

# **AUR In Male patients**

- Most common in men in their 6os to 8os
- In Two Large Cohort Studies Of U.S. Men 40 To 83 Years Of Age, The Overall Incidence Was 4.5 To 8 Per 1000 Men Per Year
- In sub cohort of Olmsted county study Incidence of AUR in men with BPH: 18 PER 1000
- The Incidence Dramatically Increases With Age
- In 70s: 10 Percent Chance
- In 80s :more than 30 percent
- AUR Incidence In Antimuscarinics And  $\alpha$ 1-blockers In Men With LUTS/BPH: 0 –78.2/1000 Man-years

# AUR In Male patients

- 65% Of Cases Are Spontaneous
- Mortality rate at :

4.1% in ages 45 to 54 years 33% in 85 years and older.

• The risk factor: prostatic enlargement:

increasing age

African American race

obesity

diabetes mellitus

high alcohol consumption

physical inactivity

## **AUR In Female patients**

- 7 per 100 000 per year
- Prevalence of urinary retention diagnoses among female Medicare beneficiaries to be 1532 per 100 000 women
- Risk factors: cardiovascular disease, diabetes, metastatic malignancy and renal disease
- Retention and catheterization the strongest associations identified with a concomitant diagnosis of neurologic condition, UTI, and POP

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## Acute Urinary Retention During Pregnancy

- The risk of AUR during pregnancy was 0.47%
- The peak incidence occurred between the 9<sup>th</sup> and 16<sup>th</sup> gestational weeks
- risk factors: urogenital infection, gestational diabetes mellitus, previous abortion, abnormal pelvis and endometriosis

# **AUR In Pediatric patients**

- Neurological Diseases, Infections, Dysfunctional Voiding Dysfunction, Drugs Side Effects (Especially Anticholinergics), Tumors, Anatomical, Emotional Problems And Trauma
- Constipation Does Not Appear Among The Most Common Causes Of Acute Urinary Retention.
- Although The Prevalence Of Intestinal Constipation In Brazilian Pediatric Population In One Text Is High

# Post-operative Urinary Retention

- 2.1% To 80% According To Surgery Types And Specific Study Factors
- Age, Aggressiveness Of The Bladder Dissection, The Use Of Opiates And Underlying C omorbidities
- The POUR May Be Caused:

Voiding Reflex Interruption

Perioperative Medication

Sensation Of Bladder Fullness Impairment From Anesthesia

The Imbalance Of Sympathetic And Parasympathetic Systems

**Immobilization** 





### The International Continence Society (ICS)

AUR: "a painful, palpable, or percussible bladder, when the patient is unable to pass any urine

CUR: "reduced of contraction strength and/or duration, resulting in prolonged bladder emptying and/or failure to achieve complete bladder emptying within a normal time span





### **Chronic urinary retention**

• Can Be Long-lasting:

The Painless Retention
Increased Volume Of Residual Urine
Urinary Incontinence
UTI

• Non Neurogenic CUR is empirically defined herein as an elevated PVR of >300 mL that has persisted for at least six months documented on two or more separate occasions.

### **HISTORY**

| Symptom Score (I-PSS) <sup>1</sup> |   | 1         | Circle your score for each below. |                          |  |                         |                                       |                     |
|------------------------------------|---|-----------|-----------------------------------|--------------------------|--|-------------------------|---------------------------------------|---------------------|
| Date                               |   |           | Not<br>at all                     | Share<br>1 Since<br>in 5 | than<br>half the<br>time                                     | About the time          | tran<br>had the<br>time               | Almost              |
| ı                                  | Over the past month or so, how often have you had a sensation of not emptying your bladder completely after you finished urinating?                           |           | 0                                 | 1                        | (2)  | 3)                      | 4                                     | (5)                 |
| 2                                  | Over the past month or so, how often have<br>you had to urinate again less than two hours<br>after you finished urinating?                                    |           | (0)                               | 1                        | (2)  | (3)                     | <b>(4</b> )                           | (5)                 |
| 3                                  | Over the past month or so, how often have you found that you stopped and started again several times when you urinated?                                       |           | ( <b>0</b> )                      | 1                        | (2)  | (3)                     | (4)                                   | (5)                 |
| 4                                  | Over the past month or so, how often have<br>you found it difficult to postpone urination?  |           | 0                                 | <b>(D)</b>               | (2)  | (3)                     | (4)                                   | (5)                 |
| 5                                  | Over the past month or so, how often have<br>you had a weak urinary stream?   |           | 0                                 | <b>①</b>                 | (2)  | (3)                     | <b>(4</b> )                           | (5)                 |
| 5                                  | Over the past month or so, how often have you had to push or strain to begin urination?   |           | 0                                 | 1                        | (2)  | (3)                     | <b>(4</b> )                           | (5)                 |
| 7.                                 | Over the last 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? |           | None                              | 1.<br>①                  | 1000<br>(2)  | 3<br>67es<br>(3)        | # # # # # # # # # # # # # # # # # # # | # 3 and 1 feres (5) |
|                                    |   |           | Total Symptom Score =             |                          |  |                         |                                       |                     |
|                                    |   |           | Sum of Questions 1 to 7 =         |                          |  |                         |                                       |                     |
| Q                                  | uality of Life Due to Urinary Symptoms  | 5         |                                   |                          |  |                         |                                       |                     |
| 1                                  | If you were to spend the rest of your life with   | Delighted | Pleased                           | Mostly<br>satisfied      | Micrel about oquality substituted and should be substituted. | Mostly<br>disparationed | Unhappy                               | Terriba             |
|                                    | your urinary condition just the way it is now,<br>now would you feel about that?  | (0)       | 1                                 | (2)                      | (3)  | 4                       | (5)                                   | (6)                 |

#### Fig. 1. International prostate symptom score.[1]

### **AUA Score**

1-7 Mild

8-19 Moderate

20-35 Severe



### **HISTORY**

- History On The Presence Of Hematuria
- Dysuria
- Fever
- Low Back Pain
- Neurologic Symptoms

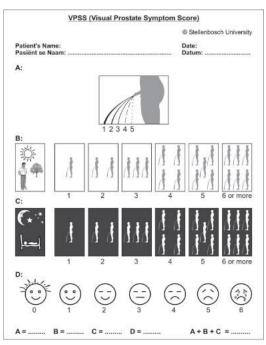


Fig. 2. Visual prostate symptom score consisting of pictograms to evaluate (A) force of the urinary stream, (B) daytime frequency, (C) nocturia, and (D) quality of life.



## Past medical history

- Cancer
- Trauma
- Surgery
- Urolithiasis
- Prostate Infections
- Sexually Transmitted Infections
- Radiation Treatment Or Exposure



## **Drug History**

- Anticholinergic Agents
- Musculotropic Relaxants
- Calcium Channel Blockers
- Antiparkinsonian Agents
- α-adrenergic Agonists
  - Antihistamines



# **Physical Exam**

- Abdominal Exam
- Genital Exam
- Digital rectal exam (DRE)
- Neurologic Exam



### **Bladder Examination**

Palpation can often note the distended bladder



500 cc 150 cc



## Physical Exam (DRE)

- The Rectal Exam Can Note An Enlarged Prostate (Showing Prostatic Hyperplasia)
- Fecal Impaction (Showing Impingement On The Bladder Neck Or Urethra)
- Poor Sphincter Tone (Showing A Spinal Cord Problem)

