

**PHILADELPHIA RHEUMATISM SOCIETY**  
**Clinical Pathologic Conference, Tuesday, February 11, 2014**

**Case #1: A 52-year-old woman with peripheral neuropathy:**

Presenter: Dr. Ruchika Patel, Fellow at the University of Pennsylvania

Discussant: Dr. Marissa Blum, Temple University

**History of Presenting Illness:** A previously healthy 52-year-old African American woman, presented to an outside hospital with ten days of abdominal pain, nausea and watery diarrhea. Stool specimens were positive for *Clostridium difficile* toxin A/B. She had increasing abdominal pain, despite treatment with oral metronidazole and vancomycin. A subsequent CT abdomen showed critical small bowel obstruction resulting in a partial small bowel resection.

Post-operatively, the patient developed bilateral lower extremity weakness and numbness, which later involved her upper extremities. She soon became unable to walk. CT head and MRI/MRA of her brain did not show any intracranial pathology. The patient was then transferred to acute rehab and the etiology of the weakness was attributed to deconditioning post-operatively.

Two months after her surgery, she was transferred to our facility for persistent lower extremity weakness, despite aggressive physical therapy. She lost 10 pounds of weight in the past two months, but otherwise had no symptoms other than her weakness of all 4 extremities

**Review of Systems:** Negative including, no history of fever or chills, no history of raynauds, no oral or nasal ulcers, no sinus disease, no history of dry eyes or dry mouth, no hemoptysis, no SOB, no cough, no history of headaches or seizures, no history of neuropathy, no history of myalgias, arthralgias, no history of DVT/PE. No history of miscarriages. Since the surgery she has had no recurrence of her abdominal symptoms.

**Past Medical History:** Hypertension

**Past Surgical History:** Partial small bowel obstruction as above, Cholecystectomy and tubal ligation.

**Family History:** Sister with cerebral palsy, no family history of autoimmune disease

**Social history:** Used to be a judge in Philadelphia prior to this presentation. She does not smoke drink alcohol, no history of IVDU

**Allergies:** none

**Medications:** metoprolol 25 mg twice a day, oxycodone for pain. Colace 100 mg twice a day, multivitamins and Ambien prn for sleep.

**Physical Examination:**

Vital signs: BP 122/99, T 99, HR: 102, RR 18, sats 96% on RA

HEENT: no alopecia, pupils equal and reactive, normal hearing, no mouth ulcers

No palpable lymph nodes or enlarged parotid glands, decreased tear meniscus with no evidence of dry mouth,

Respiratory: symmetric chest expansion, clear to auscultation

Cardiovascular: no carotid bruits, s1, s2, RRR, no murmurs

Abdominal: midline surgical scar well healed, no tenderness, normal bowel sounds

Skin: no rashes

Musculoskeletal: no swelling or tenderness of any of her joints.

Neuro: 0/5 power in her left upper extremity, 1/5 power in left lower extremity. Power in right upper extremity 3/5 and right lower extremity 1/5. Absent deep tendon reflexes in all limbs and an unequivocal Babinski's sign bilaterally. Decreased sensation to light touch in left arm and right leg to mid calf and left leg above knee. Normal communication, able to follow commands with no difficulty and had no difficulty with comprehension.

### **Labs:**

WBC: 6.7 with ALC 0.84, H/H: 8.5/26, Platelets 503

CMP, TSH, CPK, folate and vitamin B12 were all normal. Infectious screening for hepatitis B and C, HIV, syphilis and Lyme disease was negative. Her urinalysis was normal with no proteinuria. There was no evidence of paraproteinemia on urine and serum protein electrophoresis.

ANA 1: 640 speckled, dsDNA < 10, C3 130, C4 3

Rheumatoid factor 188,

Anti-CCP negative, ANCA negative, Smith/RNP negative

SSA 3.6 (<0.9), SSB 5 (<0.9)

Anti cardiolipin IgG 15 (0-11), IgM 7.5 (0-12), B2 glycoprotein and lupus anticoagulant negative

ESR 129, CRP 214.6

Lumbar puncture was negative for infectious etiology (WBC 0), normal glucose level and a marginally elevated protein at 48. No oligoclonal bands were seen.

### **Imaging/diagnostic tests:**

- CT head, MRI/MRA head and neck was unremarkable and carotid dopplers did not show any significant stenosis.

- MRA abdomen was unremarkable with normal vessels.

- EMG of her right leg was performed showing severe denervation distally, consistent with a severe, axonal sensory motor neuropathy.

-Small bowel pathology from the surgery 2 months prior was reviewed – This showed acute transmural necrotizing inflammation consistent with acute ischemic process as well as necrosis of the vascular walls and leucocyte fragmentation consistent with leucocytoclastic vasculitis. The appendix showed necrotizing vasculitis of small vessels within the submucosa and peri-appendiceal soft tissue.

*At this time a diagnostic test was performed.*