Assessment of competence in patients affected by brain tumors

Veronica Villani, Chiara Zucchella, Edvina Galiè, Marta Maschio, Andrea Pace

Neuro-Oncology Unit, "Regina Elena" National Cancer Institute, Via Elio Chianesi 53, 00144, Rome, Italy

BACKGROUND:
Neuro-oncological patients during their care pathways are repeatedly asked to make important decisions about their treatment; hence, the determination of whether patients are competent is critical on the one hand to respect the voluntary choice of subjects, on the other to protect those who are cognitively impaired. Despite the high percentage of patients affected by brain tumors who develop cognitive disturbances, literature data suggest that a formal capacity assessments is rarely performed and the decision about capacity is left to the subjective judgment of the clinician. The aim of this study was to assess the complex relationship between cognitive deficits and competence in a population of newly diagnosed brain tumors patients.

CONCLUSIONS: The issue of competence involve all neuro-oncological patients throughout their disease course, as their mental capacity might be expected to deteriorate when each further treatment is administered, owing to accumulated damage. Every patient who is required to provide informed consent should receive a proper cognitive assessment so that alternative solutions can be sought if necessary.

METHODS: Competence was evaluated by means of the MacArthur Competence Assessment Tool for Treatment (MACCAT-T), a semistructured interview based around the real treatment decision being faced, administered after discussion between patient and clinician. Neuropsychological standardized tests were administered to assess different cognitive functions. The formal assessment of capacity was compared to the assessment of capacity made by the clinician through an ad hoc questionnaire based on answers on a Likert scale. All patients were evaluated after neurosurgery, before starting treatments.

Demographic and clinical features	
Age (mean ± st. dev.)	67.8 ± 4.8
Gender F/M	0/5
Lesion site: • Frontal • Parietal • Temporal • Temporo-occipital	 1 2 1 1
Lesion side: • Right • Left • Bilateral	 2 3 0

MACCAT-T focuses on:
• *understanding* of treatment-related information
• *appreciation* of the significance of the information for the patient's situation
• *reasoning* in the process of deciding upon treatment, focusing on the ability *to* compare alternatives in light of their consequences, including the impact of the alternatives on the patient's *everyday life.*
• *expressing a choice about treatment.*

Data analysis revealed:
➡ **a positive correlation between capacity and global measure of cognitive functioning**
➡ **agreement between physicians' opinions, the MMSE and the MACCAT-T score were found**