Lateral Supraorbital Craniotomy for Tuberculum Sella Meningioma Resection

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Abstract

Tuberculum sella meningioma can be approached by either open or endoscopic approaches. The aim of this video case presentation is to highlight the nuances of the lateral supraorbital craniotomy for tuberculum sella meningioma resection. The authors present a 34-year-old female patient who presented with decreased right eye visual acuity (20/60), afferent pupillary defect, and nasal field cut due to a tuberculum sella meningioma. The tumor was partially encasing the left A1 artery, severely displacing the optic apparatus, and minimally invading the right optic canal. The lateral supraorbital craniotomy was considered the most suitable approach to this tumor. The operative nuances and pitfalls of this approach are detailed in the video. Gross total resection of the tumor was achieved and confirmed with postoperative MRI. The patient’s vision gradually improved and she was discharged on the fourth postoperative day. The minimally invasive lateral supraorbital craniotomy for tuberculum sella meningioma is a suitable approach in selected cases. The link to the video can be found at: https://youtu.be/yG8q6YH2D9k.

Keywords

► suprasellar tumors
► lateral supraorbital craniotomy
► meningioma

Conflict of Interest

None.
Fig. 1  (a) Coronal MRI with GAD showing a tuberculum sella meningioma. (b) Post operative MRI confirmed gross total resection of the tumor.

Fig. 2  Operative photo at the end of the procedure showing dura opening.