

# Female Urinary Disorders and Pelvic Organ Prolapse

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## Statistics:

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10-60% of women report urinary incontinence

50% of women that have had children develop Pelvic Organ Prolapse

11% of US women will require surgery for Pelvic Organ Prolapse



# Urinary Incontinence

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The involuntary leakage of urine.



# Urinary Incontinence

- An estimated 15-20 million people in the United States have bladder control problems, and it is nearly twice as common in women than men
- 10-60% of women report urinary incontinence
- Estimated that 30-50% never seek treatment
- 80-90% of cases can be treated successfully
- Billions of dollars spent annually on incontinence products (in North America)



# Delay in Treatment

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- Most women with UI are reluctant to seek help.
- They might be embarrassed, or might have been told by family members, acquaintances, and/or friends that no truly useful remedies exist.
- Often women believe this is a normal consequence of aging



# Psychosocial Impact

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Higher prevalence of depression, embarrassment, loss of self esteem, anxiety

Decrease in excursions outside home, social interactions, sexual activity

Major factor in the decision to place a relative in a nursing home



# Types of Urinary Incontinence

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Genuine Stress Urinary Incontinence

Overactive Bladder

Intrinsic Sphincter Deficiency (Weak Urethra)

Overflow Incontinence

Functional incontinence



# Stress Incontinence

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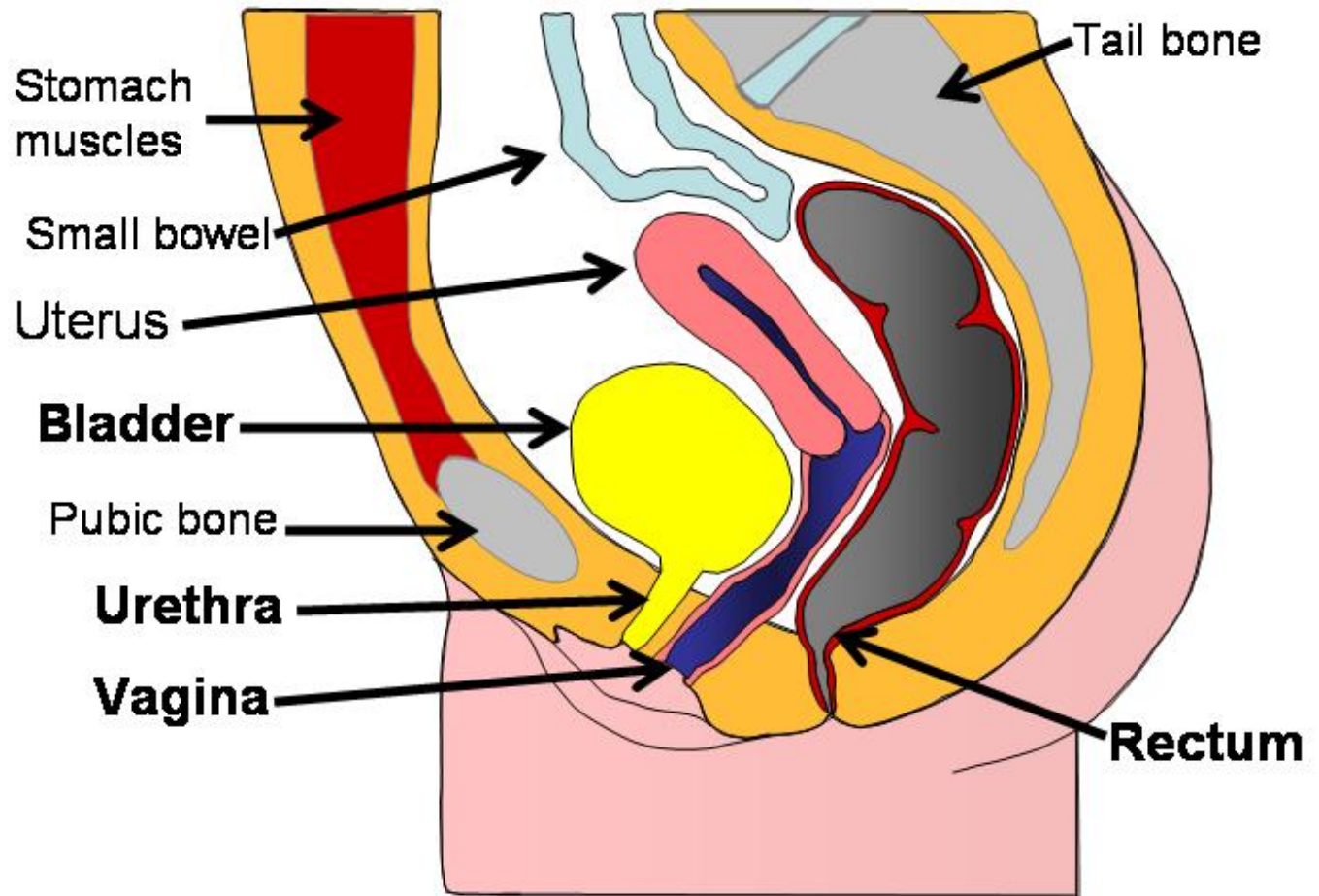
Loss of urine with activity (cough, sneeze, laughing, walking, running)

Due to change in position of the bladder (“dropping of bladder”)

