

4/26/22 Neuro Morning Report with @CPSolvers



Case Presenter: Rafael Medina (@Rafameed) Case Discussants: Yazmin Heredia Allegretti (@minheredia), Victor Mawuli Morhe (@mvmorhe)

CC: severe back pain

- 73 y.o. M presents to the ED with gradually increasing severe back pain since 2 weeks
- Worse in recumbent position and at night
- Progressively worse in the last 12h, now with difficulty walking and urinating

Vitals: T: 37 HR: 104 BP: 122/83 RR: SpO,: wnl on RA

Exam: appears uncomfortable Systemic: no abnormalities

Neuro

- Mental Status: alert and oriented x3
- Cranial Nerves: wnl
 Motor: UE 5/5, LE ¾
- Reflexes: UE wnl, LE 3+ bilaterally, upgoing toes bilaterally
- Sensory: decreased sensation up to the umbilicus
- Cerebellar: wnl
- Other: point tenderness over T10 and 11, decreased rectal tone

| PMH: | Fam Hx: |
|----------|---------|
| Advanced | |
| prostate | |
| cancer | Soc Hx: |

cancer treated with radiation tx;

DM type 2

Meds: Metformin Health-Related Behaviors:

Allergies:

Bladder catheter with 800 ml of clear urine

Imaging:

MRI spine: thoracic spinal metastasis

Final Dx: Spinal cord compression due to spinal metastasis

Tx: i.v. GCC to decrease local edema and neurosurgery consulted to decompress **Problem Representation**: 73yoM with PMH of advanced prostate cancer and radiation therapy p/w severe back pain for 2 weeks worsened by recumbent position and at night progressing with urinary incontinence.

Teaching Points (Debora): #EndNeurophobia

What is in and around? Neck, articulation, vertebrals, muscle, articulations, discs, synovial, spinal cord, conus medullaris, epidural space, subarachnoid space (e.g.meningitis), CSF.

Back pain → causes: Articulation, muscle, nerves, multiple myeloma, articulation, malignancy, metastasis, infections (e.g. TB), spondylolisthesis, GBS, referred pain to the back.

Asking: age, physical, how started, tempo, paralysis, loss of sensations, diffuse pain.

Red flags: Urinary incontinence, history of malignancy, B symptoms, chronic infections, wake at night, associated with movement, some positions, at night.

Different diagnosis: Acute spinal cord compression syndrome can cause the difficulty of walking, prostate cancer can cause hydronephrosis, low calcium, metastasis, osteomyelitis and ankylosing spondylitis.

Myelopathy: can be delayed and progressive to the spine. Radiation can affect every area.

Neurology complications in patients with systemic cancer → 3 things X axis: Malignancy, chemotherapy, radiation + 4 things Y axis: Direction tissue damage, (Mechanisms: Direct infiltration and adjacent tissues leading to compression), vessels and coagulation (e.g. bleeds, stroke, vasculitis, vasculopathy), nutrition (e.g. vitamin disord because of the side effects of the chemotherapy, cachexia, weight loss), immunity (e.g. infections, cytopenias, paraneoplastic syndrome).

UMN → everything goes UP: Hyperreflexia, positive babinski, increase tone, weakness in a pyramidal. Pathology localization brain and spinal cord.

An insult to UMN (brain, spinal cord) does not immediately present with hyperreflexia

→ First hyporeflexia, hyperreflexia takes takes time to develop!

Epidural abscesses can present with no signs/symptoms of inflammation due to encapsulation and the isolated local process.