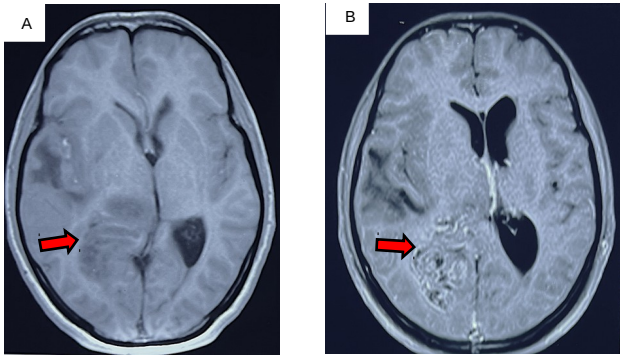
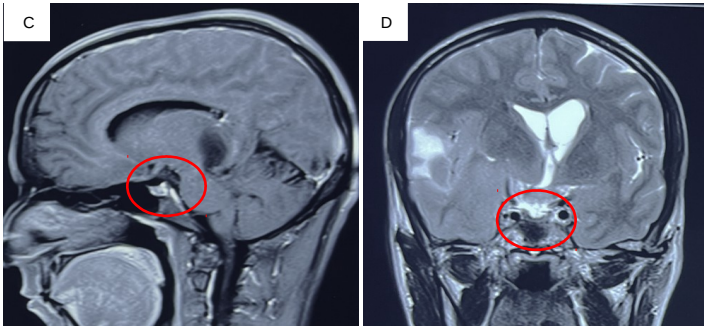


PRE-OPERATIVE SCAN

A 41-year-old-male presented with persistent headache and altered sensorium for 2 months



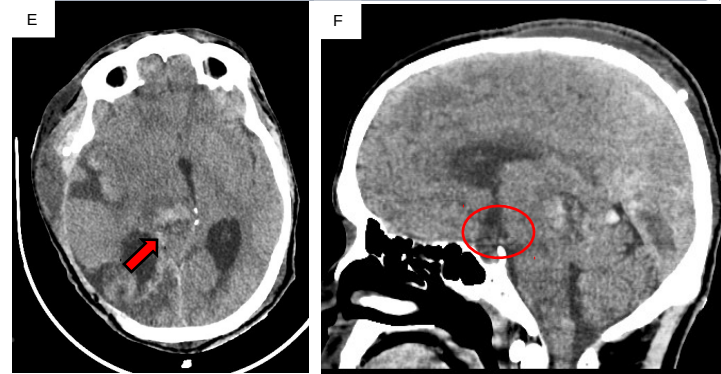
A T1W heterogeneously hypointense (A), heterogeneously enhancing (B) mass lesion is seen involving right parieto-occipital region extending to right thalamic region (red arrow). Findings are consistent with high-grade glioma.



Sellar and suprasellar structures appear normal with no evidence of any mass lesion (red circle). Note made of mass effect in right thalamic region.

POST-OPERATIVE SCAN

Tumor debulking was performed and histopathological evaluation revealed WHO GRADE 4 GLIOMA.



Immediate post-operative NCCT shows post-operative changes with residual mass lesion in right thalamic region (red arrow) with no sellar/suprasellar mass (red circle).

DISCUSSION

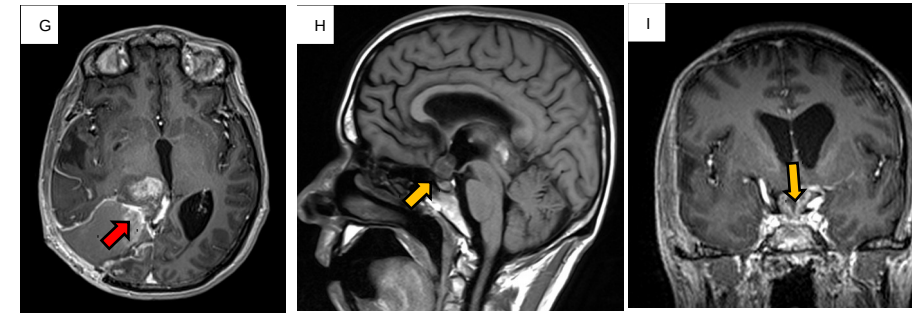
Based on the finding of a newly identified rapidly growing lesion having similar morphological and perfusion parameters to the original lesion, a diagnosis of optic chiasm metastasis from glioma was considered.

This case highlights the importance of differentiating optic chiasm metastases from other more common suprasellar masses such as craniopharyngioma, germinoma and optic nerve gliomas.

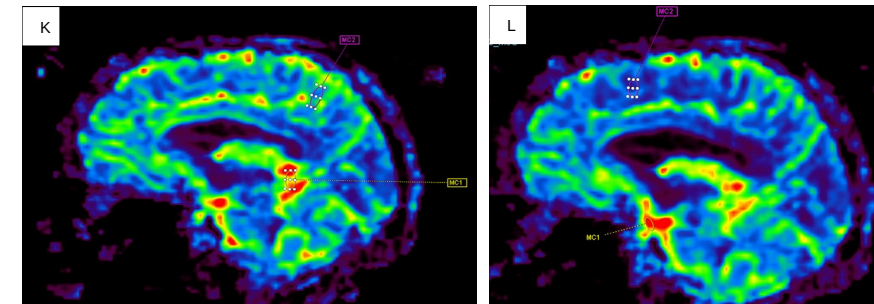
It also underscores the utility of perfusion MRI in distinguishing various brain malignancies.

2 WEEKS POST SURGERY SCAN

2 weeks after surgery the patient complained of new onset headaches and gradual bilateral painless peripheral vision loss



MRI 4 weeks post surgery shows post operative changes with residual right thalamic region (G) (red arrow). A new heterogeneously enhancing lesion having similar signal characteristics is noted in the suprasellar region with the optic chiasm not identified separately (yellow arrow). The pituitary gland is seen separate from the lesion and appears compressed.



Cerebral blood volume maps of the thalamic (K) and chiasmatic (L) lesions yielded similar rCBV values of 3.6 and 4 respectively, consistent with high-grade gliomas.