9/8/20 Morning Report with @CPSolvers

Case Presenter: Marco Malaga *(@marcomalaga97)* ***Case Discussants:*** *Andrew Levy and Emily Russel*

CC: Involuntary movement: Myoclonus

HPI: 60 M p/w involuntary movement admitted for upper GI bleeding. Not rhythmic jerk movements spontaneous but can be elicited by touch. A month ago and had become more common. 3 months, started with motor disturbances gait disturbances on left side
ROS: Back and lower limb pain

PMH:
Dyslipidemia
HTA, peptic ulcer, migraine

Meds:
Aspirin, esomeprazol, Tylenol, duloxetine, rosuvastatin

Fam Hx:
Non contributory for epilepsia, dementia

Soc Hx: Wife and runs cat rescue. Retired car manufacturer

Health-Related Behaviors:
Smoker of 1.5 pack for 40 years. Currently smokes 3 joints a day

Allergies: None

Vitals: **T**: 37.1 **HR**: **BP**: 137/84 **RR**: **16** **SpO_2**:
Exam:
Gen, **HEENT**, **CV**, **Pulm**, **Abd, Extremities/Skin:** N
Neuro: Alert, CN II-XII: normal. Generalized muscle weakness, predominance of left side, increased tone. Bilateral positive Hoffman's sign and negative plantar reflex. Hyperreflexive all around specially in upper limbs. Jerk like non rhythmic spontaneous movement mostly focal in both arm especially in left. Abnormal light touch sensation and pinprick in left side. Abnormal coordination. Gait was not assessed

Notable Labs & Imaging:
Hematology:
Hgb: 8.6, the rest was normal

Chemistry:
Metabolic and electrolyte panel: normal
B12: 282 (Low normal), Folate: 2.5 (normal)

Imaging:
Head CT: No evidence of abnormality
Endoscopy: Bleeding peptic ulcer
Spinal: C3-5 narrowing of central canal C4-5 myelasia multilevel arthropathy with foramen
Final Dx: Cervical spondylotic myelopathy

Problem Representation: 60 M p/w involuntary movement admitted for upper GI bleeding. Generalized muscle weakness, predominance of left side, increased tone. Hyperreflexive specially in upper limbs. Final Dx: Cervical spondylotic myelopathy

Teaching Points (Sukriti):
How do we investigate a Sx of involuntary movement?
1. Anatomy: DDx - Localisation x Time
Localising the involuntary movement - Motor cortex, brainstem, spinal cord, peripheral N, NMJ, muscle
2. Pathology: What is this movement? " A picture is worth a thousand words"
a. **Seizures** (jerky rhythmic, stereotypic character)
b. **Movement disorder:** clonus (hyperreflexia) vs myoclonus (jerk across a joint, can be stimulated-- startle myoclonus)
c. **Fasciculations** (muscle twitch)
3. Etiology: Neurological -- Primary (Ex, Juvenile myoclonus) or structural, Medication (Ex, opiates, SSRI - myoclonus), metabolic (chorea gravidarum)
Context is helpful! -- PMH of metabolic conditions can be indicative of stroke (clue: negative Sx; exception: subthalamic stroke), Meds (SSRI: myoclonus), genetic component (epilepsy, parkinsons)
What clues do we look for on the physical exam?
Step 1: Look for distribution of involuntary movement and reflexes
= Focal myoclonus (think structural, exception Parkinson's)+ B/L UMN signs (Hoffman's sign)
Step 2: Layer other Sx and signs to localise
= Spinal Cord -- cervical spine (ask for bowel and bladder incontinence, vibration and proprioception)
Step 3: Go back to DDx = Localisation x time; tempo can help clue us into the natural history of a disease
What are our hypotheses so far? Applying base rate: cervical myelopathy> tumour metastasis to the cord> inflammatory> infection (neurocysticercosis)