Endoscopic Endonasal Transplanum–Transtuberculum Sellae Approach for the Resection of a Diaphragma Sellae Meningioma

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Abstract

The endoscopic endonasal approach (EEA) provides a direct access to diaphragma sellae meningiomas. We present a case of a 56-year-old-female with an incidentally diagnosed sellar/suprasellar lesion with no hormonal deficit; thus, she opted for conservative management initially. During her annual follow-up appointment with her ophthalmologist, it was noticed that the patient had right eye peripheral deficit on formal visual field testing. Magnetic resonance imaging (MRI) revealed an enlargement of the sellar/suprasellar mass, causing displacement of the optic chiasm. A transplanum–transtuberculum EEA was performed. Gross-total removal was achieved and closure was done in a multilayer fashion using a collagen matrix, nasoseptal flap. Histopathological examination confirmed a meningioma WHO grade I. There were no intra- or postoperative complications. At 4-year-follow-up, the patient has stable vision and MRI brain showed no recurrence.

The link to the video can be found at: https://youtu.be/xY8T9hotIDs.

Keywords
► diaphragma sellae meningioma
► endoscopic endonasal approach
► expanded approaches
► transplanum
► transtuberculum

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Conflict of Interest
None.

Fig. 1 Pre- and postoperative magnetic resonance imaging showing complete resection and no recurrence in 4 years.

Fig. 2 Intraoperative image.