Identification of Cognitive Impairment After Acute Stroke Using the Montreal Cognitive Assessment

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Background

Unfortunately, many patients with stroke experience cognitive impairment. Early identification of cognitive impairment after stroke is important for ensuring that patients receive the most appropriate level of rehabilitation after discharge from the acute care hospital. The Joint Commission has incorporated the identification of cognitive impairment into the accreditation standards for comprehensive stroke centers. Traditionally, cognitive impairment after stroke has been identified by the Mini-Mental State Examination versus the Montreal Cognitive Assessment (MoCA), which has been shown to be effective in identifying mild cognitive impairment in patients with stroke.

Objectives

The purpose of this study was to:
- Determine the feasibility of administering the MoCA in the acute care hospital.
- Compare the MoCA to a non-standardized process for identifying cognitive impairment soon after stroke.

Methods

During a 4-week period, patients admitted to the Comprehensive Stroke Center at Capital Health with the diagnosis of acute stroke were screened for cognitive impairment using both a non-standardized process and the MoCA.

Results

Thirty-nine patients with acute stroke were included in the study. The average MoCA score was 13. On average, the MoCA was administered 3.5 days after admission. No formal score was obtained from the subjective method.

Fifty one percent of patients were identified as having cognitive impairment using the subjective, non-standardized method. In comparison, 95% of patients were identified as having cognitive impairment using the MoCA.

Discussion

- The MoCA identified a greater proportion of patients with cognitive deficits, making it better in identifying higher level skill deficits.
- The MoCA was administered quickly and easily, making it an appropriate tool for use in the acute care hospital. As well, intra- and inter-rater variability may be lower as expected for a scored, quantitative assessment.
- The score for identifying cognitive impairment using the MoCA may be overly sensitive. It has been suggested that a lower passing score of 20 would improve the selectivity of identifying individuals with cognitive impairment. If this criteria were applied to the current study, the identification rate of patients with cognitive impairment would have decreased from 95% to 85%.

Conclusion

The MoCA identified more patients with cognitive impairment early after acute stroke compared to a non-standardized, subjective process. In addition, administration of the MoCA was feasible in the acute care setting.

References


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