Treated with pelvic floor exercises, medication and/or surgery



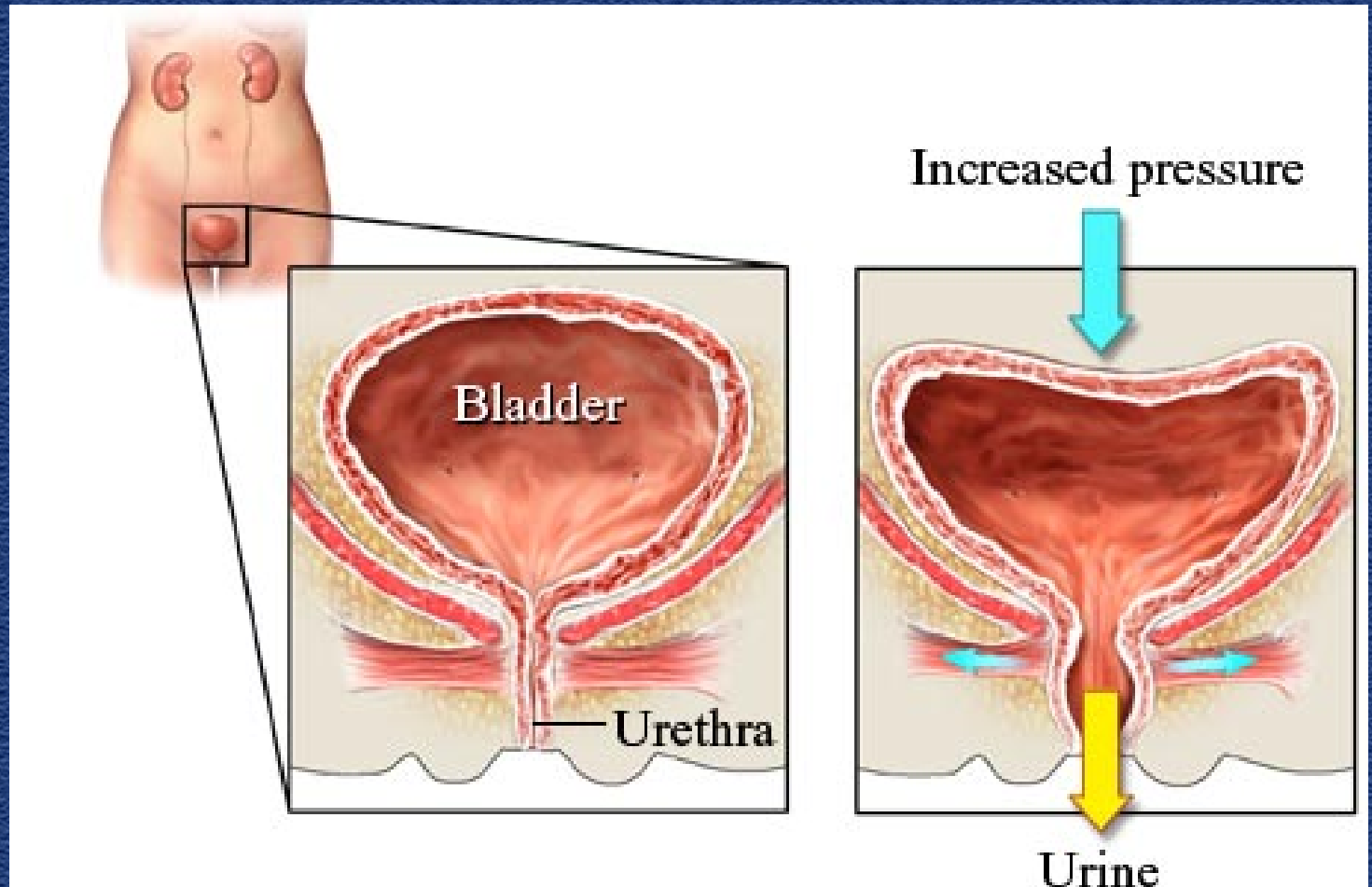
# Normal Female Pelvic Structures



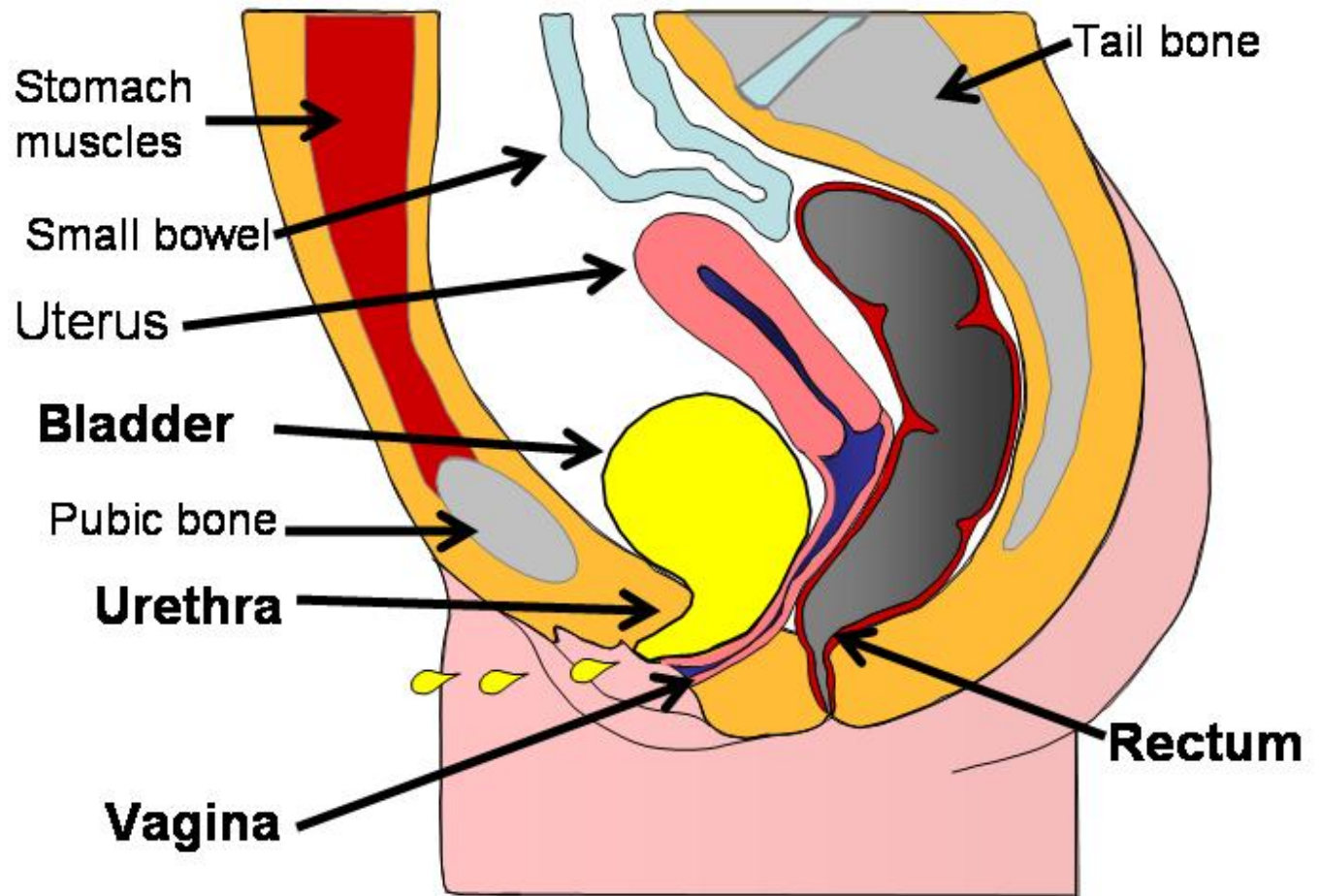
*JP Theofrastous 2004*



# Stress Incontinence



# Stress Incontinence



*JP Theofrastous 2004*



# Overactive Bladder

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Urgency- rushing to the toilet

