02/16/21 Neuro Morning Report with @CPSolvers

Case Presenter: *Sanjit Krishnam (@)* ***Case Discussants***: *Felipe Solares(@Felipesolares) and Maria Aleman(@MariaMjaleman)*

CC: "my belly hurts" / abdominal pain

HPI: 74 yo man with sudden onset abdominal pain started 5 days ago, presenting in the lower abdomen in the hypogastric distribution associated with back pain radiating to the scrotum, 9/10 on the severity, aggravated by movement, relieved on sitting position. Not able to stand.
ROS: denies weakness, urinary or fecal dysfunction, saddle anesthesia.

Vitals: **T**: N **HR**: N **BP**: N **RR**: N **SpO_2**: N
Exam:
Systemic: normal. No spine tenderness. Skin was not tender, and didn't have pain in palpation
Neuro:
- **Mental Status:** normal
- **Cranial Nerves:** normal
- **Motor:** difficult to evaluate because of pain, unable to stand because of the pain
- **Reflexes:** 2+/4+. Plantar reflexes normal.
- **Sensory:** allodynia in the scrotum area and dermatomes L3/L4 in the left side
- **Cerebellar:** normal

Problem Representation: 74-yo man with a previous heart condition and severe degenerative disease of the cervical spine presenting with acute lower abdominal pain radiating to the hypogastric and sacral areas, relieved by sitting position. Neuro exam showed allodynia in the scrotum and dermatomes L3/L4.

PMH: DM, HTN AF, COPD, HF reduced EF, hypothyroidism, previous CT w/ severe degenerative disease of cervical spine
No surgeries

Meds:
Apixaban
Inhalors for COPD
Levothyroxin

Fam Hx:
None

Soc Hx:
Denies, alcohol, smoking

Health-Related Behaviors:
None

Allergies:
None

Notable Labs & Imaging:
Hematology: (Un)Remarkable
Chemistry: (Un)Remarkable

Imaging:
MRI: Multiple degeneration changes, severe foraminal narrowing worse at L2/L3 and L3/L4.
Disk herniation at L2/L3, L3/L4, L4/S1. Small fragment around L1/L2.

Abdomen CT: unremarkable.

Neurosurgery consultation: physical therapy, no surgery (cardiac history), muscle relaxants, corticosteroids shot.

Final diagnosis: Acute disk herniation in L1/L2 level.

Teaching Points (Kiara): #EndNeurophobia

- **Abdominal pain:** Generalized vs localized. Can precede botulism, thoracic radiculopathy (DM, TB, Transverse Myelitis). GBS (genital tingling)
- Parkinson's disease atypical atrophy can have constipation rather than dysautonomia.
- Localization: Bilateral vs unilateral process affecting thoracic (diabetes radiculopathy, mononeuropathy, craneo neuropathy), sacral root.
- Time course: Hyperacute (vascular: Adamkiewicz, Fibrocartilaginous embolism), acute (inflammatory > infection), chronic (metastases)
- **UMN** (increased reflexes/tone goes up/ toe goes up or Babinski sign -signs go up), **LMN** (signs go down: toe goes down, tone goes down, reflexes decrease, fasciculations can be found)
- **VZV** immunocompetent (more localized, dermatoma) vs immunosuppressed (anywhere).
- **Lumbosacral radiculopathy asymmetric and neuropathy:**
  Non-compressive: Bruns Garland Sd (DM complication),infx-Lyme, Elsberg sd HSV 2, inflam like GBS, toxic, neoplasia-neurolymphomatosis VS **compressive** (mass, mets)
- **UB Pearl:** Dermatomal diabetic neuropathy, skin is very tender → pain, respond nicely to medication.