E-Poster

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Long-Term Functional Outcomes of Acquired Brain Injury Patients Discharged Without Rehabilitation: A Prospective Observational Study

Topic: Neuroscience

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BACKGROUND

Acquired brain injury (ABI) might lead to subtle cognitive impairments, particularly in executive functions, memory, and attention. However, in absence of systematic cognitive screening in neurosurgical units, such deficits are likely to be missed, and almost 70% of ABI patients are discharged home just based on an apparent good neurological recovery. The exact frequency of these "invisible" deficits and their impact on daily functioning, return to work, and overall quality of life of patients remains largely unknown. This study aims to assess the long-term cognitive, psychological and functional outcomes of ABI patients discharged home based on normal neurological examination and to estimate the proportion of patients who have been secondarily referred to rehabilitation or psychological care based on these extensive long-term evaluations.

METHODS

This prospective observational study included ABI patients discharged home from a neurosurgery unit without a rehabilitation plan, as they were considered to have no significant sequelae. A follow-up physiatry evaluation was offered to patients 6 to 12 months post-discharge, assessing cognitive function (Montreal Cognitive Assessment (MoCA) and Cog-First: an innovative tablet-based self-administered cognitive screening tool), psychological status, and functional outcomes. Decision to refer the patient to rehabilitation or psychological care was then made by the rehab physician at the end of the evaluation. Cognitive impairment was defined by MoCA and Cog-First scores below established thresholds.

RESULTS

Among 125 patients, diagnoses included benign tumors (44%), malignant tumors (20%), subarachnoid hemorrhages (18%), and traumatic brain injuries (8%). At follow-up, among previously employed patients, 85% had resumed work (and among them, 29% remained in medically-recommended part-time work). More than 40% exhibited cognitive impairments. Altogether 35% of patients were secondarily referred to cognitive rehabilitation. Additionally, 34% experienced psychological distress (anxiety, depression, or PTSD) necessitating psychological care.

CONCLUSION

While most ABI patients discharged without rehabilitation reintegrate socio-professional life successfully, a significant proportion develop long-term cognitive and psychological impairments affecting work and daily life. Early systematic screening using validated cognitive assessments could improve detection of at-risk patients, enabling timely rehabilitation and optimizing long-term functional outcomes in post-neurosurgical care.

Statement of Disclosures

The authors declare that they have no conflict of interest.

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