06/28/21 Morning Report with @CPSolvers

Case Presenter: *Maria Aleman (@MariaMjaleman)* ***Case Discussants***: *Api Chew (@Api_chew) and Pariniti*

CC: Inability to walk

HPI: 57M with inability to walk. 3 week history of progressive inability to walk. Progressive weakness on both legs and tingling on both legs and tingling that now extends to the umbilicus. Urinary incontinence for the past week.

PMH:
Chronic Hep C infection, not on tx.
HTN, PTSD,
Gastroenteritis prior to symptoms.

Meds:
Clonazepam, Metoprolol, Sertraline, Tramadol, Cyclobenzaprine.
Daily laxatives for the past 2-3 wks due to new onset constipation.
Doxycycline prior to presentation for folliculitis on lower extremities.

Fam Hx:

Soc Hx:
Smokes 1 pack/day for the last 40 years.
4-6 beers daily.

Health-Related Behaviors:
None.

Allergies:
None.

Vitals: **T**: Afebrile **HR**:84 **BP**:120/60 **RR**:15 **SpO_2**:98
Exam:
Neuro: Oriented and alert. Normal speech and cognition.
Motor: Strength normal in upper extremities, decreased in lower extremities (b/l hip extension ⅗, b/l knee extension ⅘ , b/l foot dorsal and plantar flexion ⅘).
Reflexes: Hyporreflexia (patellar b/l 3/4, ankle jerk b/l 2/4).
Sensory: Loss of vibration sense up to T10 dermatome, loss of pain sensation up to upper calves b/l.
Gait: No ataxia. Able to stand, but cannot walk.
Extremities/Skin: Maculopapular rash with scattered pustules on b/l lower extremities.

Notable Labs & Imaging:
Hematology: CBC, Kidney function and liver enzymes nl.
HbA1C 4% B12 and TSH normal.
CRP 4 ESR 48
HIV, Syphilis, HSV, CMV, EBV negative. Hep C antibody and cryoglobulin positive.
Chemistry:
LP: Opening pressure normal. Protein 124 (high), WBC 4 RBC 0, Myelin basic protein 10.3 (high). Cytology with no malignant cells, no oligoclonal bands on CSF.
Imaging:
MRI brain and cervical to lumbar spine: left posterior epidural mass measuring 6.5 mm at C7-T1 resulting in stenosis of the central canal, complete effacement of the thecal sac and deformation of cord. Hyperintense and hypointense signal on T2 imaging at C7-T1.

Final Dx: Hep C - Transverse myelitis. Tx with high dose steroids and symptoms improved. Epidural mass was incidental finding.

Problem Representation: 57M, with chronic HCV and polypharmacy, p/w 3 wks of progressive b/l lower extremity weakness, tingling that extends to the umbilicus and urinary incontinence. Exam showed b/l lower extremity hyporreflexia. MRI showed an epidural mass at C7-T1.

Teaching Points (Gabriel):

- **Localizing the problem:**
  - Motor-sensory + autonomic dysfunction on lower extremities → spinal cord involvement (cauda equina syndrome, mass compression, subacute combined degeneration), demyelinating diseases like GBS, B12 deficiency, infectious.
  - Bladder innervation involvement in demyelinating diseases is presented in the late course of the disease because of their short length → spinal cord most likely.

Looking for a trigger

- **Gastroenteritis**
  - GBS → campylobacter
  - Vasculitis
  - Post-infectious transverse myelitis: acute motor, sensory, bowel/bladder dysfunction, hyperreflexia or areflexia.
- **Medications:** anticholinergic, sertraline (SS)
- **40 pack-year smoking habit** → paraneoplastic syndrome

Physical exam clues:

- **Rash:** vasculitis, post-infectious related. **No profound hyporeflexia:** demyelinating diseases less likely (*not always*)
- **Cryoglobulinemia - neurological manifestations:** peripheral >> central. Common peripheral manifestations are: symmetric polyneuropathy, small fiber neuropathy, and mononeuritis multiplex.
- **Transverse myelitis** triggers: infectious (viral, mycoplasma), immune. HCV is the most common hepatitis virus causing TM.