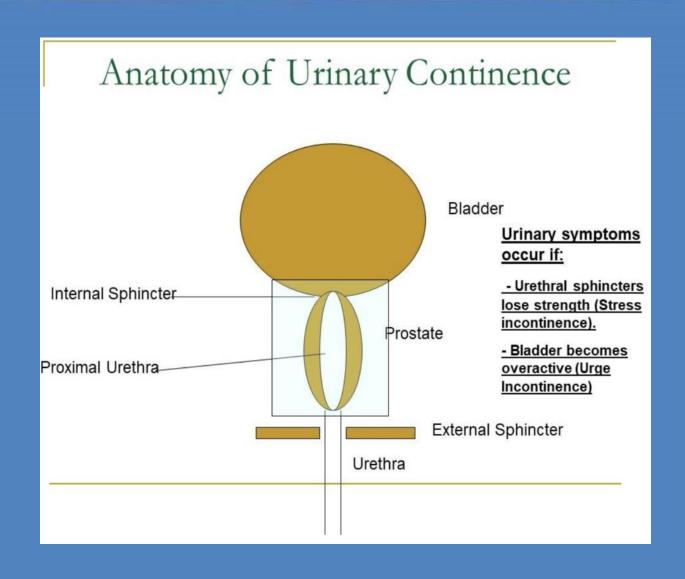
What's Up with Urinary Incontinence Post Prostate Cancer Treatment?

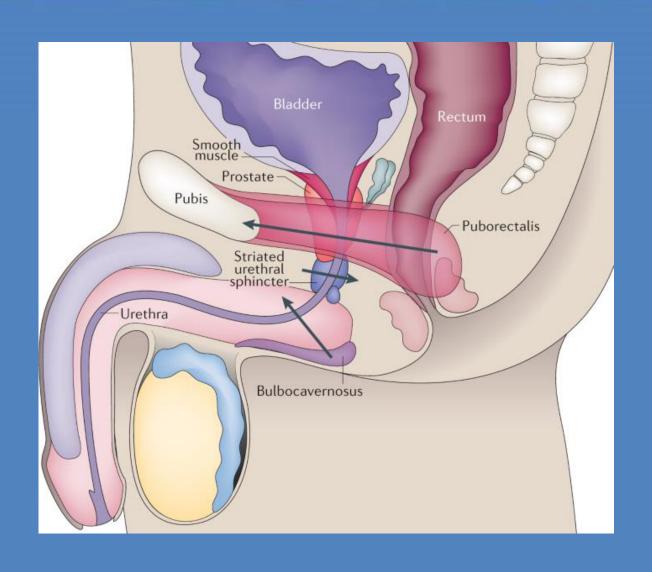
Philip Van Kerrebroeck, MD, PhD, MMSc Prof. em of Urology, Maastricht University (NI) Life Expert Center, Leuven (Be)



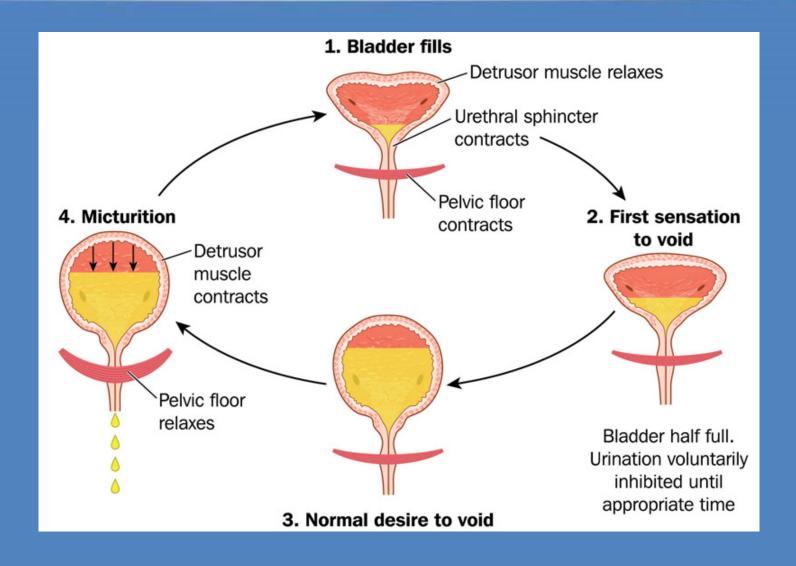
### How is it normally?



