7/16/24 Morning Report with @CPSolvers

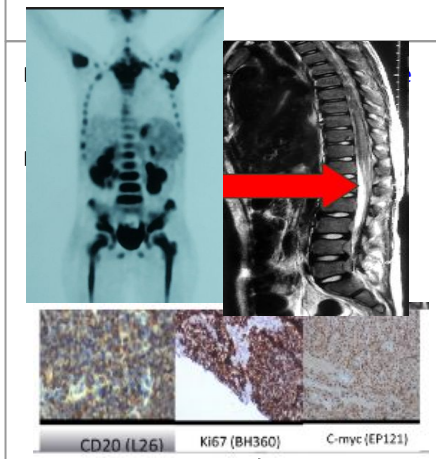
"One life, so many dreams" ***Case Presenter****:Amit Shrestha(@theduskdoc)* ***Case Discussants****: Alec(@ABRezMed) Austin(@RezidentMD)*

CC: Difficulty walking and back pain

HPI: 12-years-old male with no comorbidities presents to ER:

- Lower back pain for 14 days
  Difficulty to ambulate for 7
- Manage with massage and pain meds.
- 3 days later, Severe back Pain 8/10 again
- Bedridden, unable to ambulate
- Dysphagia, poor oral intake
- Slurred speech
- Constipation, normal bladder habits

Negative history: No URI or GI symptoms, headache, behavioral changes, loss of consciousness, abnormal movements, vision issues, facial deviation, or limb weakness. No rashes, joint pain/swelling, bleeding, head trauma, or animal bites. No fever



Vitals:WNL
Exam:
HEENT: Pale palpebral conjunctiva on bilateral eye, no lymphadenopathy
CV RESP GI/GU :WNL
Neurological assessment:
Cranial nerve 9: Dysphagia, dysarthria, nasal intonation.
Motor Exam (Bilateral lower limbs): Normal bulk, decreased tone, 0/5 power, absent DTR, equivocal plantar reflexes, no sensory deficit , normal anal tone.

Investigations: Stool samples for Acute Flaccid Paralysis surveillance; Hb 10 gm/dl; normal TLC/PBS. CSF: Protein 190 mg/dl, albuminocytologic dissociation, negative cytology.->GBS
Treatment: IVIg 2gm/kg over 5 days; Acetaminophen/Ketorolac.
Response: First IVIg dose led to dramatic improvement in knee reflexes, lower limb power (⅘), swallowing, and speech. Initially improved to 5/5 power. By day 7, now deteriorating.
On the 7th day:
Severe back pain managed with fentanyl. Bilateral lower limb power/reflexes: 0. Bilateral upper limb weakness, power ⅛. Pale palpebral conjunctiva, Hb 6gm/dl -> Blood transfusion Urinary incontinence. **Treatment**: Started "Treatment Fluctuant Variant of GBS", IVIg restarted at 2gm/kg over 5 days. PBS wnl
On the 8-9th day:
Left-sided jaw pain, loosening left lower 2nd molar tooth.
Palpable, tender right submandibular swelling (1x0.5 cm to 2x1 cm in 24 hours).

Biopsy findings: Medium-sized atypical cells in diffuse patterns, pleomorphism suggesting Burkitt Lymphoma. Positive immunohistochemistry for c-MYC, CD3, CD10, CD20, CD30, CD34, BCL6, MUM1, SOX11, BCL2, Tdt, and Ki-67 (90%) Elevated serum IgG anti-EBV titers,
MRI Brain and spine: T2 high signal in cervical and dorsal epidural space, mild heterogeneous enhancement. Infective/inflammatory or metastatic disease suspected.
PET scan: Metabolically active disease in meninges, cervical, axillary nodes, internal mammary nodes, liver, spleen, kidneys, bone marrow, paranasal sinus soft tissue. Lymphoproliferative disease suspected.
Bone Marrow aspiration: Consistent with lymphoma.
CSFLP: cytology normal
B NHL Protocol with Prephage-COP Cyclophosphamide (C)Vincristine (Oncovin, O)Prednisone (P))
Diagnosis : **Burkitt Lymphoma**

Problem Representation:

A 12-year-old male presented with low back pain and difficulty walking for two weeks. He was initially diagnosed with GBS and treated with IVIG, which led to improvement. However, a week later, he developed severe back pain, jaw pain, and swelling. MRI, PET scan, and biopsy confirmed c-MYC positivity and a high Ki-67 index, indicating Burkitt Lymphoma.

Teaching Points (Ibrahim)
- **Young vs. adults**: urgency can change based on CC (**chest pain vs. back pain**)
- **Low extremity weakness**: spinal cord, peripheral nerves, concurrent lesions
- **Constipation**: spinal cord pathology
- Back pain in child + progressive neuro decline → inflammation (e.g. meningeal irritation) (I-MADE)
- **Pale conjunctiva** = anemia vs non-specific sign → inquire for sx of anemia
- **Lymphadenopathy** in young → leukemia, lymphoma, infections
- Absent DTR → peripheral nerve pathology, if both limbs/bilateral → diffuse, decreased tone → lowers pre-test prob of spinal cord involvement. **In constellation of these, think AIDP/GBS, botulism.**
- Normal sensation → NMJ, muscular (look at muscle bulk), anterior horn cells.
- **Next steps: neuroimaging (MRI), LP** (albuminocytologic dissociation).
- Response to treatment followed by failure → sub-treatment, treatment failure
- **Rapid drop in hemoglobin w/o obvious external bleed** → bleeding (internal), hemolysis (production [e.g. lead poisoning]/loss/sequestration) → assess for cytopenias (leukemias/lymphomas)/hemolysis
- **Lymphadenopathy** in absence of fever → paraneoplastic related to underlying lymphoma (Burkitt's, DLBCL, mantle cell lymphoma, Hodgkins), theory supported by anemia. Send for LDH, uric acid, flow cytometry.
- **Back pain** → TISSUE IS THE ISSUE.
- **Rapid presentation in the absence of an inflammatory signature** → autoimmune, malignancy
- **Anemia in the context of malignancy** → DIC (look for schistocytes), AIHA