



7/14/26 Morning Report with @CPSolvers



"One life, so many dreams" Case Presenter: Meghna Badami (@) Case Discussants: Ravi (@rav7ks) & Kirtan (@KirtanPatolia)
<https://clinicalproblemsolving.com/present-a-case/>

Scribing (Sneha and Lera)

CC: 15F with **inability to grasp objects with R hand** for **1 year**.

HPI: Presenting to outpatient clinic. Initially unable to pick up / hold objects with R hand. Over 1 year **weakness** involved R arm and **all 4 limbs symmetrically** -> recent difficulty speaking [understanding is fine] + **memory loss**, decline in school performance.

ROS: Irregular menstrual cycle [q 2-4 mo]. **Urination up to 20 times / day** + polydipsia. Otherwise negative - no headache, weight loss, sensory Sx.

PMH: —

Fam Hx: —

Meds: —

Social Hx: —

Health-Related Behaviors: none.
Not sexually active.

Vitals: T: 36.8 HR: 80 BP: 110/70 RR: 16 Sat: 98 BMI: 21

Exam: Gen: well, not in distress

HEENT: anicteric, no LAD, otherwise nl too **MSK:** no rashes

CV: regular rate and rhythm **Pulm:** CTAB **Abd:** normal

Neuro: awake, alert and oriented x 3.

CN: slow **spastic dysarthria**. Rest of CNs nl.

Reflexes: brisk throughout. **Bl** ankle clonus. **Plantar** extensor B/L

Motor: increased tone, muscle bulk nl. **Strength** reduced in all extremities [bl UE %, bl LE %]. **Gait** and coordination not assessed.

Mental status: severe **retrograde** and **short term memory deficits**.

Notable Labs & Imaging:

Hematology: WBC: 7.8 Hgb: 12.2 Plt:354 MCV: 90.3

Chemistry:

Na: 158 **K:** 4.8 **Cl:** 103 **Cr:** 0.76 **BUN:** 7 **Glucose:** 94 **Ca:** 9.5 **Mg:** 2

AST: 14 **ALT:** 11 **Alk-P:** 52 **Bili:** 0.5 **Albumin:** 4.5 **Total Protein:** 7.7

ESR: 8 **CRP:** 0.4 **LDH:** 313

TSH: 1.53, **LH** < 0.01 and **FSH** < 0.5

AFP: 1.83 **Beta hcg:** 10.7 **CA-125:** 14.6

Imaging:

MRI: Large lesion in the left cerebral hemisphere

Pituitary stalk thickening

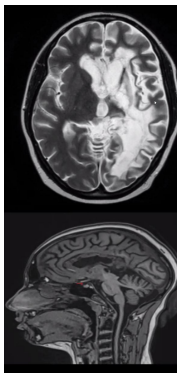
CSF: atypical cells, elevated proteins and oligoclonal bands

AFP nl, b-hcg nl

Biopsy: mild lymphocyte infiltrate

OCT3, SALL4 positive. GFAP and p53 neg.

Dx: Primary intracranial germinoma



Problem Representation: 15yo with no PMH presenting with worsening limb weakness, difficulty speaking, dysmenorrhea, memory loss and spasticity. Labs revealed hypernatremia and low gonadotropins suggesting diffuse pituitary involvement. Biopsy and genetic markers confirmed a germ cell tumor.

Teaching Points (Krishi)

- Adult medicine derives from pediatric literature!
 - Consider hereditary disease in peds, growth charts
 - In categorizing disease, pinpoint tempo, quality, extent of illness
- TOUCH=lower order** (pinprick, light touch, vibration, proprioception) + **higher order functions** (graphesthesia and stereognosis). *Discriminate between:*
 - True motor weakness (lesions of UMN, LMN, NMJ)
 - Pseudo weakness
 - Non motor (ligament, tendon, cartilage)
- Neurovascular exam:** look, feel, move, neuro exam. Spinal cord? Nerve plexus? Peripheral nerve? Entrapment? Radiculopathy?
 - Brain MRI could be insufficient, instead use fundoscopy because eyes and ears are portals into brain!
- Polyuria** (check sugar and lytes!)
 - Osmotic load (DM)
 - ADH (DI) at level of brain or nephron
- Difficulty speaking**
 - Pharynx/larynx and thus mechanical?
 - Higher order: cerebellar (scanning speech), Broca, Wernicke, white matter/leukoencephalopathy considerations
- Mechanism of multisystemic dysregulation** can be attributed to **endocrinopathies (HPA axis)** e.g. characterize dysmenorrhea as primary or secondary. Consider vitamins, lytes, imaging.
- Memory** = supratentorial | **Coordination** = infratentorial | **RAS** and **brainstems** travel together
 - Imaging shows structural disease = mass lesion
 - Imaging does not show structural disease = molecular
- UMN vs LMN** = if lesion is higher up we lose inhibitory effect; lower lesion can still be inhibited by upper
 - The spasticity here points towards central lesion
- Diabetes insipidus** (posterior) and decrease in gonadotropin hormones (anterior) = pituitary
 - Pituitary disease usually selectively affect anterior or posterior but seldom both (this case)
 - Also rare effects like tumors, demyelinating disorders, Kallman, histiocytosis, ovarioleukoencephalopathies
- Sequence of hormones affected in pathology: **GH** → **LH/FSH** → **TSH** → **ACTH** bc of vascular distribution
- How to read MRI: gyri, edema, ventricles, hyperintensities, masses, symmetric, anatomy, atrophy
- Brain masses: tumors (glial, metastatic, melanoma, germ cell), lymphomas (sarcoma, histiocytosis), vascular (AVM), demyelination (tumefactive demyelination e.g. in MS, NMO, MOGAD)
- Germ cell tumors associated with OCT3 and SALL. Germ cells also epidemiologically supported
 - Follow midline pathway