Frequency- voiding  $>8x/day$

Nocturia- voiding  $> 2x/night$

Bed wetting



# Overactive Bladder

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Involuntary loss of urine with a strong desire to urinate

“GOTTA GO, GOTTA GO”

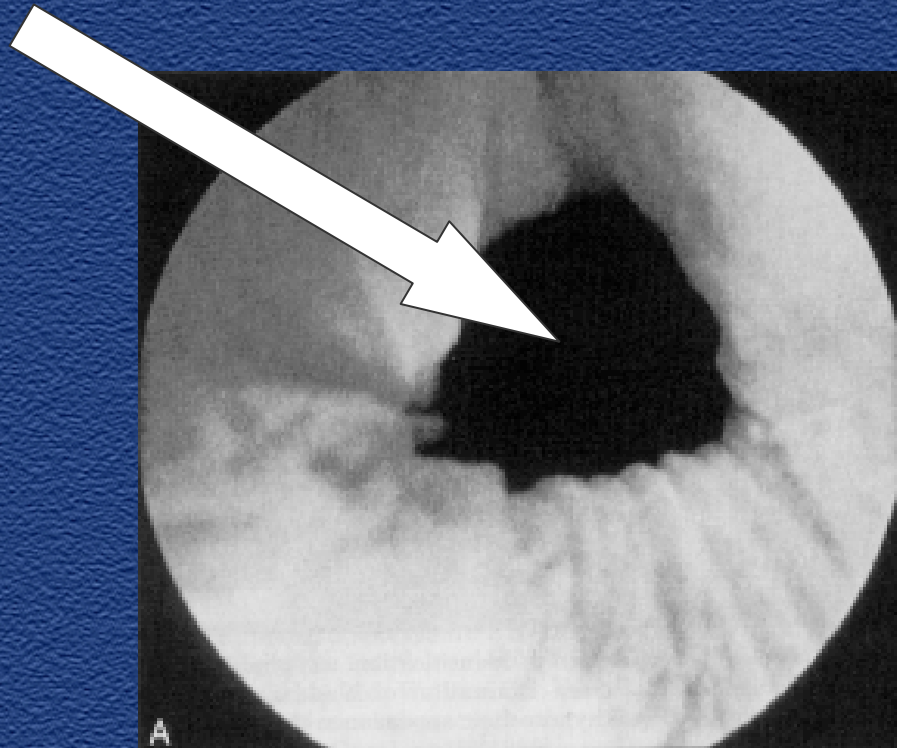
Associated with “bladder spasms”

Treated with medications, physical therapy/  
rehabilitation, nerve stimulators



# Intrinsic Sphincter Deficiency

Problem with ability of urethra to close



“Drain pipe” urethra



# Overflow Incontinence

Bladder muscle not able to contract and doesn't empty the bladder

**“THE GLASS IS ALWAYS FULL!”**

Over filling of the bladder and “spill over”

Can be the result of a neurological disorder  
i.e.: stroke, MS, spinal cord injuries

Treatment – physical therapy/ rehabilitation,  
medication



# Functional Incontinence

Most often seen with elderly or physically challenged

Person is usually continent, but may have a physical disability which interferes with getting to the toilet

