

Basal ganglia glioma

Basal ganglia glioblastoma

The [basal ganglia](#) and [thalamus](#) are uncommon locations for infiltrating [gliomas](#). [Tumors](#) here are usually treated with [biopsy](#) and [adjuvant therapy](#) with relatively poor results. Rarely do patients undergo extensive surgical [intervention](#). It seems reasonable to suggest that successful [cytoreduction](#) may help these patients. However, this [hypothesis](#) has not been studied due to the general view that it is not possible to remove deep-seated brain tumors with acceptable outcomes.

Through retrospective data collection, Briggs et al., described a small case series undergoing awake contralateral, [transcallosal approach](#) surgery for deep-seated brain tumors affecting the basal ganglia. They described the patient [cohort](#), report on patient [outcomes](#), and describe our surgical technique.

Four patients underwent [awake](#) contralateral, transcallosal surgery for [glioblastoma](#) invading the basal ganglia. All four patients demonstrated hemibody [weakness](#) contralateral to the side of their tumor, with three patients confined to wheelchairs at presentation. Ages ranged from 25-64 years. Tumor volumes ranged from 14-93 cm³. Greater than 50% resection of each tumor was achieved during surgery. In two cases, approximately 90% resection was achieved. Motor strength improved in one patient who presented with hemiplegia. Two patients required [ventriculoperitoneal shunting](#) for complications related to [hydrocephalus](#). When writing this manuscript, two of our patients were still alive, functional, and free of tumor progression.

They presented results attempting to resect large [gliomas](#) infiltrating the basal ganglia in four patients. This technique combined a contralateral, transcallosal approach with awake [neuromonitoring](#). The results suggest it is possible to remove these tumors with reasonable outcomes¹⁾.

¹⁾

Briggs RG, Nix CE, Conner AK, Palejwala AH, Smitherman AD, Teo C, Sughrue ME. An Awake, Contralateral, Transcallosal Approach for Deep-Seated Gliomas of the Basal Ganglia. World Neurosurg. 2019 Jul 10. pii: S1878-8750(19)31937-0. doi: 10.1016/j.wneu.2019.07.031. [Epub ahead of print] PubMed PMID: 31301441.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=basal_ganglia_glioma

Last update: **2025/04/29 20:29**