### How is it normally?



### How is it normally?



#### Prostate cancer treatment

- Watchful waiting (WW)
- Radical prostatectomy (RP)
- External beam radiotherapy (EBRT)
- Internal radiation therapy (brachytherapy)
- Cryotherapy
- Hormonal treatment
- Combinations

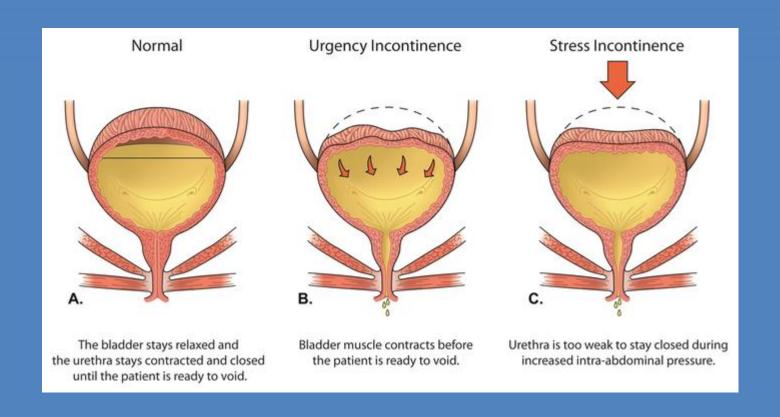
### Side effects and complications of Prostate cancer treatment

- Urinary incontinence
- Erectile dysfunction (erection problems)
- Changed sexuality
- Defecation problems
- Other urological complications
- Global side effects
- Psychological changes

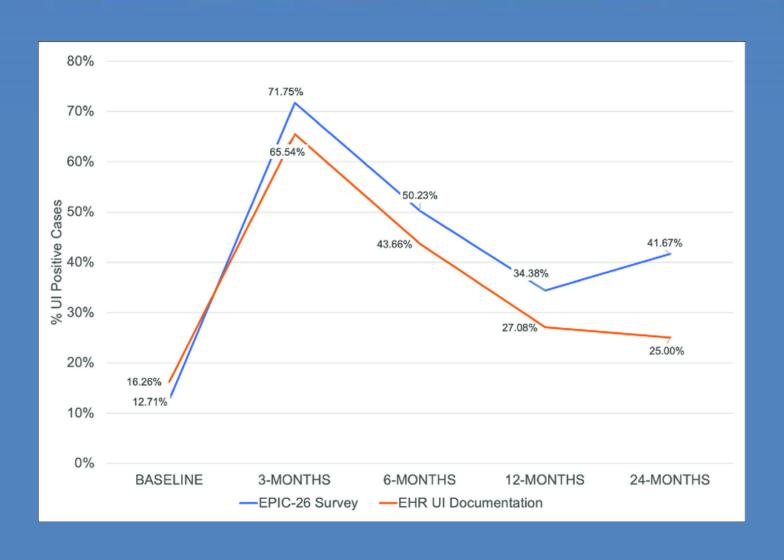
### Urinary side effects and complications of Prostate cancer treatment

- Urinary incontinence
  - Stress urinary incontinence
  - Urgency urinary incontinence
- Voiding problems
  - Overactive Bladder (OAB)
  - Incomplete emptying
- Other urological complications

### Urinary incontinence after Prostate cancer treatment



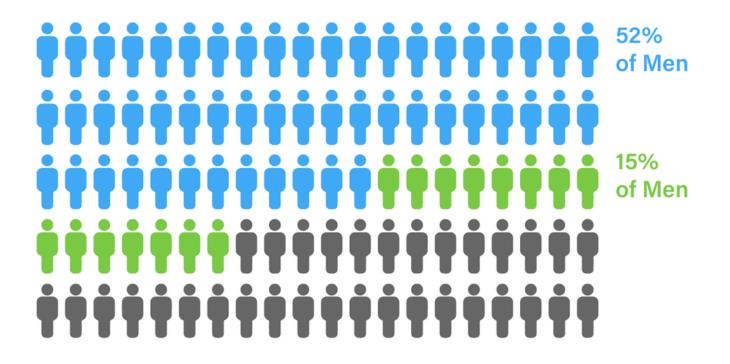
# Urinary incontinence after radical prostatectomy: how often?



