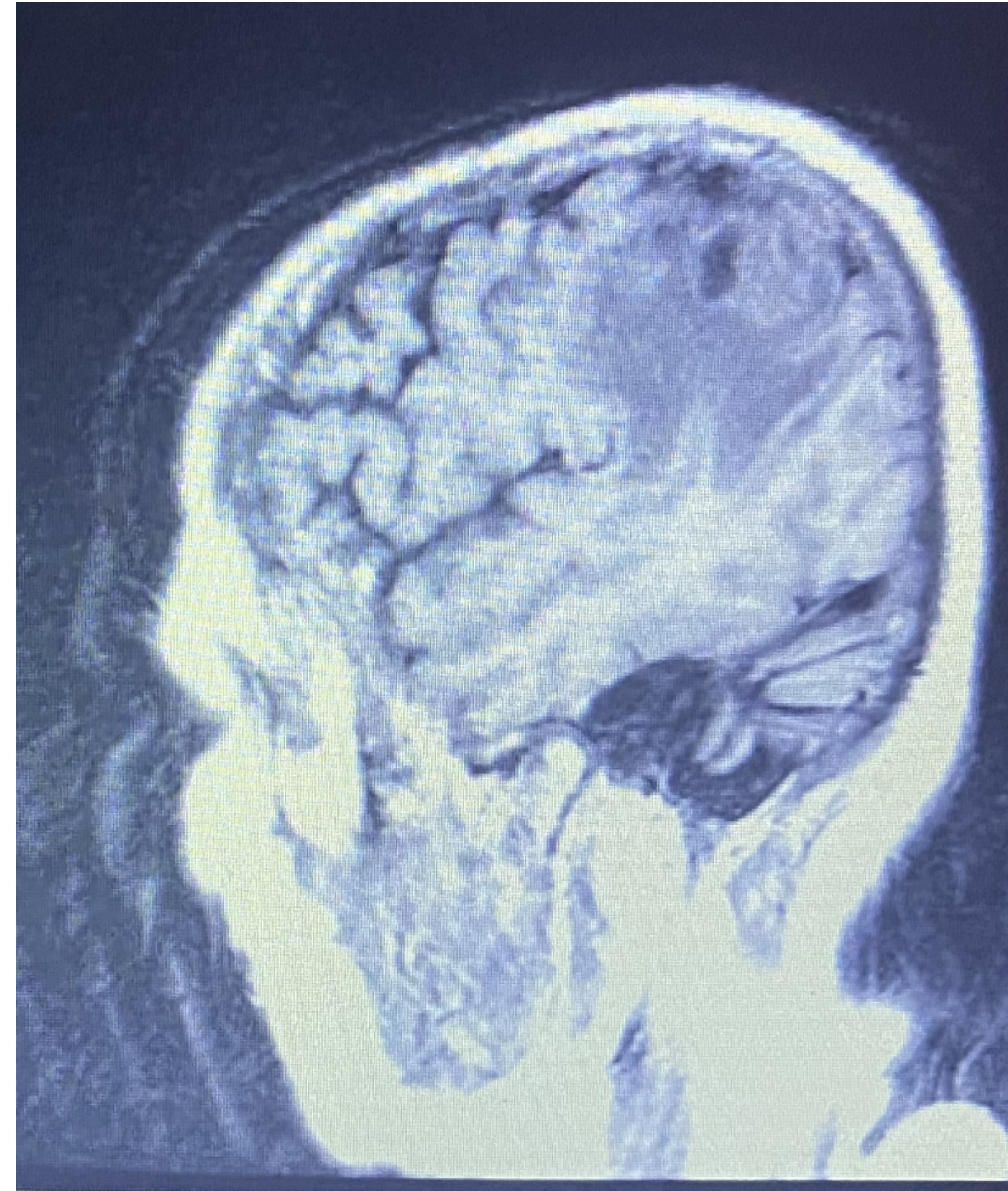


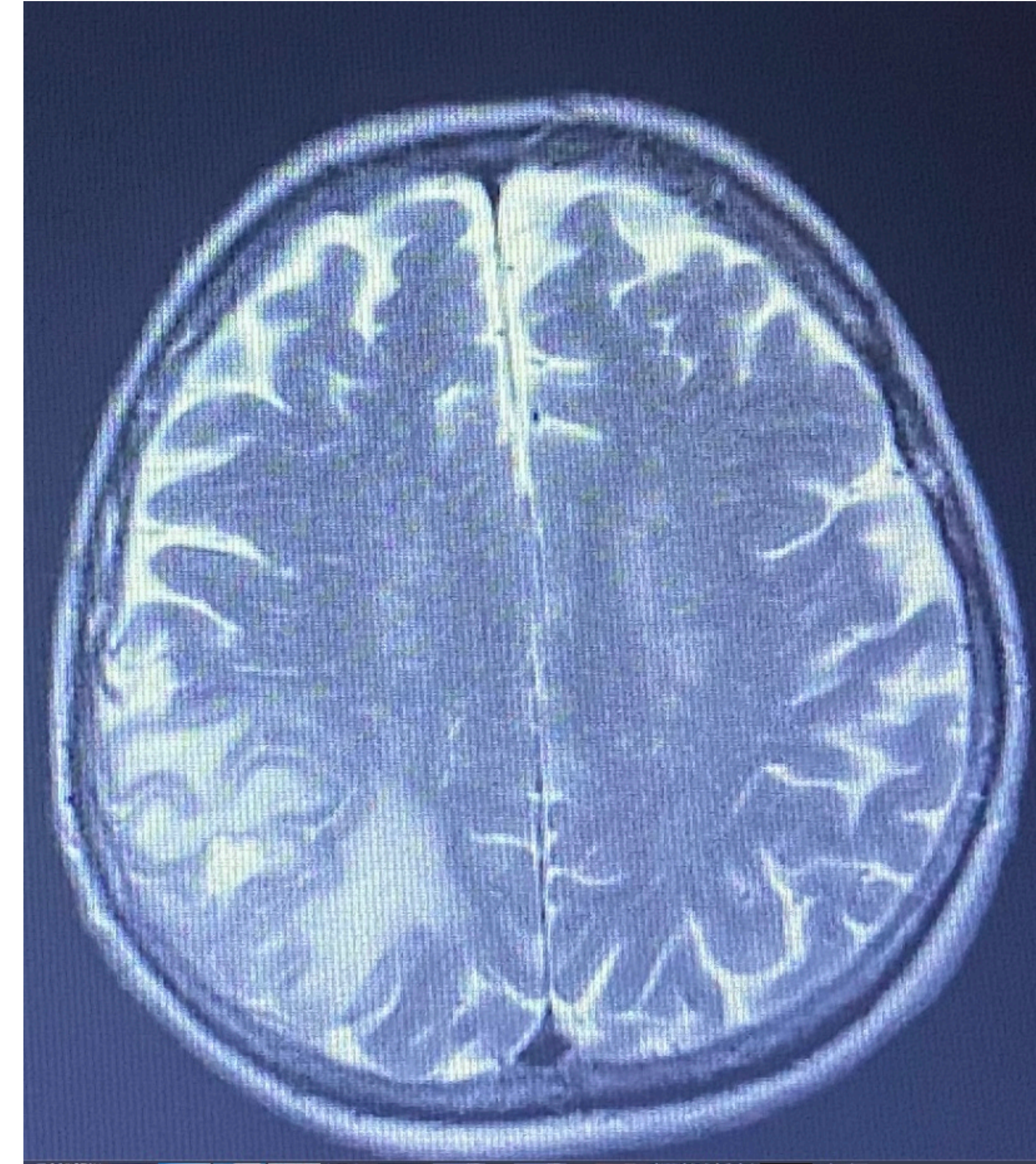
## CASE DESCRIPTION

A 73-year-old female with history of pleural mesothelioma diagnosed in 2019 and treated with radiation and chemotherapy presented with sudden left arm weakness and right-sided headache. In the ED, she was observed with facial twitching and involuntary movements of the left arm. Brain MRI showed an enhancing mass in the right parietal lobe with vasogenic edema, suspicious for metastatic disease or a primary glial neoplasm. EEG showed lateralized periodic discharges in the right hemisphere, consistent with epileptogenic activity. She was started on Decadron, Keppra, and Vimpat. The patient underwent right parietal craniotomy and resection of the mass, which was confirmed as metastatic mesothelioma on the final pathology report. She was stabilized and discharged to acute inpatient rehabilitation where she was noted to improve her functional mobility with comprehensive physical and occupational therapy.

## IMAGING STUDIES



**MRI Brain T1-FLAIR Sagittal View**



**MRI Brain T2 Axial View**

## DISCUSSION

Mesothelioma is a highly invasive tumor that usually affects the lung pleura. Common sites of metastasis include the liver, kidney, and adrenal gland, but post-mortem studies