

A person wearing a red jacket and blue jeans is sitting on a rocky ledge, looking out over a vast, forested valley. The valley is filled with dense trees in various shades of green and brown, suggesting an autumn setting. In the foreground, there are tall, dry grasses and some rocks. A large, leafy tree branch hangs down from the top left corner of the frame. The sky is a clear, bright blue.

Tennessee

UROLOGY[®]

URODYNAMICS

WHAT IS URODYNAMICS

Urodynamics refers to a series of diagnostic tests that evaluate the function of the bladder and urethra. These tests may be recommended if you have urinary incontinence (leakage of urine), recurrent bladder infections, slow or weak urinary stream, incomplete bladder emptying, or frequent urination.

HOW TO PREPARE FOR URODYNAMIC STUDIES

- Before your appointment, you may be asked to complete a questionnaire or voiding diary. Please bring this with you to the appointment.
- At the beginning of the test, you will be asked to provide a urine sample, so please arrive for the study with a relatively full bladder.
- You may eat or drink before the study without restriction.
- Take your medications as normally scheduled, unless otherwise directed by your doctor.

The tests typically take about 60 minutes and are generally painless, so no anesthesia is necessary. A catheter (soft, hollow tube) or special sensor will be carefully placed in your urethra and the rectum for males and either the vagina or rectum for females.

A friend and/or family member is welcome to accompany you to the test but will be asked to remain in the waiting area. You will be able to resume all previous activities, including driving, after the urodynamic studies.

Types of Urodynamic Studies

Your physician will decide which of the following tests needs to be performed to help diagnose and treat your condition.

UROFLOW

This test measures the speed and the amount of urine you void. You should come to the test feeling as though you need to urinate. Try not to empty your bladder one hour before your test. You will be asked to urinate into a commode with a funnel attached to a computer that measures urine flow.

CYSTOMETROGRAM

This study evaluates how your bladder holds urine, measures your bladder capacity, and determines how well you can empty your bladder. Your bladder will be filled with fluid through a catheter. To reproduce your bladder symptoms, you should report any sensations you feel during the study. In addition, you may be asked to cough, bear down, stand, or walk in place during the test. At the end of the study, you will be asked to urinate.

EMG

This test measures how well you can control your sphincter muscles (the muscles that keep urine in the bladder) and determines if they are working in coordination with your bladder. Electrodes may be placed near the rectum to record muscle activity.

PRESSURE FLOW STUDY

This test determines if there is an obstruction. After your bladder is filled through a catheter, you will be asked to urinate as you normally would by sitting on a commode or standing. The study simultaneously records bladder pressure and urine flow rate.

VIDEOURODYNAMICS

This study combines one or more urodynamic tests with the addition of video pictures. If this study is prescribed, the doctor will be present to explain each step of the process. Your bladder will be filled with contrast fluid, and X-ray video pictures will be taken to see your bladder in motion during filling and emptying. After the procedure, the doctor will discuss the study results with you. A detailed report will be sent to your physician including a summary of results, diagnosis, and suggestions for treatment. After reviewing the report, your physician will speak with you about the findings and your options for treatment.

What To Expect at Your Appointment

In preparation for your urodynamics study, here's what you can expect:

1. Your urodynamics appointment will take approximately 60 minutes. Please arrive 15 minutes before your appointment time to complete any necessary forms.
2. Arrive with a comfortably full bladder.
3. You will be asked to empty your bladder into a uroflow meter that will automatically measure the amount of urine and flow rate.
4. The urodynamicist will then perform a post-void residual. This involves the placement of a thin tube in your bladder to measure the amount of urine remaining.
5. The recommended urodynamic study will then be performed. This study will evaluate: 1) how much your bladder can hold; 2) how much pressure builds up inside your bladder as it stores urine; and 3) how full it is when you feel the urge to urinate.
6. Your physician will review the results with you at your next visit.

BLADDER HEALTH QUESTIONNAIRE (FOR MEN)

Name: _____ Date: _____

Which symptom(s) best describes you?

