

# The validity study on evaluating residual cognitive problem in traumatic brain injury patients: Comparison between K-MMSE and K-MAS

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This study analyzed diagnostic validity of K-MMSE, one of the most popular evaluation tools in the clinical setting, and K-MAS to investigate the validity of evaluating residual cognitive problems in traumatic brain injury(TBI) patients. To investigate factors affecting diagnostic capacity of K-MMSE and K-MAS, we analyze the influence of age, education level and severity of brain injury. In study 1, participants were 76 traumatic brain injury patients who visited neuropsychiatry to evaluate residual cognitive problem. Results indicated that K-MMSE score was significantly affected by age and education level but K-MAS wasn't. Besides, K-MAS showed higher sensitivity than K-MMSE in diagnosing brain injury. This result still existed after adopting adjusted cut-off score reflecting influence of age and education level. In study 2, we studied differences of test score among 3 different injury severity groups. The result indicated that K-MMSE could significantly discriminate 3 group(mild/moderate/severe) divided by severity of brain injury. But K-MAS could only discriminate between the mild group and the other 2 groups. Mean score of K-MMSE of mild severity group was above cut-off score for diagnosing brain injury. Finally, the clinical implication and limitation of present study were discussed.

*Keywords: Traumatic Brain Injury, K-MMSE, K-MAS, Severity of brain injury*

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수는 나날이 늘고 있으며, 건강심리학자가 이들의 인지기능평가와 재활계획에 참여할 기회가 높아질 것으로 예상되고 있다. 본 연구는 재활계획에 필수적인 인지기능 회복판정에 실용적 도움을 줄 수 있는 경험적 자료를 제시하였는데 의의를 둘 수 있다. 하지만 본 연구는 앞에서 제시한 회복집단의 선정 문제와 함께, 여러 신경심리검사 중 단지 기억검사만을 대상으로 했다는 점이 한계로 남는다. 추후의 연구에서는 회복집단에 대한 선택의 정밀성과 함께 언어, 집행기능, 주의 등 다양한 인지기능에 대한 평가연구가 요구될 것이다.

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