Primary Suprasellar Opthalmochiasma Tuberculoma Mimicking Optic Glioma in an Immunocompetent Host Presenting Progressive Bilateral Blindness: Case Report and Literature Review

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Introduction

- Primary intracranial tuberculomas in immunocompetent hosts is an extremely rare.
- Suprasellar opthalmochiasma as the primary site is uncommon, and easily misdiagnosed as various suprasellar masses that represented a real diagnostic challenge.

Case Presentation

A 22-year-old male with progressive bilateral vision loss to no light perception (NLP) in 3 months. Hormonal disturbance was noted. No radiological/clinical findings leading to suspicion of TB lesion. An optic glioma was considered to be the likely preoperative diagnosis.

Microsurgical exploration with a right side pterional-transylvian approach mild internal decompression was performed. Histopatological studies supported the infective granulomas (tuberculoma)

The improvement in vision in both eyes was reported. The visual acuity of the right eye was 1/300 and the left eye was 1/~. Neuroinfection division of our center decided to initiate FDC for intracranial tuberculosis.

Disscusion

- Our patient had a tuberculoma with no known primary site.
- **Only two papers** in our literature search reported infections involving the optic chiasm and hypothalamus in adults.
- Bommakanti et al[1] looked at 24 patients initially diagnosed with chiasmatic-hypothalamic gliomas on MRI, and 4 subsequently were found to have tuberculomas on final pathology. And 1 of 4 patients in case series by Raelson et al[2] was also found to have a mycobacterial infection that mimicked a mass.

Reference :
1. Panigrahi, M., Yarlagadda, R., Sundaram, C., Uppin, M., Purohit, A., & Bommakanti, K. (2010). **Optic chiasmatic-hypothalamic gliomas: Is tissue diagnosis essential? Neurology India, 58(6), 833.** doi:10.4103/0028-3886.73738
2. Raelson, C., & Chiang, G. (2014). **Chiasmatic-Hypothalamic Masses in Adults: A Case Series and Review of the Literature. Journal of Neuroimaging, 25(3), 361–364.** doi:10.1111/jon.12132