Assistance- i.e. commode by bedside, modify living environment

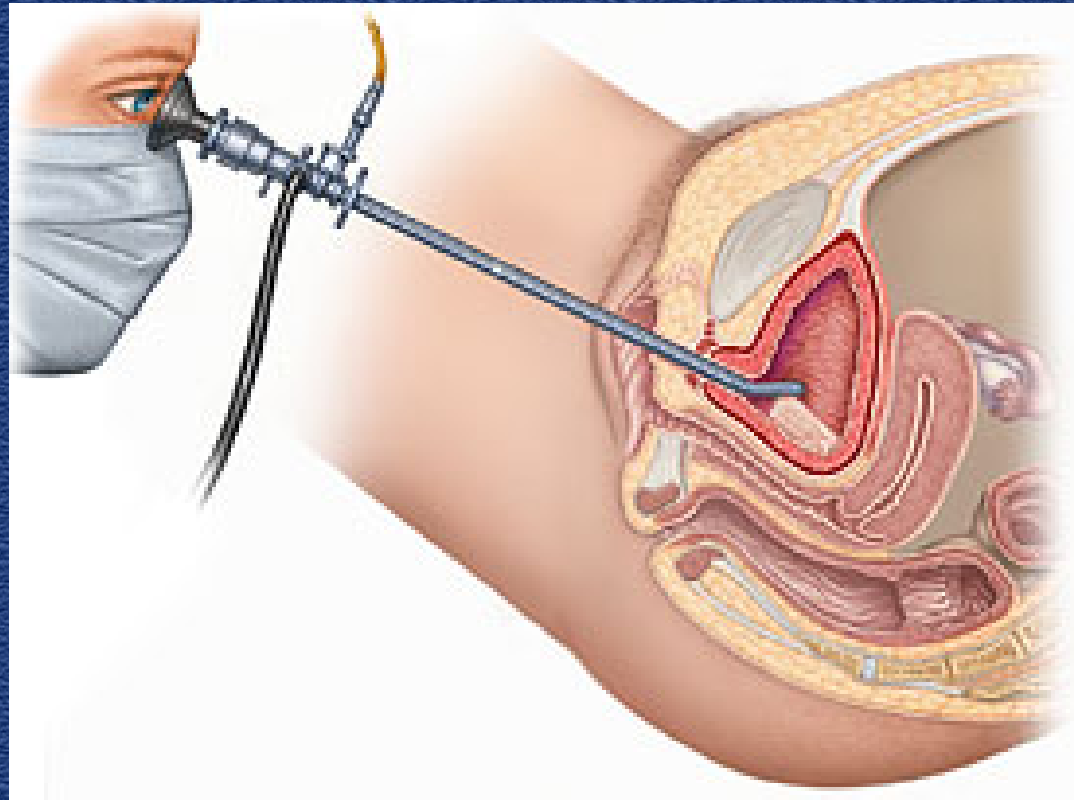


# Evaluation of Urinary Incontinence

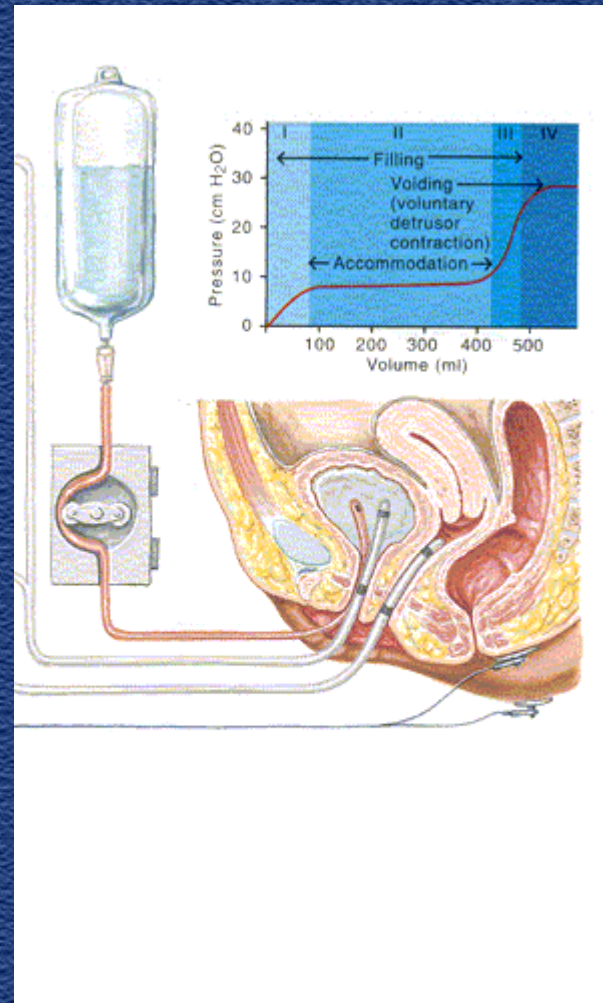
- History
- Physical Exam
- Review of medications
- Post void residual urine- “What’s left behind”
- Urine culture, Urinalysis
- Possible urodynamic testing and cystoscopy



# Cystoscopy



# Urodynamics

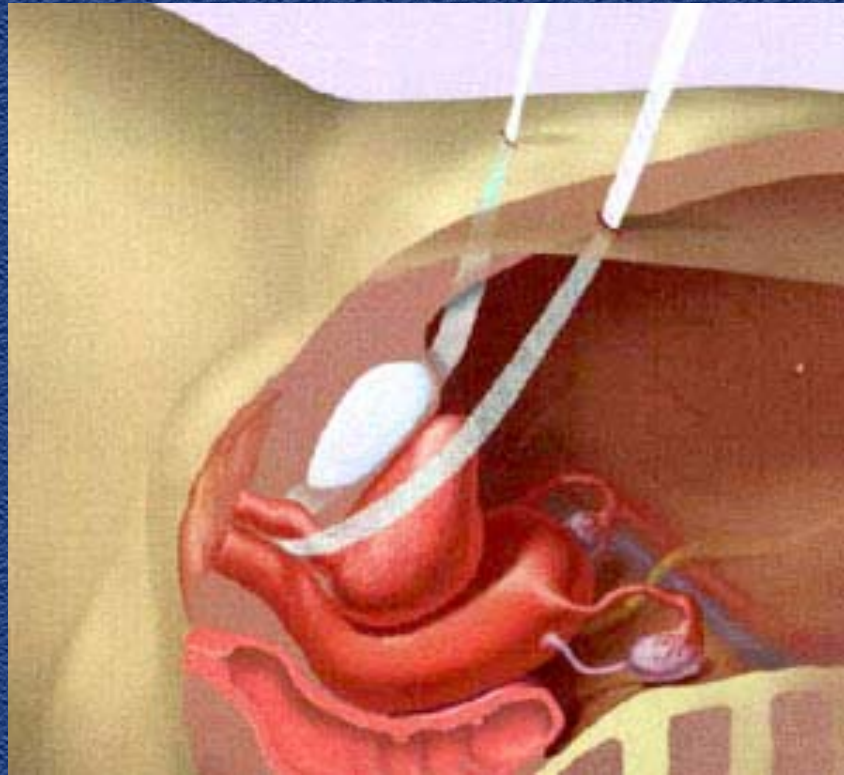


# Treatment Options

- Pelvic Floor Muscle Physical Therapy
  - “**Not just Kegel’s**”
- Bladder training
- Medications- “Gotta Go, Gotta Go”
- Vaginal estrogen
  - Cream
  - Tablet
  - Ring
- Surgery- sling procedure most common



# Urethral Sling



# Interstitial Cystitis

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The painful bladder.



# Interstitial Cystitis

- Condition of chronic irritation and inflammation of the bladder
- Patients often diagnosed with multiple “UTI” but antibiotics don’t help
- Urine cultures show no infection
- Symptoms of pain, frequency of urination, and sudden urgency to urinate
- Patients often go years before condition is diagnosed



# Interstitial Cystitis

- Cause is unclear- but often starts with a severe “Bladder Infection”
- Symptoms often get worse with menstrual bleeding
- Symptoms often wax and wane and can be increased by stress
- Certain foods, caffeine, alcohol, nicotine can increase symptoms



# Interstitial Cystitis

- Diagnosis made by excluding other causes of symptoms:
  - **Infection**
  - **Bladder Stones**
  - **Bladder Tumor**
  - **Overactive Bladder**
- Specific Questionnaire
- **Potassium test**
- Cystoscopy with Bladder Distention



# Interstitial Cystitis



# Interstitial Cystitis

- Treatment often requires multiple strategies:
  - **Diet Modification**
  - **Medicine placed into the bladder**
  - **Oral Medication**
    - Elmiron
    - Antibiotics
    - Antihistamines
    - Anti-Ulcer Medication
  - **Pelvic Floor Physical Therapy**



# Pelvic Organ Prolapse

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Things are beginning to drop.



