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Retinal detachment and convexity intracranial meningioma: an uncommon association

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SUMMARY: **Retinal detachment and convexity intracranial meningioma: an uncommon association.**

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Case report. *A 70-years-old woman presented with a one week history of progressive loss of vision in the right eye (RE) diagnosed as retinal detachment from 7 to 1 o' clock with retinal break at the 10.30 o' clock associated. Gadolinium enhanced magnetic resonance imaging (MRI) scan of the brain and orbits with fat suppression showed a convexity meningioma. Scleral buckling with a segmental sponge, subretinal fluid drainage and cryopexy were performed with detachment repair.*

Conclusion. *In our patient with retinal detachment and convexity meningioma without significant neurological symptoms, performing ocular surgery and close follow up care seemed to be the optimal treatment option.*

RIASSUNTO: **Distacco retinico e meningioma della convessità: una associazione rara.**

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Caso clinico. *Una donna di 70 anni riferisce calo della vista progressivo in occhio destro da una settimana. All'esame oftalmoscopico si evidenziano distacco retinico da ore 7 a ore 1 con rottura retinica alle ore 10,30 ed edema della papilla ottica con congestione delle arterie e delle vene retiniche. La risonanza con mezzo di contrasto mostra la presenza di un meningioma della convessità. La paziente viene sottoposta ad intervento di cerchiaggio episclerale e piombaggio con spugna di silicone, puntura evacuativa e criopessia della rottura ottenendo il riaccollamento della retina.*

Conclusioni. *Data l'assenza di sintomi neurologici importanti e la soddisfazione della paziente dopo l'intervento alla retina, si opta per un monitoraggio del meningioma con frequenti controlli radiologici.*

KEY WORDS: Optic disk edema - Convexity meningioma - MRI - Retinal detachment.
Edema della papilla - Meningioma della convessità - RMN - Distacco retinico.

Introduction

Convexity meningiomas (CM) are tumors whose attachment does not occur on the dura of the skull base nor does involve the dural venous sinus or falx (1). The tumor may arise from any area of the dura over the convexity, but they are more common along the coronal suture and near the parasagittal region. CM occurs more commonly in middle aged woman and patients usually present with seizures, headache, or a focal neurological deficit, depending on the tumor location. Surgery is indicated in patients with worsening neurological symptoms and in most patients under 70 who present with a seizure or with any neurological symptoms. If patient was over 70 and presents seizure or have mild symptoms, can be followed with scans and undergo surgery if there is evidence of definite growth. However, if there is significant edema or a history of worsening symptoms, age is not a contraindication to surgery (4).

A number of patients are now seen in whom the tumor is found incidentally without any neurological

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symptoms. These patients can be followed with periodic scans, including those with large tumors. Radiation therapy is not recommended in this group (3).

The clinical management of patients with meningiomas has changed over the past decade. Change has occurred because of a variety of factors, including improved diagnostic imaging, better results with surgery and interventional neuroradiology and the advent of radiosurgery.

In our study we report a case of CM associated with retinal detachment.

Case report

A 70-year-old-woman presented with painful visual loss in the right eye (RE) for one week associated with central scotoma. Her left eye (LE) was normal. She had no medical problems and no medical prescriptions.

Ophthalmoscopy showed a retinal detachment from 7 to 1 o' clock with retinal break at the 10.30 o' clock associated. Best corrected visual acuity (BCVA) in the RE was limited to hand motion, in the LE BCVA was 180/200. In addition, RE fundus biomicroscopical examination revealed optic disk edema and a normal-appearing optic nerve in LE (Fig. 1). Anamnestic data collected from the patient revealed no correspondence between retinal detachment and optic nerve edema. Slit lamp biomicroscopy (SLB), motility findings, trigeminal and facial function, palpebras fissures, exophthalmometry and pupil reactivity were normal. Goldmann perimetry confirmed a central scotoma on RE and normal visual field on LE.

MRI study of the brain and orbital cavities was performed. In the MRI protocol T2, T2 with fat suppression, T1, T1 with fat suppression sequences, pre-and post gadolinium injection on axial, sagittal and coronal planes were performed showing an extra-axial lesion of the parietal and meningotelial nature was assumed (Figs. 2 and 3).

