

P 13. The added benefit of intraoperative neuromonitoring for resection of motor eloquent brain lesions: A comparative study—
M.N. Bonk^{a,*}, I. Konietzko^a, F. Choumin^a, B. Sommer^a, B. Hackanson^b, K.H. Kahl^c, G. Stüben^c, A. Berlis^d, C. Maurer^d, C. Schmid^b, M. Trepel^b, B. Märkl^e, E. Shiban^a
 (^aUniversitätsklinikum Augsburg, Klinik für Neurochirurgie, Augsburg, Germany, ^bUniversitätsklinikum Augsburg, II. Medizinische Klinik, Augsburg, Germany, ^cUniversitätsklinikum Augsburg, Klinik für Strahlentherapie und Radioonkologie, Augsburg, Germany, ^dUniversitätsklinikum Augsburg, Klinik für diagn. und interv. Neuroradiologie, Augsburg, Germany, ^eUniversitätsklinikum Augsburg, Institut für Pathologie und Molekulare Diagnostik, Augsburg, Germany)

Objective. Resection remains the most important form of treatment for patients with intracranial malignancies. The advantages of surgical resection must be balanced with the risk of surgery. Intraoperative neuromonitoring (IOM) is utilized to improve safety and enlarge the resection extent. However, comparative data on the use if IOM is scarce.

Methods. Retrospective analysis of patients following resection of motor eloquent lesions between June 2018 and June 2020 was performed. A comparative analysis of the extend of resection; neurological sequel were compared between resections with or without IOM.

Results. 66 patients (31 female, 35 male, age median, SD 62+/-11,2) were identified. IOM was performed in 34 (51%) cases. 46% were female with a median age of 62 (range 31–82). There were no differences in baseline patient's characteristics between both groups. 14% and 3% had a temporary neurological deterioration in the IOM and non-IOM group ($P=0,198$), respectively. 3% and 15% had a permanent neurological in the IOM and non-IOM group, respectively ($P=0.100$). 65% and 35% of resections were total and subtotal in both the IOM and non-IOM group ($P=0.027$), respectively.

Conclusion. IOM is associated with lower rates of new postoperative neurological deterioration with the same rate resection quality following resection of motor eloquent lesions.

doi:10.1016/j.clinph.2021.02.335