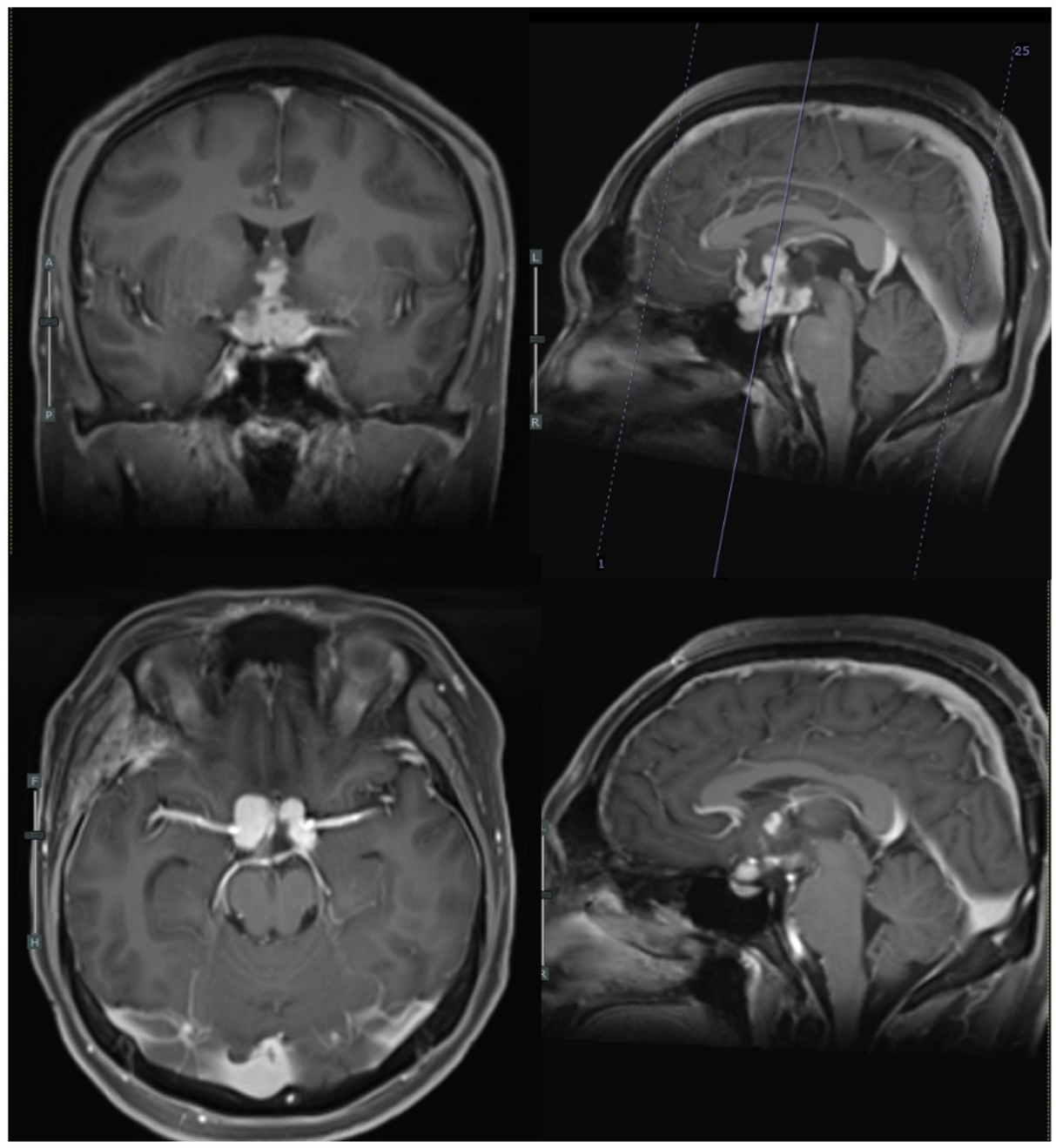

Fig 1 and 2. A brain MRI revealed a suprasellar solid-cystic lesion, which enhanced the contrast in the solid, sharply delimited by lobulated surface, measuring 3.0×3.6×3.0 cm. Fig 3 and 4 showed post operative M3RI evaluation

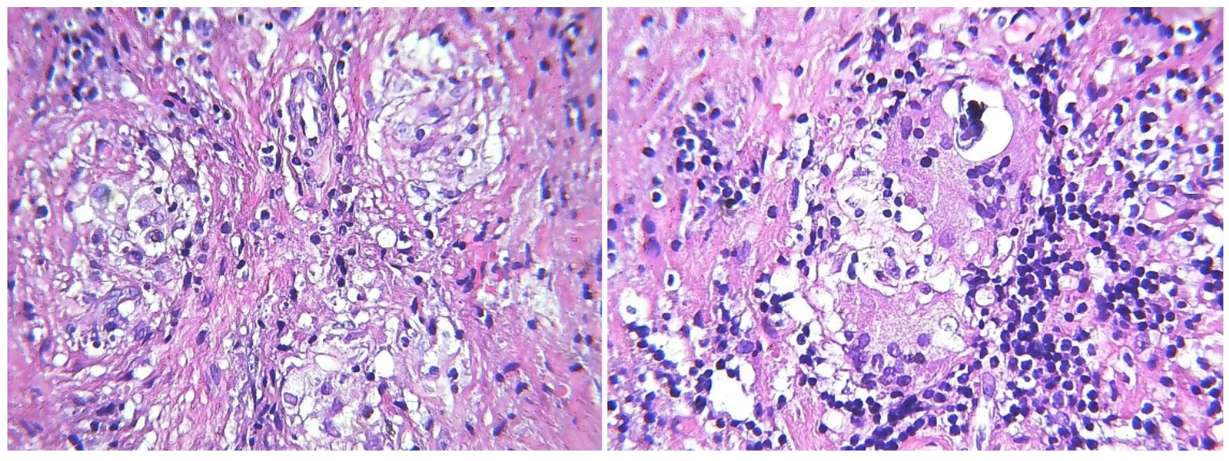

Fig 5 Histopathological studies showed chronic granulomatous tissue with lymphocytes, epitheloid-like histiocytes, and datia langhan cells. Fig 6. Datia langhans cell

Conclusion

1. Infective granulomas (tuberculomas) can develop along the optic pathways and should be considered in the differential diagnosis of the masses at the optochiasmatic area.
2. Tuberculoma in the suprasellar region radiologically can mimic optic chiasmatic-hypothalamic gliomas, and it is not possible to diagnose them with certainty on the basis of radiological findings alone.
3. Histopathological studies, at least a microsurgical biopsy of the lesion must be performed.

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