# WEST VIRGINIA UNIVERSITY MEDICINE

# **Department of Urology**

1 Medical Center Drive | Morgantown, WV 26506 Telephone: (304) 555-3400 | Facsimile: (304) 555-3401

### PATIENT DEMOGRAPHICS

Patient Name: Anderson, Mary Elizabeth

**Date of Birth:** January 10, 1970 (Age: 55 years)

Medical Record #: WVU-847392

**Insurance:** Medicare Part B | Beneficiary ID: 3RQ7PM5NT82

**Date of Service:** October 4, 2025

Attending Physician: Dr. Jennifer Carter, MD

#### **CHIEF COMPLAINT**

Severe neurogenic bladder with urge urinary incontinence unresponsive to medical management

### HISTORY OF PRESENT ILLNESS

Ms. Anderson is a 55-year-old female with relapsing-remitting multiple sclerosis (diagnosed 2015) who presents with severe urge urinary incontinence. She reports 10-12 incontinence episodes daily with severe urgency and frequency. This has worsened over the past 18 months despite escalation of medical therapy. The patient requires 7-8 pads daily and reports significant negative impact on quality of life.

#### **Multiple Sclerosis History:**

- Diagnosed 2015 with relapsing-remitting multiple sclerosis
- Followed by Neurology (Dr. Michael Stevens)
- Current disease-modifying therapy: Ocrelizumab infusions
- Recent MRI brain/spine (July 2025): Stable disease burden, no new lesions
- Bladder symptoms attributed to MS-related neurogenic bladder
- EDSS score: 4.5 (moderate disability, able to ambulate without aid)

# **Conservative Treatment History:**

### Behavioral Therapies (2023-2024):

- · Bladder retraining program limited success
- · Timed voiding schedule
- · Fluid management

### Pharmacologic Trials:

- Oxybutynin ER 15mg daily 6 months (2023) minimal benefit, discontinued due to cognitive effects
- Tolterodine ER 4mg daily 5 months (2024) inadequate response
- Mirabegron 50mg daily 7 months (2024-present) partial benefit (~30% improvement) but still significantly symptomatic
- Solifenacin 10mg daily added 3 months (current) combination therapy with modest additional benefit

### PAST MEDICAL HISTORY

- Multiple Sclerosis relapsing-remitting type, diagnosed 2015
- Depression related to chronic illness
- · Chronic fatigue syndrome
- · Vitamin D deficiency
- · No diabetes mellitus
- No hypertension

# **SURGICAL HISTORY**

• Cesarean section (2002)

Anderson, Mary Elizabeth | MRN: WVU-847392 | Page 2 of 3

# **CURRENT MEDICATIONS**

- Ocrelizumab 600mg IV every 6 months (last dose: August 2025)
- · Mirabegron 50mg once daily
- Solifenacin 10mg once daily
- · Escitalopram 20mg once daily
- Modafinil 200mg every morning (for fatigue)
- Vitamin D3 5000 IU daily
- Baclofen 10mg TID (for spasticity)

### **ALLERGIES**

No known drug allergies (NKDA)

## PHYSICAL EXAMINATION

Vital Signs: BP 118/72 mmHg, HR 68 bpm, Temp 98.2°F, Weight 152 lbs

General: Chronically ill-appearing female, mild dysarthria noted

Abdomen: Soft, non-tender, no palpable masses, C-section scar well-healed

Pelvic: Normal external genitalia, no prolapse, adequate pelvic floor tone

Neurologic: Alert and oriented x3, mild dysarthria, decreased sensation in lower extremities bilaterally in stocking pattern,

hyperreflexia in lower extremities, positive Babinski sign bilaterally, gait slightly unsteady but ambulatory

without assistance

# **DIAGNOSTIC STUDIES**

## Baseline 3-Day Voiding Diary (09/18-09/20/2025):

Parameter	Day 1	Day 2	Day 3	Mean
Urge incontinence episodes	11	12	10	11.0
Total voids	19	20	18	19.0
Nocturia	5	4	5	4.7

Pads used	8	7	8	7.7

Urinalysis (09/18/2025): Normal, no infection, no blood

Post-Void Residual Volume (09/18/2025): 45 mL (normal)

#### **Urodynamic Study (09/22/2025):**

- Cystometric capacity: 265 mL (reduced)
- First sensation at 80 mL
- Strong desire to void at 165 mL
- Detrusor overactivity with neurogenic pattern frequent involuntary contractions
- · Detrusor sphincter dyssynergia noted
- · No stress incontinence
- Findings consistent with neurogenic bladder secondary to multiple sclerosis

## Neurology Consultation Note (09/25/2025) - Dr. Michael Stevens:

"Ms. Anderson has stable relapsing-remitting MS currently well-controlled on ocrelizumab. Her bladder symptoms are a manifestation of her MS with neurogenic bladder dysfunction. MRI imaging shows stable demyelinating lesions in brain and spinal cord. Patient is appropriate candidate for evaluation of neuromodulation therapy for neurogenic bladder. However, should be counseled that outcomes may differ from non-neurogenic populations."

Anderson, Mary Elizabeth | MRN: WVU-847392 | Page 3 of 3

## SACRAL NERVE TEST STIMULATION

Procedure Date: September 26, 2025

**Procedure:** Percutaneous nerve evaluation (PNE) with bilateral S3 lead placement performed under fluoroscopic guidance. Lead placement confirmed. Good motor responses obtained during placement.

Trial Period: 14 days (September 26, 2025 - October 10, 2025)

### Trial Period Voiding Diary (Days 9-11):

Parameter	Day 9	Day 10	Day 11	Trial Mean	% Change
Urge incontinence episodes	5	6	4	5.0	-55%
Total voids	13	14	12	13.0	-32%
Nocturia	3	2	3	2.7	-43%
Pads used	4	4	3	3.7	-52%

### TEST RESULT: 55% improvement in urge incontinence episodes

Patient reports improvement in symptoms during trial period. Better bladder control and reduced urgency. Improvement sustained throughout 14-day trial. No adverse effects. Patient very satisfied with trial results and eager to proceed with permanent device.

### **ASSESSMENT**

#### Diagnosis:

- Neurogenic bladder due to multiple sclerosis (ICD-10: N31.9, G35)
- Urge urinary incontinence (ICD-10: N39.41)
- Multiple sclerosis, relapsing-remitting (ICD-10: G35)

#### **CLINICAL SUMMARY & PLAN**

55-year-old female with relapsing-remitting multiple sclerosis and secondary neurogenic bladder with severe urge urinary incontinence. Patient has failed comprehensive behavioral therapy and multiple medication trials. Urodynamics confirm neurogenic detrusor overactivity with detrusor sphincter dyssynergia. Test stimulation shows 55% improvement in incontinence episodes.

Patient's bladder dysfunction is directly related to her underlying multiple sclerosis with documented demyelinating lesions on MRI and neurogenic bladder pattern on urodynamics. Neurology consultation confirms MS etiology of bladder symptoms.

#### Plan:

- · Authorization request submitted for permanent sacral nerve stimulation device
- · Patient counseled extensively on risks and benefits
- Continue current medications pending authorization decision
- · Coordinate care with Neurology for ongoing MS management
- · Follow-up as needed pending authorization decision

Jennifer Carter, MD Board Certified Urology Date: October 4, 2025 NPI: 1638294750