The Sally Letson Lecture:

The Diagnosis, Management, and Prognosis of Optic Nerve Sheath Meningiomas

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Optic nerve sheath meningiomas (ONSMs) are the most common tumors of the optic nerve sheath. The diagnosis of an ONSM can be suspected in most cases from clinical findings (usually a unilateral slowly progressive anterior or retrobulbar optic neuropathy) and supported by the results of neuroimaging, obviating tissue biopsy in the majority of cases. Management depends on several factors. Observation may be appropriate in patients with mild or no visual deficit or in whom visual loss is not progressing, whereas stereotactic fractionated radiation therapy has been demonstrated to improve or stabilize vision in progressive or advanced cases. Attempts at excision of ONSMs are associated with a high risk of blindness and should be reserved for the rare case of an anteriorly located, primarily exophytic tumor with focal involvement of the dural sheath. Rare patients with acute visual deterioration may benefit from optic nerve sheath fenestration. In conclusion, the majority of ONSMs can be suspected on clinical grounds and diagnosed with readily available noninvasive neuroimaging. Stereotactic fractionated radiotherapy is currently the treatment of choice for ONSMs that require therapy.

References

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