

P15.07**VISUOSPATIAL AND VISUO-CONSTRUCTIVE ABILITIES IMPAIRMENT AFTER RIGHT OCCIPITAL EXTRAXIAL LESION: CASE REPORT**[C. Sindorio](#),¹ [R.V. Abbritti](#),² [C. Mento](#),³ [M.C. Quattropani](#),¹ and [A. Germanò](#)²¹Department of human and social sciences-psychology division, University of Messina, Messina, Italy²Neurosurgical clinic, University of Messina, Messina, Italy³Department of neurosciences, University of Messina, Messina, Italy[Copyright](#) Published by Oxford University Press on behalf of the Society for Neuro-Oncology 2014.**Abstract**

INTRODUCTION: It is widely reported in literature that parietal and occipital lesions, especially when located on the right brain hemisphere, may be associated to visuospatial and visuo-constructive impairment. Psychiatric patients suffering from bipolar disorder and treated with lithium in association with brain tumors, present neuropsychological deficits in several domains such as memory, attention and executive functions. In the present study we describe the case of a 43 years old female, lawyer, with a child, and an adequate social and working background, affected by a right occipital extraxial lesion. Her clinical history was characterized by a previous diagnosis of bipolar disorder treated with lithium, and of breast cancer treated through a multidisciplinary protocol of surgery, chemotherapy and radiotherapy. In contrast to previous data, the preoperative cognitive assessment of the patient reveals only a mild visuospatial and visuo-constructive impairment in addition to an excellent performance in memory, attention, language and executive functions. The patient underwent to microsurgical removal of the lesion and the three days post-op later cognitive evaluation showed the complete resolution of pre-op visuospatial and visuo-constructive impairment. The experience of our institution, through the analysis of this case, focuses on higher education's level, younger age and adequate social and working environment as effective predictive factors of post-operative cognitive improvement. **MATERIALS AND METHODS:** We performed a pre and post-operative neuropsychological assessment through MMSE and RBANS, a brief, fast and simple neuropsychological battery which assesses 5 different domains: immediate memory, visuospatial and visuo-constructive abilities, attention, language comprehension and delayed memory, minimizing the effect of cognitive strain. **RESULTS:** We observed a preoperative mild visuospatial and visuo-constructive impairment with preserved immediate and delayed memory, language and attention and the complete resolution of visuospatial and visuo-constructive impairment after surgical treatment. **DISCUSSIONS:** The analysis of the key aspects of this case reinforces the association between higher education's level, younger age and better pre-op neuropsychological performance as predictive factors of post-op cognitive improvement in patients suffering from brain tumors and psychiatric disorders.