## Introduction: Surgery of limbic and paralimbic gliomas

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In this issue of *Neurosurgical Focus*, a challenging neurosurgical entity, gliomas, which grow in the limbic and paralimbic system, is covered from various angles. It is still controversial whether intrinsic tumors in this area should be removed surgically or not. Temporomesial gliomas, and especially those of the insula and cingulate gyrus, are even now widely considered "unresectable." The aim of this compilation of articles is to provide evidence to the contrary.

On the basis of a thorough understanding of functional connectivity and knowledge of the topography, state-of-the-art imaging can be easily interpreted. This will aid in clear preoperative decision making with respect to resectability and imminent risks. It is clear that surgery that is aimed at complete removal has substantial but acceptable morbidity, which is most severe in insular and least severe in temporomesial gliomas. These tumors are closely related to epilepsy or seizures, a fact that is also acknowledged in this issue. Therefore, oncological and seizure aspects of outcome must be considered equally. In both aspects surgery is beneficial. The following articles emphasize also that intraoperative monitoring is of utmost importance during surgery, and that surgery is part of a multimodality treatment concept.

Since Yaşargil and colleagues<sup>3,4</sup> reported their experience, our group has exhibited particular interest in

this topic,<sup>1,2,5</sup> partially triggered by the fact that units that have an epilepsy surgery program tend to see more of these lesions than others. It was interesting to see that others, many of whom are represented here, developed the same interest simultaneously. A lot of improvements have been made in the last 15 years, which are well reflected by the work of the authors represented here.

To improve the care of these patients further, the focus needs to be directed to the aspects that have been neglected so far; that is, the neuropsychological consequences of these gliomas and their removal.

## References

- Schramm J, Aliashkevich AF: Surgery for temporal mediobasal tumors: experience based on a series of 235 patients. Neurosurgery 62:1272–1282, 2008
- Simon M, Neuloh G, von Lehe M, Meyer B, Schramm J: Insular gliomas: the case for surgical management. J Neurosurg 110:685–695, 2009
- Yaşargil MG: Microneurosurgery, Vol 4A. Stuttgart: Thieme, 1994
- Yaşargil MG, von Ammon K, Cavazos E, Doczi T, Reeves JD, Roth P: Tumours of the limbic and paralimbic systems. Acta Neurochir (Wien) 118:40–52, 1992
- Zentner J, Meyer B, Stangl A, Schramm J: Intrinsic tumors of the insula: a prospective surgical study of 30 patients. J Neurosurg 85:263–271, 1996