5/19/25 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: (Sean Thompson) Case Discussants: (Aye@AyeThant94 and Vale@valeroldan23) and (Dr. Andres De Leon)

Scribing (SEEME)

CC:14 year old male presented with numbness

HPI:

Numbness and neck pain on right side. A week later fingertips of hand had numbness and tingling. Flare with playing basketball.

Headache bitemporal also present. Worse on bending.Numbness extended to the shoulder.

No trauma, no problem speaking or tasks with hand work. No bowel or bladder problems. Flu a week ago.

PMH:
Not significant

Meds:
ibuprofen

Fam Hx:
Not significant

Social Hx:
Born in india , moved at 1 year of age to Southeast USA

Health-Related Behaviors:
Not significant

Allergies:
Seasonal allergy

Vitals: nl
Exam: Gen: nl
HEENT:no neck swelling or stiffness
CV: nl
Pulm: nl
Abd: nl
Neuro: language and mentation normal. CN: no facial droop, no ptosis or miosis. Motor: 5/5. Sensory touch on right side: decreased from neck till umbilicus, vibration+touch +temperature +proprioception: decreased. Reflexes 1+ on right arm, other reflexes normal. Left side normal.
MSK: muscle pains. No Atrophy

Notable Labs & Imaging:

Hematology:
WBC: nl, Hb:nl, Platelets: nl
Hb
Chemistry
Na: nl K:nl Cr:nl BUN: nl Ca:nl Ph:nl Mg: nl Glu:nl Cl:nl HCO3: nl AG:nl
CRP: 0.2 ESR:22 B12, folate, TSH: normal
Imaging:
MRI brain and spinal imaging findings: brainstem elongation/ inferior displacement of Obex, long syringomyelia from C1 to C9.

Dx : Chiari 1.5 malformation

Problem Representation: 14 year old male presented with right upper extremity numbness, neck pain and bitemporal headache.

Teaching Points (Dan):

- Numbness (sensory): think about the ascending tract (peripheral nerves –> plexus –> spine –> cortex)
  - > What does the patient mean by *numbness?* Is it really *weakness?*
  - > Does the distribution involve more than one dermatome?
- Hirayama Disease: rare motor disease primarily affecting C7, C8, and T1 myotomes
- Spinal compressive disorder: think about the cape distribution of symptoms
- Reflexes can be very helpful (especially in the arm) to assess biceps (C5-C6) or triceps (C7-C8)
- Finger flexor reflex (C8-T1 localization): positive sign can suggest cervical myelopathy
- Lower Trunk Plexopathy (C7-C8): shoulder & upper arm weakness
- Upper Trunk Plexopathy (C5-C6): hand & forearm weakness
- Chiari Malformation: prolonged headaches that worsen with Valsalva +/- muscle weakness & numbness/tingling
- Can be challenging to use sensory exam in isolation to localize symptoms
- Spinal Cord lesion may be affecting roots given reflex abnormalities (e.g. syringomyelia)
- Consider Horner's Syndrome (ptosis, miosis, anhidrosis) to evaluate extension of lesion
- When obtaining imaging of the spinal cord: go to the level of the lesion *and higher*
- Consider post-inflammatory/infectious reactive condition
- Chiari I: cerebellar tonsil involvement associated with syringomyelia
- Chiari II: vermis, brainstem, & 4th ventricle -> myelomeningocele +/- hydrocephalus