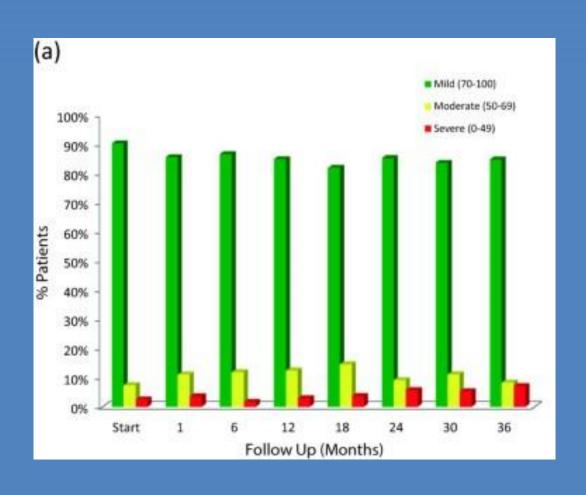
### Urinary incontinence after radical prostatectomy: how often?

#### **Post Op Urinary Incontinence**

52% of men experience incontinence 2 months following surgery 15% of men experience urinary incontinence 12-14 months after surgery



### Urinary incontinence after radiotherapy for prostate cancer: how often?



# Urinary incontinence after radical prostatectomy: summary

- 1. Incontinence is the primary urinary side effect
- 2. In the hands of a skilled surgeon, about 10-15% of men report frequent leakage or no control and a need to use absorbent pads at six months after treatment
- 3. By three years, fewer than 10% of patients report using pads at all
- 4. Up to 30 to 50% of men with normal baseline function will report some increase in urinary symptoms and urgency after prostatectomy
- 5. Less urinary incontinence if a nerve-sparing technique is performed

### Urinary incontinence after external radiotherapy for prostate cancer: summary

- 1. Radiotherapy can irritate both the bladder and the urethra, causing inflammation or swelling of the prostate.
- 2. Most symptoms lessen over time with little or no intervention:
- 3. Nearly 45% of men report voiding symptoms after six months, and the majority resolve by one year.
- 4. Symptoms can persist and some men may see even an increase over time.

# Urinary incontinence after brachytherapy for prostate cancer: summary

- 1. Urinary dysfunction following brachytherapy tends to be more severe initially
- 2. Over 70% of men have symptoms requiring pads or medication within six months after seed implantation
- 3. The rate of incontinence drops to 25% or less after two years and to under 10% by three years
- 4. However, 20 to 40% of men with normal urinary function at baseline will have persistently increased urinary symptoms three years after receiving brachytherapy

### Who is at risk for urinary incontinence after prostate cancer treatment?

#### SUI after surgery could be caused by:

- Older age
- Larger prostate size before its removal
- Smoking
- Diabetes or other neurological diseases
- A lot of blood loss during surgery
- Need for cutting nerves during surgery
- Size or stage of prostate tumor
- Radiation after surgery
- Previous surgery for benign prostate enlargement (BPH)

# Prevention of urinary incontinence after prostate cancer treatment.



- 1. Life style modification, behavioral treatment
- 2. Pelvic floor exercises
- 3. Medication
- 4. Surgery
- 5. Other

#### Life style modification, behavioral treatment

#### Bladder training:

- holding urine for a short time when you get the urge instead of going right away
- start by holding it for 10 minutes
- after you successfully do that a few times, you can increase your time
- you can use set times during the day to go, and increase the time in between
- you can help by practicing breathing or relaxation techniques
- you may not see results right away