- ☐ Frequent urination – Circle one: Day Night Both
- ☐ Sudden or strong urge to urinate
- ☐ Leaking with urge or no warning
- ☐ Leaking with sneezing, coughing or exercising
- ☐ Difficulty starting to urinate or straining to urinate
- ☐ Pain with urination
- ☐ Unable to empty the bladder
- ☐ None of these describe me. Please describe your experience or what brings you into the office.
- _____

How long have you had these symptoms?

How frequently do you urinate during the daytime? _____ Times Volume (check one): ☐ A lot ☐ Minimal

How many times do you urinate at night (Nocturia)? _____ Times Volume (check one): ☐ A lot ☐ Minimal

Do you currently have any problems with bowel function?

- ☐ Difficulty with bowel movements ☐ Leaking stool ☐ Other _____

When did your urinary difficulty begin?

- ☐ Following a prostate condition or treatment? Please explain. _____

- ☐ Other (Please explain) _____

Which symptoms bother you the most? _____

What is your level of frustration with your bladder symptoms? Please circle the number that reflects the degree of frustration:

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

Not Frustrated

Very Frustrated

Does your bladder/bowel problem limit your activity? Circle one: Yes No

Have you had any prior procedures for your symptoms? Circle one: Yes No

If Yes, what procedure(s) was done? _____

Do you currently catheterize? (place a tube in your bladder to empty)? Circle one: Yes No

Have you had a catheter in the past? Circle one: Yes No

Do you wear pads for leakage of urine or stool? Circle one: Yes No

Please describe any behavior modifications you have tried (i.e., caffeine intake, lifestyle changes, physical therapy, bladder training, pelvic floor muscle training):

Have you tried medications to help your symptoms? Circle one: Yes No

If yes, please check the medications that you have tried:

- | | |
|--|--|
| <input type="checkbox"/> Oxybutynin/Ditropan® | <input type="checkbox"/> Mirabegron/Myrbetriq® |
| <input type="checkbox"/> Oxybutynin/Gelnique® | <input type="checkbox"/> Vibegron/Gemtesa® |
| <input type="checkbox"/> Tolterodine/Detrol® | <input type="checkbox"/> Imipramine/Trofanil® |
| <input type="checkbox"/> Solifenacin/Vesicare® | <input type="checkbox"/> Hyoscyamine/Levsin-SL® |
| <input type="checkbox"/> Trosipium/Sanctura® | <input type="checkbox"/> Tinazadine/Zanaflex® |
| <input type="checkbox"/> Darifenacin/Enablex® | <input type="checkbox"/> Medication for prostate condition |
| <input type="checkbox"/> Fesoterodine/Toviaz® | |

Did these medications help your symptoms? Circle one: Yes No

If yes, please circle the number that reflects the degree to which they worked:

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

No Relief

Completely Cured

If you stopped taking your medication(s), please explain why: _____

- ☐ Did not help ☐ Side effects ☐ Too expensive ☐ Other

Please describe any side effects caused by the medication(s):

BLADDER HEALTH QUESTIONNAIRE (FOR WOMEN)

PATIENT NAME _____

PATIENT ID# _____ DATE _____

Which symptom(s) best describes you?

- ☐ Frequent urination – Circle one: Day Night Both
- ☐ Sudden or strong urge to urinate
- ☐ Leaking with urge or no warning
- ☐ Leaking with sneezing, coughing or exercising
- ☐ Difficulty starting to urinate or straining to urinate
- ☐ Pain with urination
- ☐ Unable to empty the bladder
- ☐ None of these describe me. Please describe your experience or what brings you into the office.
- _____

How long have you had these symptoms? _____

How frequently do you urinate during the daytime? _____ Times Volume (check one): ☐ A lot ☐ Minimal

How many times do you urinate at night (Nocturia)? _____ Times Volume (check one): ☐ A lot ☐ Minimal

Do you currently have any problems with bowel function?

- ☐ Difficulty with bowel movements ☐ Leaking stool ☐ Other

When did your urinary difficulty begin? Did it start as a result of a major event such a surgery, trauma, a medical conditions, etc.?

