Is it retrobulbar optic neuritis

By

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- Female patient aged 48 years housewife non diabetic non hypertesive
- Came for drop of vision in her right eye to 6/60 with retrobulbar pain

- Pain on moving her eye to right and left and pain on pressing on the right eye and pain in right temporal region
- Mild ptosis , mild proptosis on right side
- Fundus examination revealed no abnormal findings

Right disc was normal

DIAGNOSED AS RETROBULBAR NEURITIS

- She started treatment for optic retrobulbar neuritis with mega dose of steroids one gram every day for three days with taper of steroids gradually for two weeks

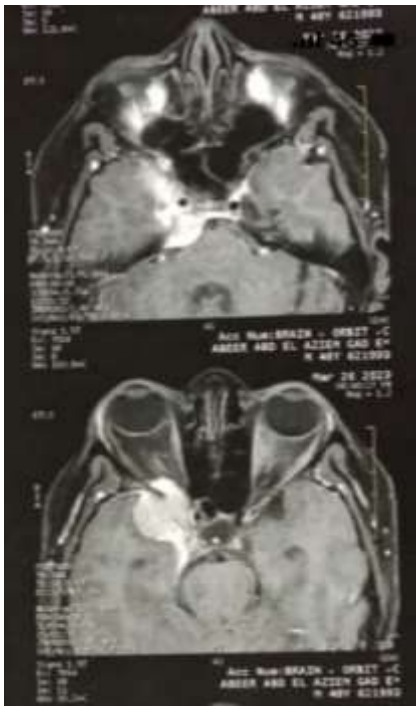
- After two week she came with no improvement of vision even deterioration of vision and her complaints and with more limitation ocular movements

- We asked for MRI brain and orbit with contrast
- She developed more drop of vision and more limitation of all ocular movements in the right eye

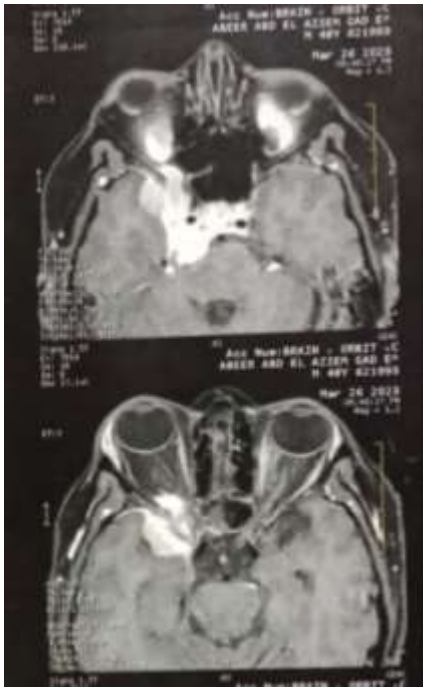
MRI imaging ?????????? Sol

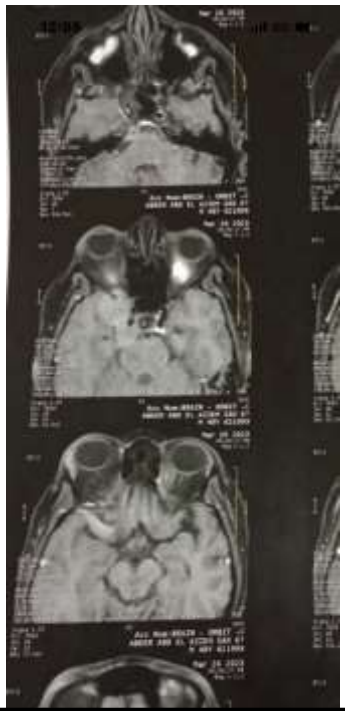
- Space occupying lesion
- Orbital apex mass

