE CLASSIC IRRITATIVE VOIDING S/S FOR UTI.

PSA : ELEVATED PSA WILL NEED FURTHER WORK UP EITHER INFECTION, CANCER OR BPH.



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### LAB/COLLECTION INFO

MALES AND FEMALES NEED TO BE EDUCATED ON CLEAN CATCH SAMPLES

-STARTS WITH LAB STAFF

-ASK THE PATIENT IF THEY USED THE WIPES AND CLEAN CATCH TECHNIQUE

BE WARY OF RECURRENT/CHRONIC UTI TXMENTS IN FEMALES AND MAY NEED STRAIGHT CATH SPECIMEN (BACTERIAL VAGINOSIS MIMICS UTI S/S)



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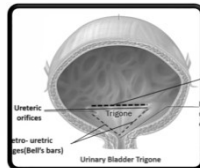
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### TREATMENT TIME!

START WITH THE SLOW PITCH SOFTBALL AND GO FOR BPH (DO EASY TXMENTS FIRST IF POSSIBLE)

- TAMSULOSIN (FLOMAX) 0.4MG QHS
- ALFUZOSIN (UROXATRAL) 10 MG WITH EVENING MEAL
- OLDER ALPHA BLOCKERS – TERAZOSIN, DOXAZOSIN, PRAZOSIN(TWO BIRDS WITH ONE STONE)



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ALPHA BLOCKERS (CONT.)

TAMSULOSIN (FLOMAX) : 0.4 MG – STARTING. CAN GO TO 0.8 MG EITHER (0.4 MG BID) OR AT ONCE

SIDE EFFECTS: DIZZINESS, RETROGRADE EJACULATION, RHINITIS, EXFOLIATIVE DERMATITIS,...

\*\*\*DON'T HOLD BACK TRYING THE MEDICATION IF PATIENT HAS A SULFA ALLERGY\*\*\*

ALFUZOSIN (UROXATRAL) : 10 MG – ONLY DOSE. NO ADDED BENEFIT DOUBLING THIS

SIDE EFFECTS: DIZZINESS, CONSTIPATION,.... (THIS MEDICATION WAS ORIGINALLY DEVELOPED TO HELP COMBAT RETROGRADE EJACULATION)

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ALPHA BLOCKERS (CONT.)

SILODOSIN (RAPAFLO) : 8 MG

SIDE EFFECTS: SIMILAR TO FLOMAX

NONSPECIFIC ALPHA BLOCKERS

-TERAZOSIN : NEEDS TITRATING. BPH DOSING USUALLY 5 MG UP TO 20 MG

-DOXAZOSIN : NEEDS TITRATING. BPH DOSING USUALLY 4 MG OR 8 MG

-PRAZOSIN : MAINLY USED FOR NIGHTMARES/PTSD, RAYNAUDS, OR HTN

\*\*\* THE ABOVE NONSPECIFIC ALPHA BLOCKERS ARE GOOD IF YOU WANT DUAL THERAPY, IE ANTIHYPERTENSIVE AND BPH SYMPTOMS\*\*\*

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OTHER BPH TXMENTS:

FINASTERIDE : 5 MG DAILY

-THIS IS TO REDUCE THE SIZE OF PROSTATE AND TAKES A LONG TIME TO SEE RESULTS, IE 4-6 MONTHS

-THIS MEDICATION CAN BE A WHOLE LECTURE IN ITSELF!

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BPH TXMENT IS NOT WORKING OR SUBOPTIMAL

**WHAT TO DO NEXT ??????**

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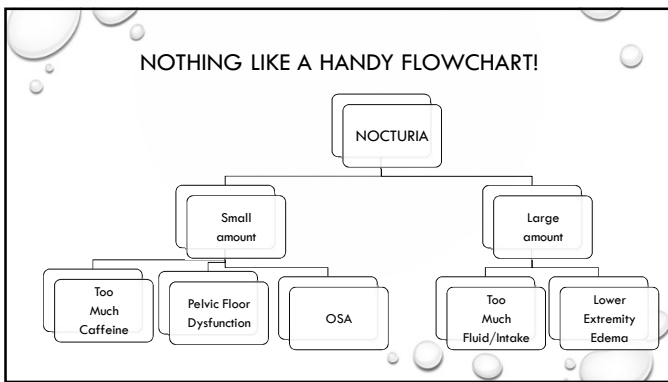
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**SMALL AMOUNT – TOO MUCH CAFFEINE**

- NO POP, NO TEA, NO CARBONATED BEVERAGES
- COFFEE – WE RECOMMEND 2 CUPS IN AM ONLY (8 OZ IS A CUP)
- ... SOME UROLOGISTS RECOMMEND NO CAFFEINE
- ... DECAF JUST AS BAD DUE TO ACID
- ... REMEMBER CAFFEINE CLAMPS DOWN ON ALPHA RECEPTORS (FLOMAX BLOCKS) OPPOSING FORCES

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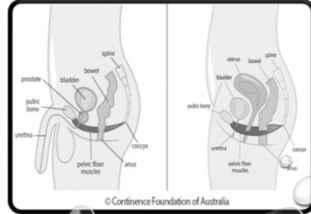
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### SMALL AMOUNT – PELVIC FLOOR DYSFUNCTION

WE RECOMMEND SIMPLE ISOMETRIC EXERCISES, NOT KEGALS.