Please explain _____

Which symptoms bother you the most? _____

What is your level of frustration with your bladder symptoms? Please circle the number that reflects the degree of frustration:

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

Not Frustrated

Very Frustrated

Does your bladder/bowel problem limit your activity? Circle one: Yes No

Have you had any prior procedures for your symptoms? Circle one: Yes No

If Yes, what procedure(s) was done? _____

Do you currently catheterize? Circle one: Yes No

Have you had a catheter in the past? Circle one: Yes No

Do you wear pads for leakage of urine or stool? Circle one: Yes No

Please describe any behavior modifications you have tried (i.e., caffeine intake, lifestyle changes, physical therapy, bladder training, pelvic floor muscle training):

Have you tried medications to help your symptoms? Circle one: Yes No

If yes, please check the medications that you have tried:

☐ Oxybutynin/Ditropan®

☐ Oxybutynin/Gelnique®

☐ Tolterodine/Detrol®

☐ Solifenacin/Vesicare®

☐ Trosipium/Sanctura®

☐ Darifenacin/Enablex®

☐ Fesoterodine/Toviaz®

☐ Mirabegron/Myrbetriq®

☐ Vibegron/Gemtesa®

☐ Imipramine/Trofanil®

☐ Hyoscyamine/Levsin-SL®

☐ Tinazadine/Zanaflex®

☐ Other _____

Did these medications help your symptoms? Circle one: Yes No

If yes, please circle the number that reflects the degree to which they worked:

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

No Relief

Completely Cured

If you stopped taking your medication(s), please explain why:

☐ Did not help ☐ Side effects ☐ Too expensive ☐ Other

Please describe any side effects caused by the medication(s): _____

What Is a Bladder Diary?

A bladder diary is a 3-day recording of your liquid intake and urine output. The recorded information can be helpful to your healthcare provider to understand your fluid balance, urinary frequency, functional bladder capacity (how much your bladder holds in your own environment), and many other aspects important to bladder function. We ask that you bring your completed 3-day diary to your initial appointment to help evaluate your bladder and establish your baseline.

When is a Bladder Diary Used?

Your healthcare provider may request that you complete a diary to evaluate urinary frequency, urgency, or incontinence. You may also choose to complete a diary before you see the healthcare provider about a bladder problem. A bladder diary can point to any dietary or behavioral factors that may be contributing to your bladder symptoms.

How to Complete the Diary:

1. Please collect three (3) days of information; however, the days do not need to be consecutive. A one-day diary may not be representative of your bladder condition, which is why a 3-day diary is recommended.
2. Begin and end the diary at the same time each day. (Example: Begin when you wake up at 6:00 a.m. and end at 6:00 a.m. the following day.)
3. Record the time of urination (Example: 6:00 a.m.) and record the volume of urine output whenever possible.
4. Record the fluid intake to the nearest ounce. A very reasonable estimation (8 oz. cup of juice, 12 oz. coke, or 20 oz. water) is appropriate. You do not need to physically measure every fluid if you know the size of the bottle, can, or cup from which you are drinking.
5. Estimate the urine output as small, medium, and large amounts.
6. Be as accurate as possible! The diaries are most useful when every intake and output in 24 hours over three (3) days is recorded.

VOIDING DIARY – DAY 1

Patient Name: _____

Date of Birth: _____ Date: _____

Use diary below to record urinary output, fluids consumed, urinary urgency and urinary leakage (if applicable) for 3 complete 24-hour periods (they do not have to be consecutive days). If you used a catheter to empty or assist in emptying your bladder, record those volumes in the specified column.