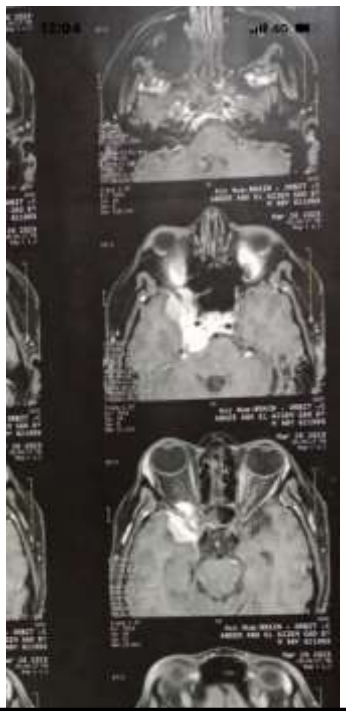
- Welldefined extra axial space occupying lesion at right para sellar region centered upon the right greater wing of sphenoid and right orbital apex
- Measuring about 4.6 x2.7 x2.8 cm in axial and coronal dimensions
- Eliciting low T1, inetermediately high T2 /flair signals rather homogenous enhancement
- The mass is associated with enhancing tail along the right greater wing of sphenoid
- Extending anteriorly through the optic foramen and inferior orbital fissure into the right orbital apex compressing the optic nerve with minimal right eye proptosis

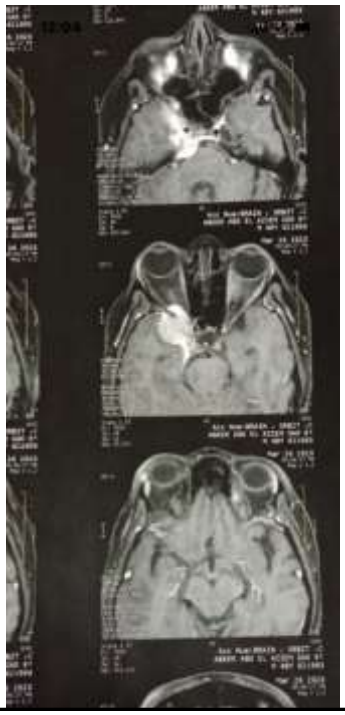


- Laterally to the right middle cranial fossa with enhancing the dural tail , and compressing the right temporal lobe with no invasion
- Medially obliterating the cavernous sinus,
- Posteriorly obliterating the right Meckel's cave extending to the right side of prepontine cistern
- DIAGNOSED AS RIGHT PARA-SELLAR SOL likely representing
- MENINGIOMA









From the litrature

- Sphenoorbital meningioma is a rare meningioma arising from sphenoid wing with periorbital extension
- It account for 2-9% of all intracranial meningiomas
- These complex slow growing tumers have characteristic morphological and clinical features
- They comprise two components an intraosseous growth with secondry associated hyperostosis and intradural soft tissus component.
- The bony tumer growth involves the sphenoid ridge as well as the lateral and superior orbital walls, and might involve the superior orbital fissure, optic canal, and anterior clinoid process
- The dural growth is usually widespread and carpet like , including the basal sphenoid wing, cavernous sinus , and temporal covexity

- Despite its benign histpathological features , they are aggressive in behaviour in the long clinical course because they can infiltrate the optic canal and exert a mass effect
- The clinical features of SOM result from itraossious , intradural, and intraorbital lesions and include a triad of symptoms
- 1- Proptosis
- 2- Visual impairment
- 3- Ocular motility defects
- Visual impairment is a result of optic canal invasion , optic nerve compression , periorbital tissue infiltration, or orbital apex invasion by the tumer it occurs in 40-60% of cases
- The treatment for symptomatic or progressing tumers involves surgical removal with gamma knife

TAKE HOME MESSAGE

- ORBITAL MASSES AND SPACE OCCUPING LESIONS ARE MISLEADING IN DIAGNOSIS
- MRI IN VERY IMPORTANT FOR NEUROOPHTHALMOLOGICAL CASES
- HISTORY AND CLINICAL DATA ARE VERY IMPORTANT TOGETHER WITH FOLLOWUP
- NEUROLOGY AND NEURO SURGEONS ARE OUR CLOSE FRIENDS FOR NEUROOPHTHALMIC PROBLEMS

THANK YOU