# Pelvic Organ Prolapse

- Pelvic organ prolapse means that the uterus and/or the vagina have fallen down from its normal position in the pelvis
- This prolapse is probably caused by injuries sustained during childbirth, aging, a woman's tissue composition, chronic coughing and heavy lifting
- 11% of US women will require surgical repair for Pelvic Organ Prolapse



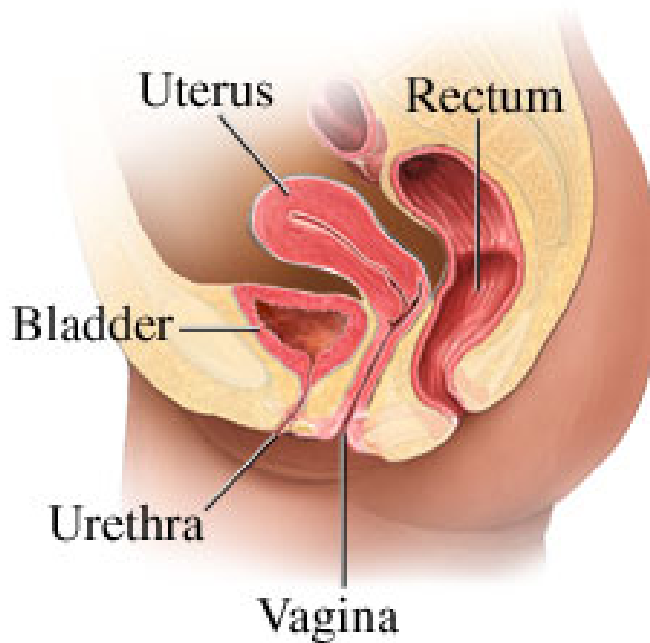
# Uterine Prolapse

- Uterine prolapse - the uterus can fall down by itself or with prolapse from a different part of the vagina. Women with uterine prolapse often experience pelvic pressure, lower backache, a protrusion from the vaginal opening, and an uncomfortable feeling during intercourse.