Life style modification, behavioral treatment

#### Diet modification:

- cut down on alcohol, caffeine (coffee/tea) and sodas)
- avoid spicy and acidic foods (citrus fruits, tomatoes)
- eliminate chocolate and artificial sweeteners
- stop smoking
- loose weight, treat constipation
- BUT: everyone's different

Life style modification, behavioral treatment

#### Bladder diary:

- record of both your diet and your leaking episodes for a few days at least (how much and what you drink, how often you have to use the bathroom, and when you leak)
- note anything in particular that might have triggered your symptoms, such as bending over in a certain way or drinking too much coffee
- doing this may help you find out what's triggering your leaks

#### Life style modification, behavioral treatment

#### Double voiding:

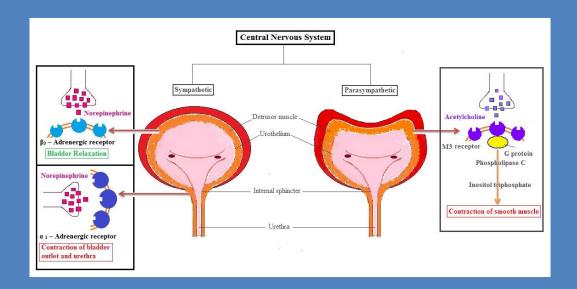
- technique you can use when you go to the bathroom to help your bladder empty out all the way
- after you urinate, wait a minute or two, then try again immediately
- doing this can reduce dribble afterward.

#### Pelvic floor exercises (Kegels exercises)

- you'll have to make sure you're flexing the right muscles
- the muscles you would use to stop passing gas are the ones to focus on
- 1. tense the muscles for 3 seconds and relax them for 3 second
- 2. build up slowly until you're doing three sets of 10 repetitions
- 3. altogether, it should take about 15 minutes a day
- 4. you can do Kegels anywhere: in bed, at your desk, or watching TV.

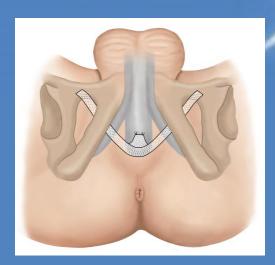
#### **Medication**

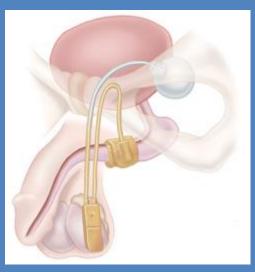
- 1. Antimuscarinics: medications that relax the muscles of the bladder to help them stop spasming. You can take them as a pill, a liquid, or use a patch.
- 2. Beta-3 agonists: favor relaxation of the bladder muscles, available as a pill
- 3. Botox: injections of botulinum toxin type A (botox) into the bladder to relax it.



#### Surgery

- 1. Sling procedure: surgery that involves synthetic material or mesh, and making a sling around the urethra .The sling helps to close the urethra during exercises, coughs or sneezes
- 2. Artificial urinary sphincter: a fluid-filled cuff placed around the urethra and connected with a balloon and a pump in the scrotum. This helps to keep the urethra closed until it's time to urinate
- 3. Prostate surgery: if the prostate (after radiotherapy) is causing problems

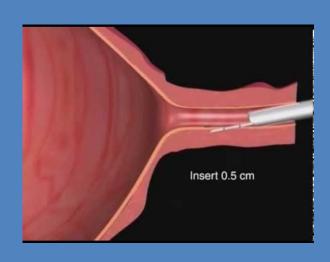




#### Other

- 1. Sacral nerve stimulation (SNS): an electric stimulator (similar to a pacemaker to control the bladder.
- 2. Urethral bulking: injection of material to strengthen the sphincter
- 3. Catheter: drainage of the urine and blocking the urethra
- 4. Pads and other protective materials: last resort





#### **Conclusions**

### What's Up with Urinary Incontinence Post Prostate Cancer Treatment?!



- Many men suffer from urinary incontinence after prostate cancer treatment
- Different causes and several types of urinary incontinence
- Prevention is important
- Several risk factors
- Multiple treatment modalities