## INTRODUCTION

- Primary diffuse leptomeningeal gliomatosis (PDLG) is a rare central nervous system tumor characterized by infiltration of the leptomeninges by malignant glial cells.
- About 50 cases were reported in the last 3 decades
- Often a fatal disease with a poor prognosis and survival rate of a few months.
- Diagnosis may only be confirmed with biopsy, and is often made postmortem

### **CASE DESCRIPTION**

- 48 y/o male with a past medical history significant for sarcoidosis and on prednisone secondary to papilledema presented with headache, intractable nausea/emesis, intermittent blurred vision and a 20 lbs weight loss over the preceding 3 weeks.
- Initial symptoms of headache and intermittent emesis began 6 months prior.
- Three weeks prior patient had an abnormal MRI brain involving the linear enhancement of the left frontotemporal region and leptomeningeal enhancement of cervical and upper thoracic spinal cord.
- Presumed diagnosis of Neurosarcoidosis. Other differentials include: fungal, viral, and tuberculous meningitis, leptomeningeal carciomatosis, and lymphoma.
- CBC, CMP, Magnesium, vitamin B1, B12, Zinc, Vitamin D, Type and screen, ACE level, CT head w/o contrast, and a neurology consult were obtained

# **UNUSUAL PRESENTATION OF HEADACHE MIMICKING NEUROSARCOIDOSIS;** PRIMARY DIFFUSE LEPTOMENINGEAL GLIOMATOSIS

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MRI showing leptomeningeal enhancement C7 and T2 in a patient with Neurosarcoidosis



Leptomeningeal enhancement at the surface of the brain stem, right temporal region, and thoracic spinal cord in a patient with PDFG

- CT Head was unremarkable. Initial labs were unrevealing.
- Physical exam revealed a 6<sup>th</sup> nerve palsy.
- Patient was transferred to tertiary center under the care of neurosurgery due to concern for intracranial hypertension and need for CNS biopsy.
- VP shunt placed due to hydrocephalus and this produced a good response
- CSF results from lumbar puncture were negative for infectious etiology
- Updated MRI, 4 weeks from prior, of the cervical/thoracic spine was significant for T5-T6 mass Biopsy of lesion revealed diffuse leptomeningeal glioblastoma
- Underwent craniospinal proton radiation for 2 months
- Patient is now pursing comfort measures due to continued functional decline

PDLG may present similar to neurosarcoidosis, necessitating consideration in the differential of patients with new onset neurological symptoms suggestive of increased intracranial pressure or meningitis with leptomeningeal enhancement on MRI CNS.

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# LIFE CHANGING MEDICINE

### RESULTS

# CONCLUSION

### REERENCES