THIS MIGHT TAKE 2-3 MONTHS TO SEE RESULTS. (DON'T EXPECT RESULTS IN 1 WEEK)



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### SMALL AMOUNT - OSA

USUAL S/S OF OSA

NOCTURIA ASSOCIATED WITH OSA IS USUALLY 4 OR MORE TIMES AT NIGHT. ALSO ASSOCIATED WITH DAY TIME FREQUENCY

MOA: HYPOXIA LEADS TO INCREASED PULMONARY VASOCONSTRICTION, WHICH LEADS TO RIGHT ATRIAL PRESSURE INCREASES, WHICH LEADS TO INCREASE IN ANP (ATRIAL NATRIURETIC PEPTIDE), WHICH LEADS TO INCREASED SODIUM AND WATER EXCRETION. IF YOU REALLY WANTED TO KNOW

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### SMALL AMOUNT – OSA (CONT)

PATIENTS WITH UNTREATED SLEEP APNEA WILL GET UP 4-6 TIMES A NIGHT

- ALSO THE UA SAMPLE WILL BE NORMAL AND THE PVR IS NORMAL
- AHI LEVEL USUALLY AT MODERATE TO SEVERE LEVELS. AHI 15-30 IS MODERATE/>30 SEVERE

TREATMENT OPTIONS INCLUDE: CPAP, DENTAL DEVICE, INSPIRE, & WEIGHT LOSS.




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**LARGE AMOUNT – TOO MUCH FLUID INTAKE**

WE RECOMMEND NO MORE THAN **8 OZ OF TOTAL** FLUIDS 3 HOURS PRIOR TO BED.

SO THE 6 PACK OF BEER IN THE EVENING SHOULDN'T CUT IT

REMEMBER TO INQUIRE ABOUT ALL FLUIDS, IE COFFEE, TEA, POP, WATER, ETOH, ETC...




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**LARGE AMOUNT – TOO MUCH FLUID INTAKE**

BESIDE DRINKING PRIOR TO BEDTIME, OVERALL FLUID CONSUMPTION DURING THE DAY

-TOO MUCH **WATER**, TOO MUCH **POP**, TOO MUCH **COFFEE**, TOO MUCH **GATORADE/JUICES**

- WE RECOMMEND ONLY **2 QUARTS** A DAY OF **TOTAL** FLUID!
- IF PATIENT IS STONE FORMER, THEN 2.5 QUARTS PER DAY TOTAL FLUID.
- PUTTING 8 QUARTS OF OIL IN A 5 QUART ENGINE = LEAKAGE




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**LARGE AMOUNT – LOWER EXTREMITY EDEMA**

VASCULAR INSUFFICIENCY VS CONGESTIVE HEART FAILURE (CHF)

TX WITH DIURETICS, COMPRESSION SOCKS, LOW SALT DIET

REMEMBER DOSING THOUGH! LASIX (STANDS FOR "LASTS SIX HOURS"). NO DOSING PAST 2 PM OR SO.




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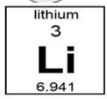
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### PEARLS



1. UNCONTROLLED DM CAN CAUSE NOCTURIA, BUT USUALLY BAD DIABETES MORE OF A DAY TIME FREQUENCY INSTEAD OF NOCTURIA
2. CHRONIC LITHIUM USE CAN CAUSE DRUG INDUCED NEPHROGENIC DIABETES INSIPDUIS
3. SSRI – THESE CAN BLOCK ADH SECRETION
4. CCB - THESE CAN INCREASE ANP SECRETIONS AND BLOCK SODIUM REABSORPTION
5. SLEEP AFFECTS
  - NHANES III STUDY FOUND  $\geq 2$  VOIDS/NIGHT WAS ASSOCIATED WITH WORSE SURVIVAL
  - WORSENING SLEEP LATENCY  $> 30$ MIN ASSOCIATED WITH  $> 2$  RISK FOR DEATH
  - WATCH OUT FOR FALL RISKS AS WELL

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### SUMMARY

DECENT HISTORY AND PHYSICAL WILL HELP IMMENSELY TO ESTABLISH DIAGNOSIS

TRY BPH FIRST FOR MEN WITH TRADITIONAL THERAPIES AND IF NO HELP REMEMBER THE FLOW CHART

BE WEARY OF SOME MEDS CAUSING ISSUES

THINK ABOUT QUALITY OF LIFE AND COMORBIDITIES (EVEN IF THE PATIENT DOESN'T MIND GETTING UP 2-3 TIMES A NIGHT, IT IS LIKELY AFFECTING OTHER SYSTEMS)

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### QUESTIONS????

IF YOU WANT REFERENCES ASK. NO MLA FORMAT FROM THIS GUY!

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