Driving ability post-stroke

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Introduction: Stroke can lead to a variety of deficits that limit driving activity. However, driving is a frequent goal of patients after stroke. The evaluation of this capacity should be based on clinical evaluation and be complemented with instrument, a driving simulator and psychology evaluation. The authors present a retrospective study, aiming to evaluate a sample of patients with a history of stroke referenced to a specialized outpatient setting with driving ability evaluation.

Methods: We included all patients diagnosed with stroke between October 2016 and October 2017. Patients were evaluated by a specialist in Physical Medicine and Rehabilitation, by a driving simulator and by Psychology.

Results: Sample of 50 patients, 70% male, with a mean age of 54 years. The most frequent stroke pathology was ischaemic (78%), followed by haemorrhagic (22%). All patients performed a driving simulator and neuropsychological evaluation. Thirteen patients were not approved for driving. Three of these were approved by psychology but failed the driving simulator. The remaining failed both. Of the approved patients, almost 70% required adaptations (average 4 adaptations). More adaptations were observed in patients with more neuromotor deficits. Adaptations for safety were related with the deficits and the laterality.

Conclusion: The results of this sample indicate that a considerable percentage of patients after stroke can initiate or resume car driving. However, a large proportion of these patients requires multiple adaptations to ensure safety. For this reason, the authors underline the need of a specialized assessment of driving capacity.

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