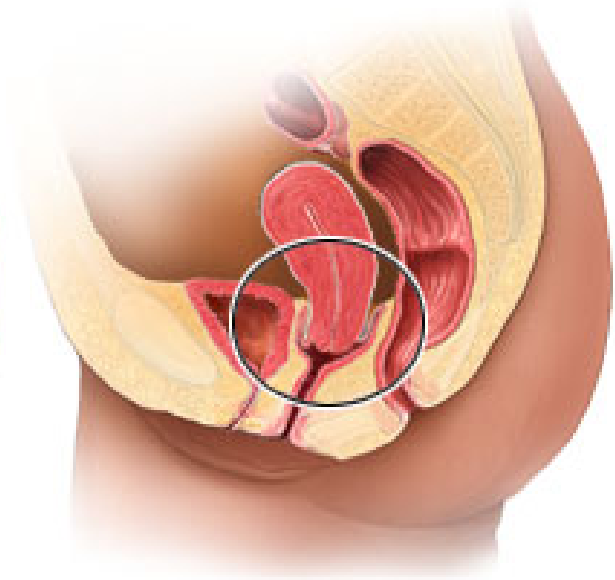


# Uterine Prolapse

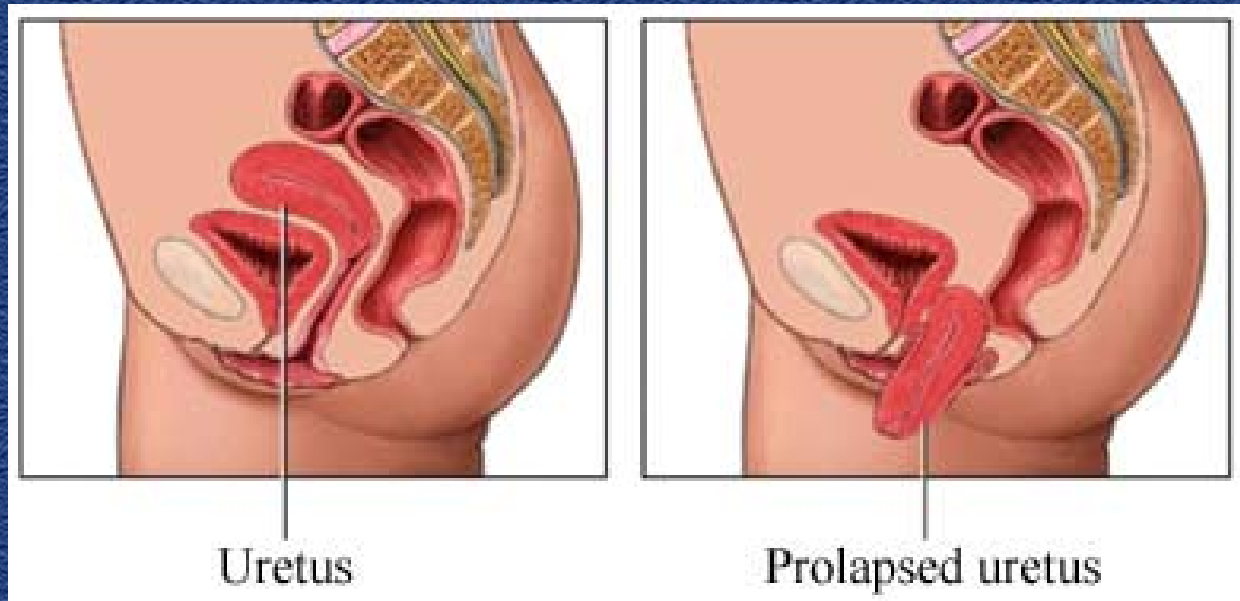
Normal  
female pelvic anatomy



Uterine prolapse



# Advanced Uterine Prolapse

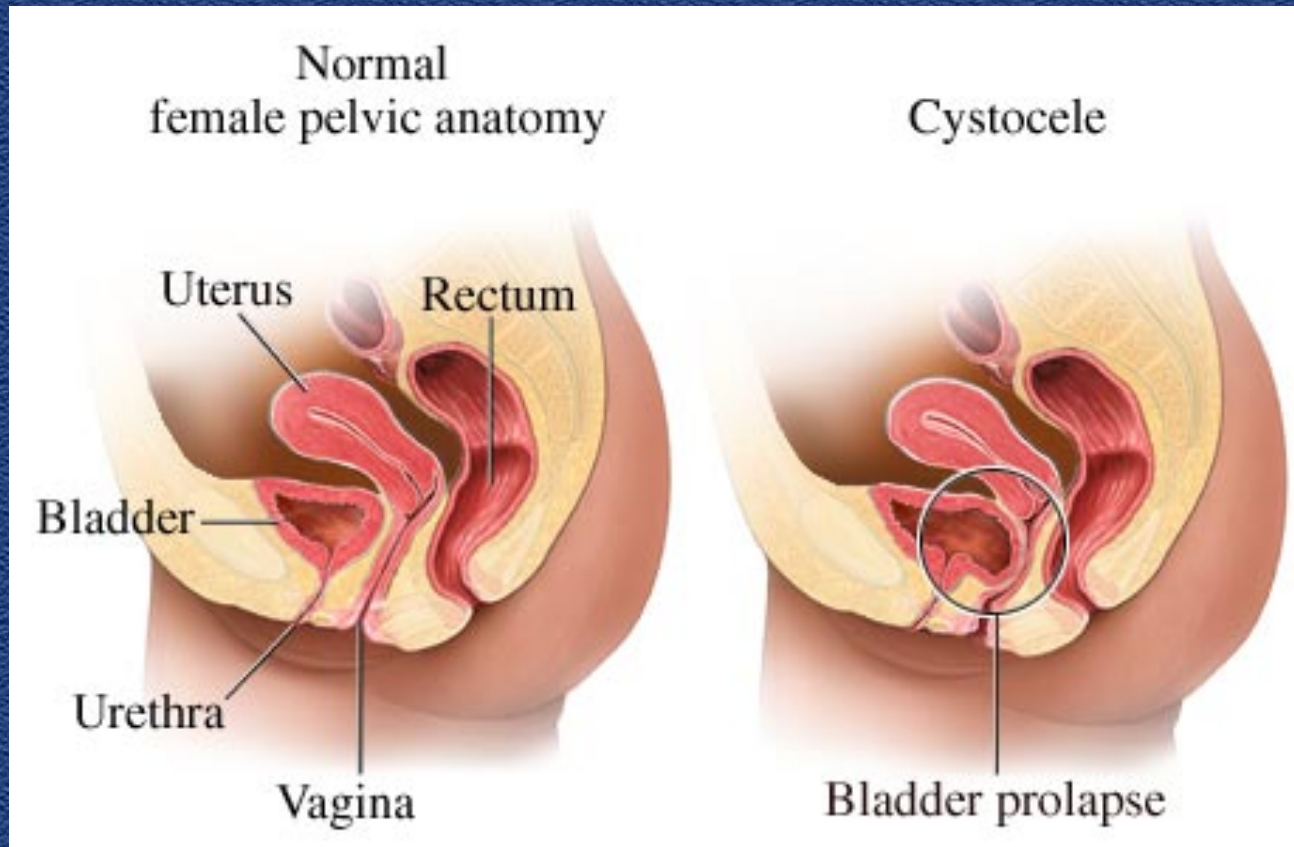


# Cystocele

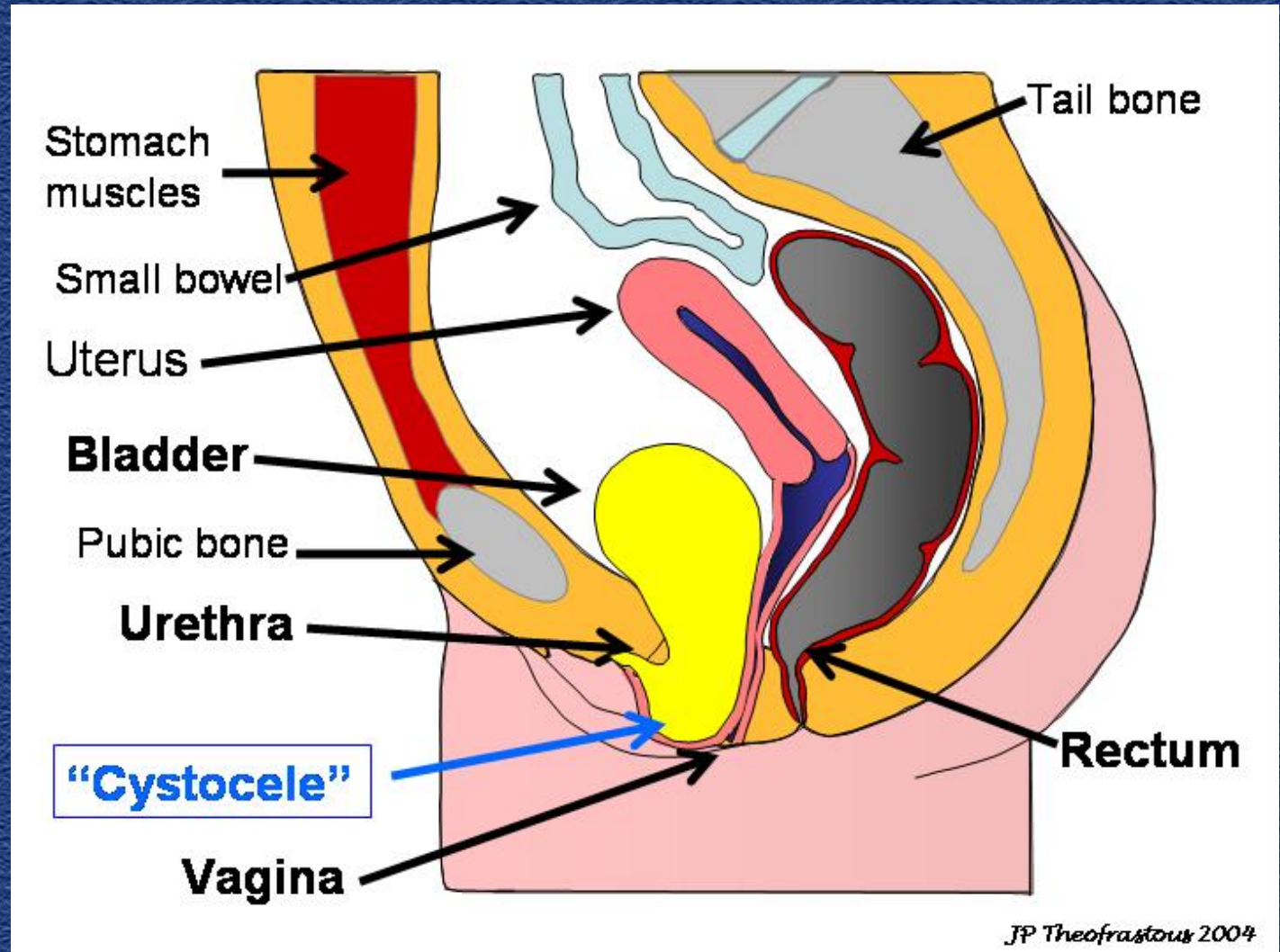
- Cystocele is caused by a defect in the anterior vaginal wall, which allows the bladder to protrude into the vagina
- Women who have a cystocele may experience pelvic pressure, lower backache, a protrusion from the vaginal opening, and an uncomfortable feeling during intercourse.
- Women with cystocele may experience involuntary urine loss or urinary retention (unable to empty her bladder).



