

Neoplastic Meningitis:

A Clear Indication For
Intensive Hospice and Palliative Care

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Introduction

- My understanding has always been...
 - └ A rare but ominous development in cancer patients.
- But, 2 recent admissions to KBR and another to home care...
- Rare? What's up?
- The KBR admissions were young women with Breast CA
 - Both very challenging for us
 - Both with very complex symptom management
 - Both with profound psychosocial & spiritual implications

Objectives

- Review definition, epidemiology, pathogenesis and diagnosis
- Understand prognostic variables
- Explore treatment options
- Anticipate the need for intensive symptom management

1st Case at KBR

- CH – 42 y/o WF presented to FMC with headache and neck rigidity, found leptomeningeal metastases (LM) as first site of recurrence < 1 year after original diagnosis
- Long and difficult course at FMC
- Transferred to KBR
 - Long and difficult course at KBR
 - Celebrated 43rd birthday with us
- Relentless neurologic progression
 - Pain, numbness, paralysis
- 2 young children
- Ultimately, incrementally required sedation for comfort

2nd Case at KBR

- JJ - 32 y/o AAF presented to FMC with HA, N/V and abdominal pain. Found to have liver metastases and in the hospital quickly developed cervical neck pain and persistent N/V and LM diagnosed.
- Long and difficult course at FMC
- Transferred to KBR
 - Long and difficult course at KBR
 - Celebrated 33rd birthday with us
- Relentless neurologic progression
 - Pain, HA, N/V, numbness, paralysis, blindness
- 2 young children
- Ultimately, incrementally, required sedation for comfort

Terminology

● Neoplastic meningitis

- the development of meningitis due to the infiltration of the subarachnoid space with cancer cells. Any kind of neoplasia, including leukemia and lymphoma

● Carcinomatous meningitis

- Due to a carcinoma (solid tumors), doesn't include leukemia and lymphoma

● Leptomeningeal metastases (LM)

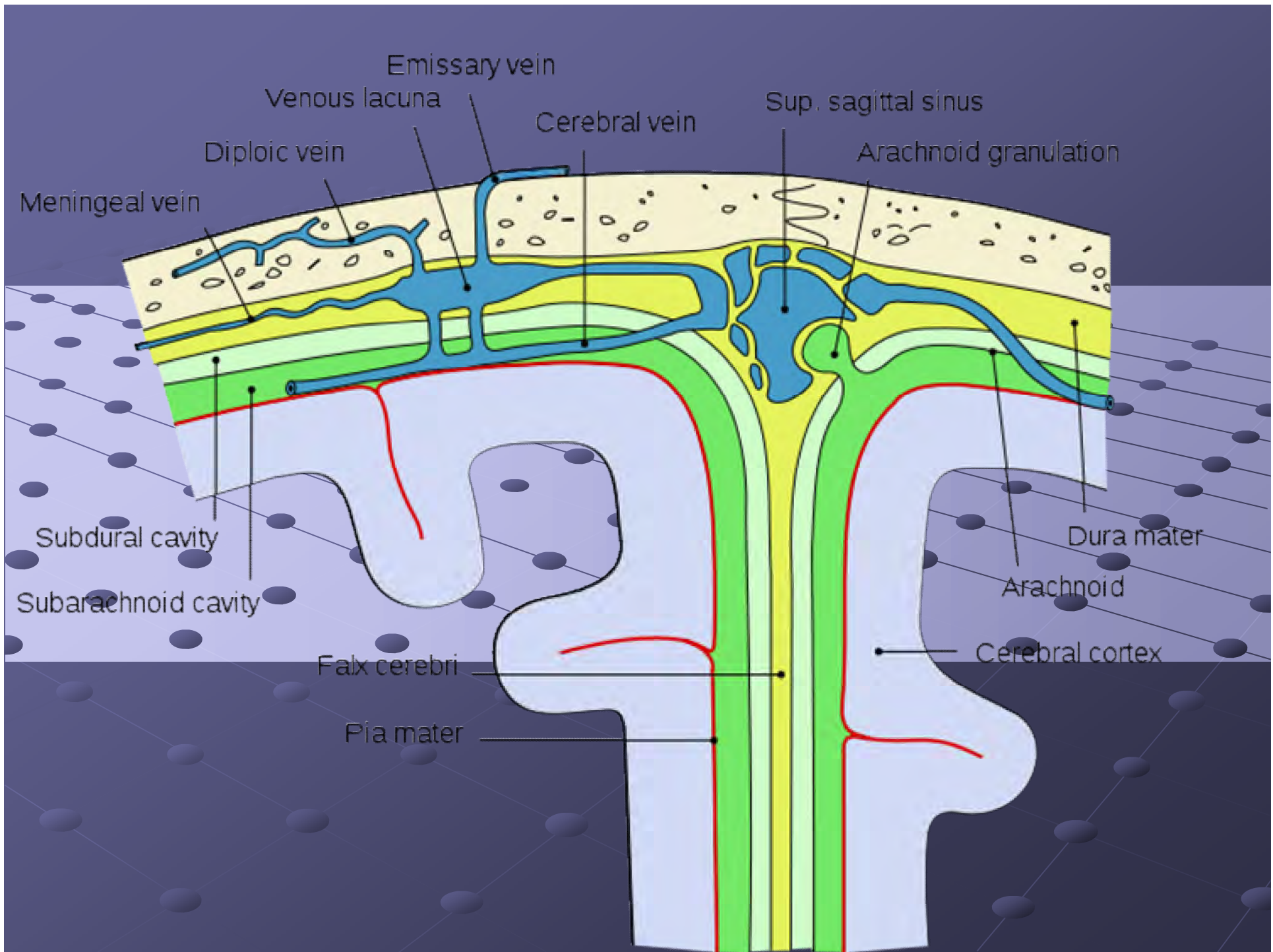
- Leptomeninges – arachnoid membrane and pia mater
- **Now seems to be the preferred term**