have also demonstrated spread to the CNS, which is significantly rare. According to the literature, the annual incidence of mesothelioma in the United States is approximately 3000 cases, and only 3-5% result in metastasis to the brain. Although rare, it is important to recognize the metastatic potential of mesothelioma, especially as survival rates improve with advancements in cancer treatment and more opportunities for metastasis arise.

## CONCLUSION

This case represents a rare instance of brain metastasis secondary to pleural mesothelioma. Our patient's progress in acute rehabilitation suggests that care under the guidance of a physiatrist can play a key role in the treatment of malignant mesothelioma and other cancers with metastatic potential to the brain, irrespective of how rare brain metastasis may be.

## REFERENCES

- El Molla M, Gragnaniello C, Al-Khawaja D, Chiribao-Negri C, Eftekhar B. Cerebral metastasis from malignant pleural mesothelioma. *J Surg Case Rep*. 2013 Sep 26;2013(9):rjt087. doi: 10.1093/jscr/rjt087.
- Wronski M, Burt M. Cerebral metastases in pleural mesothelioma: case report and review of the literature. *J Neurooncol*. 1993;17:21-6. doi:10.1007/BF01054270.
- Malignant pleural mesothelioma. Raja S, Murthy SC, Mason DP. *Curr Oncol Rep*. 2011;13:259-264.