Scleral buckling with a segmental sponge, subretinal fluid drainage and cryopexy were successfully performed with detachment repair.

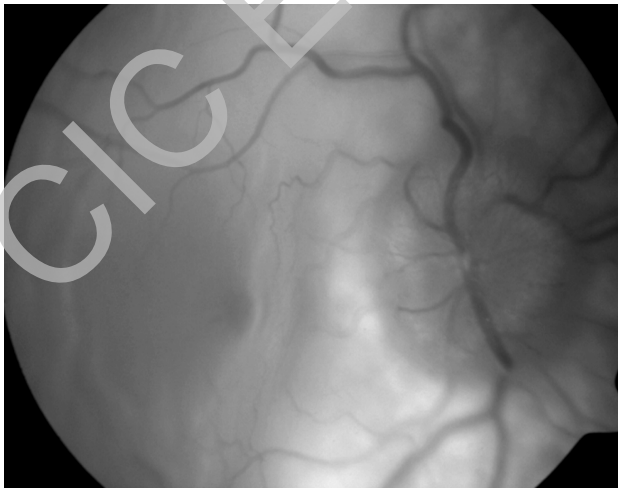

Fig. 1 - Funduscopic evaluation demonstrates optic disk edema and a normal-appearing optic nerve in left eye.

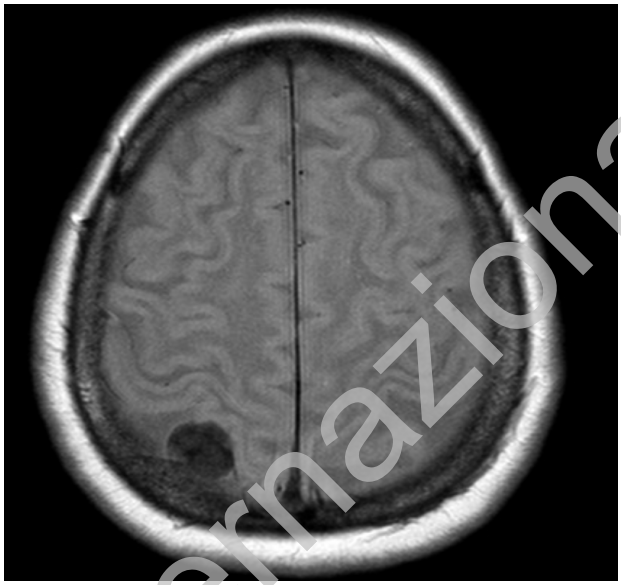

Fig. 2 - MRI axial view showing a mass in the convexity of right parietal lobe.

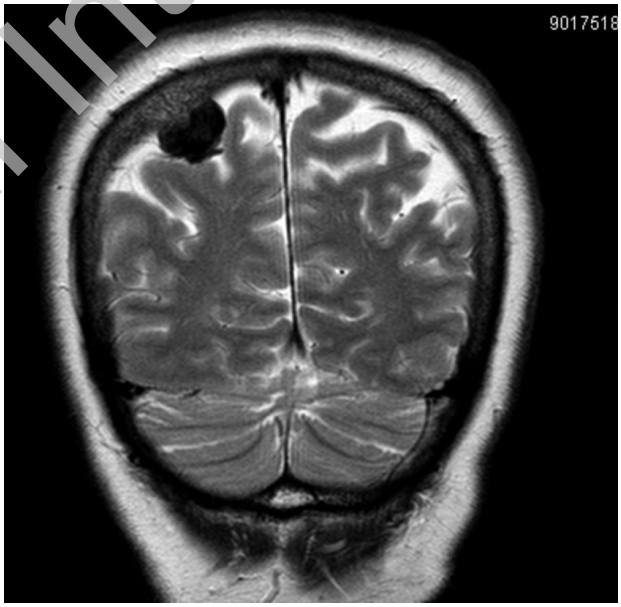

Fig. 3 - Coronal MRI T2 sequences of the parietal meningioma.

In the absence of neurological symptoms, apart from optic disk edema, conservative treatment for meningioma permofed.

Conclusion

In the absence of neurological symptoms, apart from optic disk edema, and after successful eye surgery, to avoid further surgery-related risks conservative treatment for meningioma with close follow-up was assumed as the best therapeutic strategy.

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