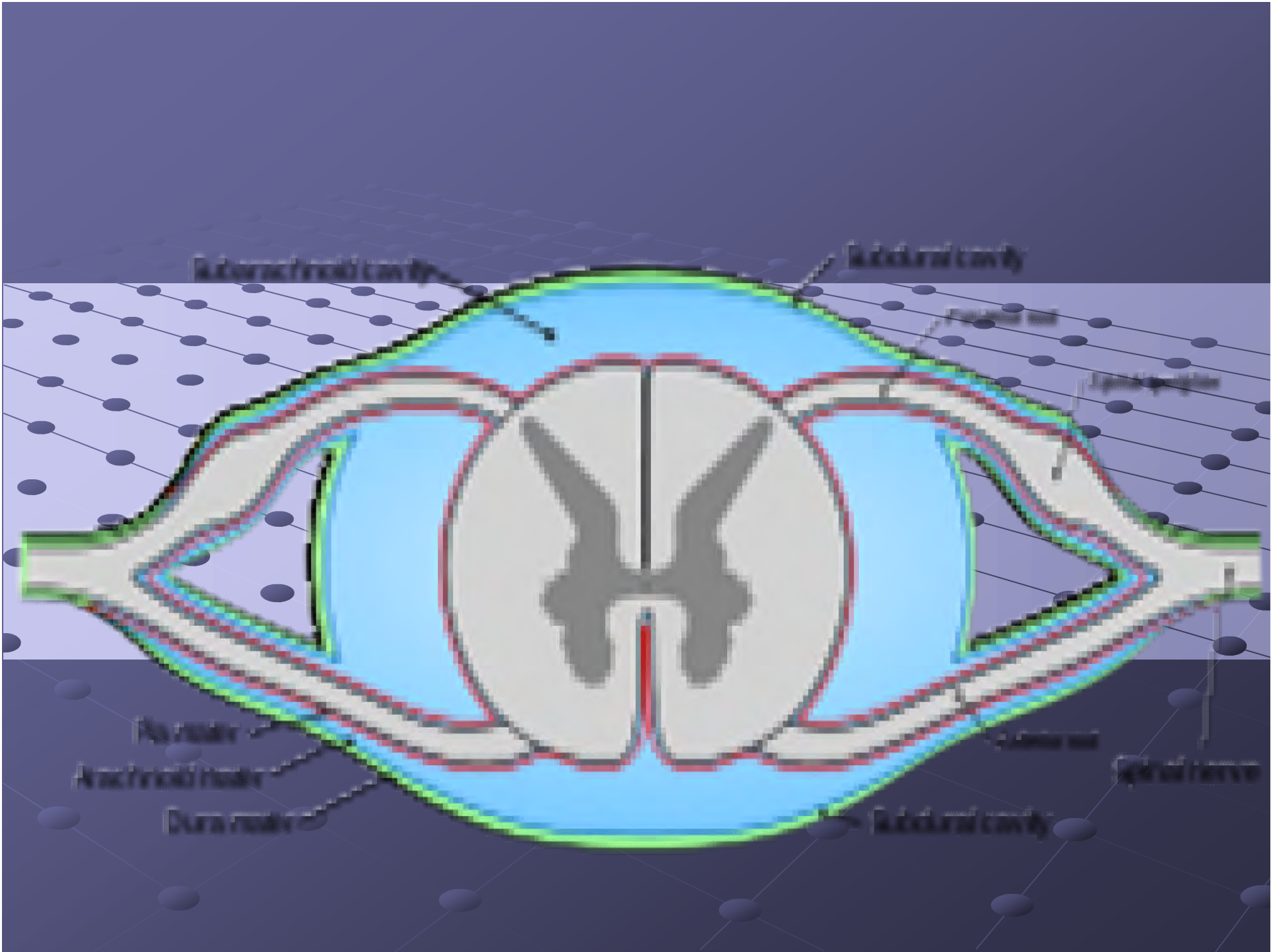
● Other terminology...

● Leptomeningeal carcinomatosis, meningeal carcinomatosis

Pathogenesis

- Hematogenous dissemination to the meninges or
- Direct extension from para-meningeal or bony contiguous structures (bone, skull or vertebrae, regional lymph nodes or soft tissues) or
- Retrograde growth along spinal and/or cranial nerve roots
- Once in...
- Carried by bulk flow of CSF to basal cisterns and cauda equina where they settle 2^o gravity and slow flow
 - Which is why cranial and spinal nerve symptoms are so common





Incidence

- Seems to be happening more often!
 - Greater awareness of the condition by oncologists
 - Higher index of suspicion & look for it
 - Improved diagnostic methods
 - Longer survival among patients with systemic malignancies...more time to develop
 - Larger molecule chemotherapies (that don't cross Blood Brain Barrier)
- Occurs in ~ 5% of all cancers
 - 4 to 8% solid tumors; 5 to 15% leukemia and lymphomas (1000KBR 40%CA 5% LM = 50 pts/year?)