| Time of Day | Fluid Intake | Toilet Urinations | Urge to Urinate | Urine Leaks | Bowel Leaks | Pad Changes | Amount of urine drained via catheter | |
|--------------------------|-----------------------------|---|---|--|--|---|--------------------------------------|----------------------------|
| Circle Wake-up & Bedtime | Ounces (oz) of liquid drank | A: Place a ✓ each time you void B: Record urine output as small, medium or large | 1 - mild 2 - moderate 3 - severe 4 - very severe | Place a ✓ if you leaked urine before making it to the toilet | Place a ✓ if you leaked stool before making it to the toilet | Note each pad change with a "D" if dry or, if wet, "small," "mod." or "large" | Voided volume (oz or ml) | Catheter volume (oz or ml) |
| 7 am | | | | | | | | |
| 8 am | | | | | | | | |
| 9 am | | | | | | | | |
| 10 am | | | | | | | | |
| 11 am | | | | | | | | |
| noon | | | | | | | | |
| 1 pm | | | | | | | | |
| 2 pm | | | | | | | | |
| 3 pm | | | | | | | | |
| 4 pm | | | | | | | | |
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| 6 pm | | | | | | | | |
| 7 pm | | | | | | | | |
| 8 pm | | | | | | | | |
| 9 pm | | | | | | | | |
| 10 pm | | | | | | | | |
| 11 pm | | | | | | | | |
| midnight | | | | | | | | |
| 1 am | | | | | | | | |
| 2 am | | | | | | | | |
| 3 am | | | | | | | | |
| 4 am | | | | | | | | |
| 5 am | | | | | | | | |
| 6 am | | | | | | | | |

VOIDING DIARY – DAY 2

Patient Name: _____

Date of Birth: _____ Date: _____

Use diary below to record urinary output, fluids consumed, urinary urgency and urinary leakage (if applicable) for 3 complete 24-hour periods (they do not have to be consecutive days). If you used a catheter to empty or assist in emptying your bladder, record those volumes in the specified column.

| Time of Day | Fluid Intake | Toilet Urinations | Urge to Urinate | Urine Leaks | Bowel Leaks | Pad Changes | Amount of urine drained via catheter | |
|--------------------------|-----------------------------|---|---|--|--|---|--------------------------------------|----------------------------|
| Circle Wake-up & Bedtime | Ounces (oz) of liquid drank | A: Place a ✓ each time you void B: Record urine output as small, medium or large | 1 - mild 2 - moderate 3 - severe 4 - very severe | Place a ✓ if you leaked urine before making it to the toilet | Place a ✓ if you leaked stool before making it to the toilet | Note each pad change with a "D" if dry or, if wet, "small," "mod." or "large" | Voided volume (oz or ml) | Catheter volume (oz or ml) |
| 7 am | | | | | | | | |
| 8 am | | | | | | | | |
| 9 am | | | | | | | | |
| 10 am | | | | | | | | |
| 11 am | | | | | | | | |
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| 5 pm | | | | | | | | |
| 6 pm | | | | | | | | |
| 7 pm | | | | | | | | |
| 8 pm | | | | | | | | |
| 9 pm | | | | | | | | |
| 10 pm | | | | | | | | |
| 11 pm | | | | | | | | |
| midnight | | | | | | | | |
| 1 am | | | | | | | | |
| 2 am | | | | | | | | |
| 3 am | | | | | | | | |
| 4 am | | | | | | | | |
| 5 am | | | | | | | | |
| 6 am | | | | | | | | |

VOIDING DIARY – DAY 3

Patient Name: _____

Date of Birth: _____ Date: _____

Use diary below to record urinary output, fluids consumed, urinary urgency and urinary leakage (if applicable) for 3 complete 24-hour periods (they do not have to be consecutive days). If you used a catheter to empty or assist in emptying your bladder, record those volumes in the specified column.

| Time of Day | Fluid Intake | Toilet Urinations | Urge to Urinate | Urine Leaks | Bowel Leaks | Pad Changes | Amount of urine drained via catheter | |
|--------------------------|-----------------------------|---|---|--|--|---|--------------------------------------|----------------------------|
| Circle Wake-up & Bedtime | Ounces (oz) of liquid drank | A: Place a ✓ each time you void B: Record urine output as small, medium or large | 1 - mild 2 - moderate 3 - severe 4 - very severe | Place a ✓ if you leaked urine before making it to the toilet | Place a ✓ if you leaked stool before making it to the toilet | Note each pad change with a "D" if dry or, if wet, "small," "mod." or "large" | Voided volume (oz or ml) | Catheter volume (oz or ml) |
| 7 am | | | | | | | | |
| 8 am | | | | | | | | |
| 9 am | | | | | | | | |
| 10 am | | | | | | | | |
| 11 am | | | | | | | | |
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