# Cystocele



# Advanced Cystocele

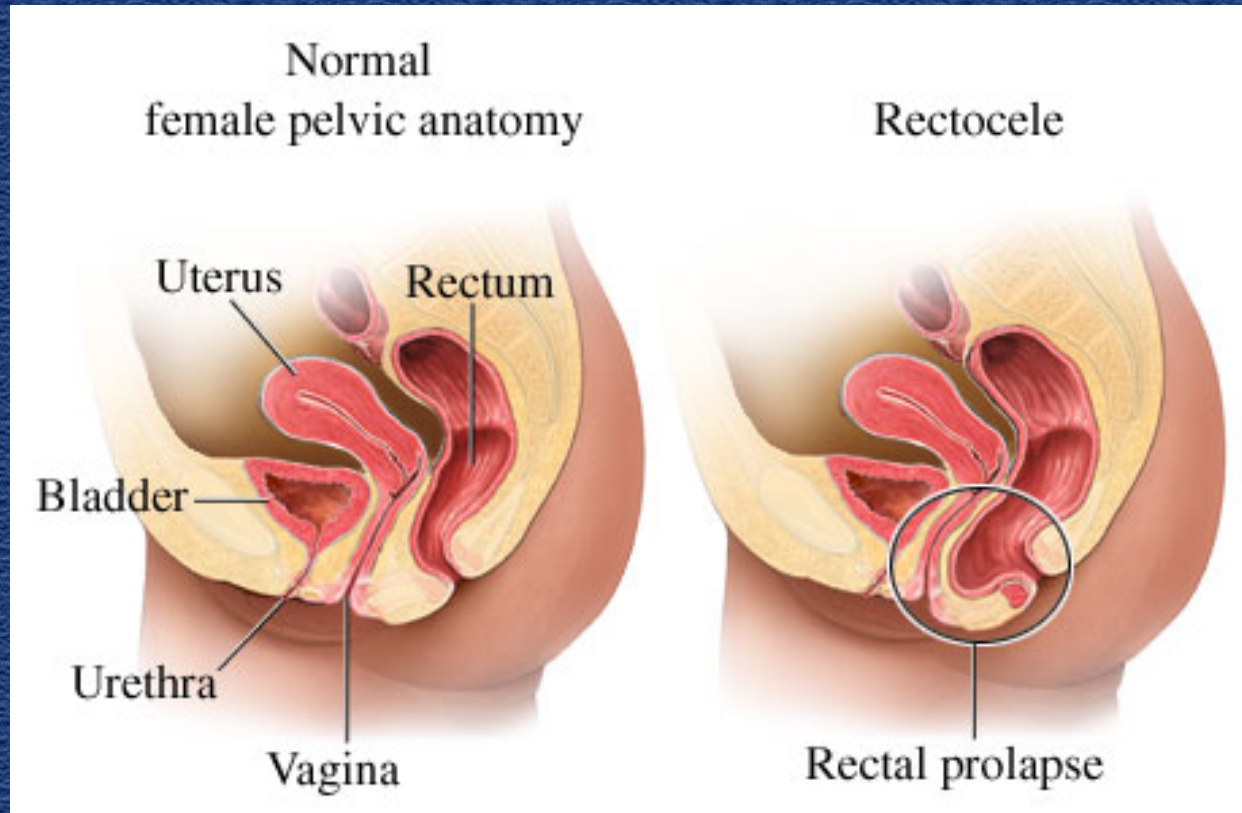


# Rectocele

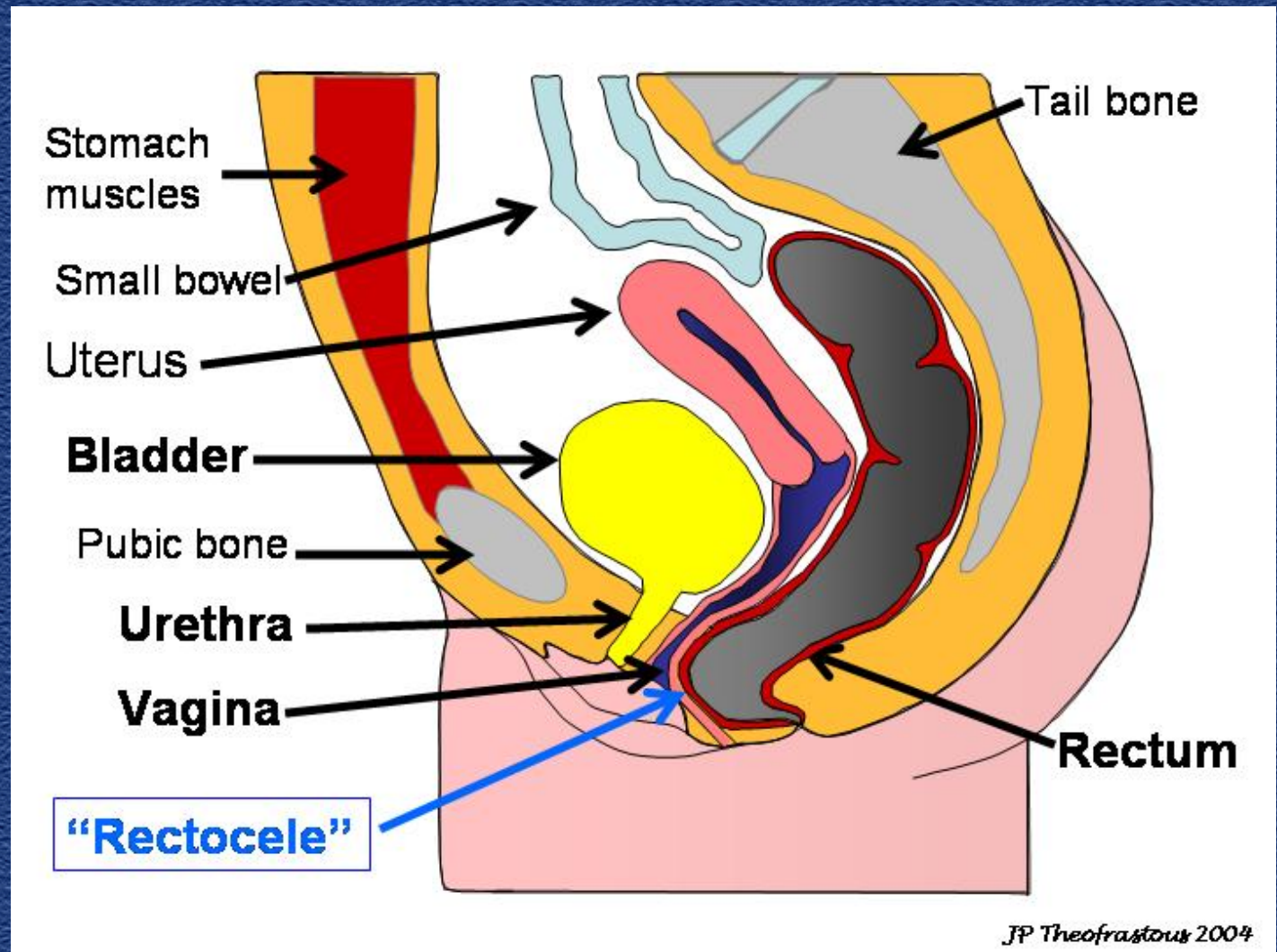
- Rectocele is caused by a defect in the back of the vagina, which allows the rectum to protrude into the vagina
- Women who have rectocele often experience pelvic pressure, lower backache, a protrusion from the vaginal opening, and an uncomfortable feeling during intercourse
- Constipation frequently can be relieved by assuming a specified posture or put pressure in the back of the vagina



# Rectocele



# Advanced Rectocele



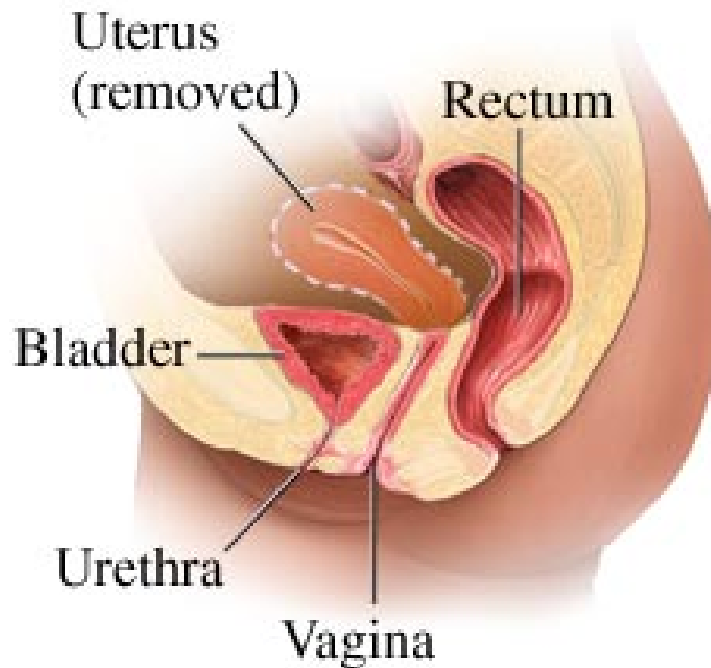
# Vaginal Prolapse

- Often can happen years after hysterectomy
- Vaginal prolapse is caused by tears in the tissue which suspend the top of the vagina
- When the top of the vagina falls down, it can cause the front and the back of the vagina to fall down as well.
- In its most severe form, the entire vagina can protrude outside the vaginal opening.

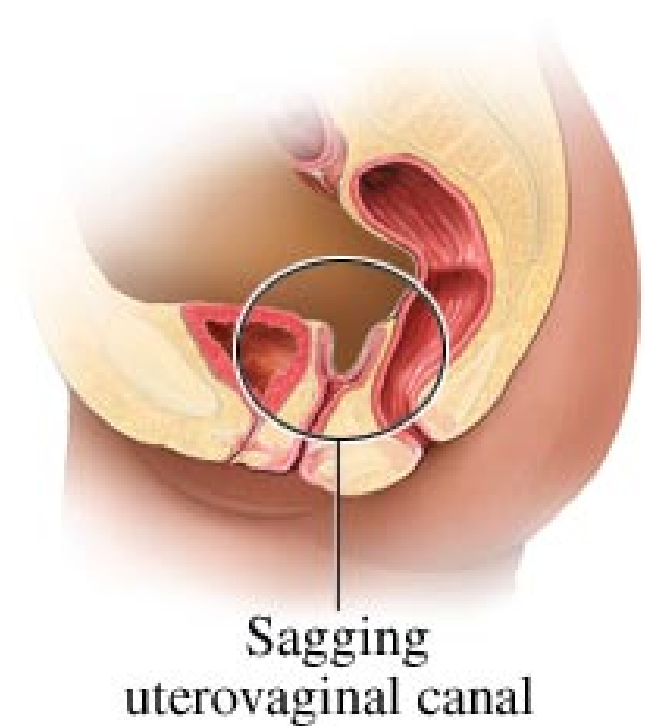


# Vaginal Prolapse

Female pelvic anatomy  
(post-hysterectomy)



Vaginal vault prolapse



# Evaluation for Pelvic Organ Prolapse

- The initial evaluation for pelvic organ prolapse involves a detailed history and physical examination
- Usually, no other tests are involved
- If a woman also has urinary incontinence, the evaluation may take longer

