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Usefulness of the Simple Coma Scale, a Simplified Version of the Glasgow Coma Scale

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The Glasgow Coma Scale (GCS) is the most commonly used consciousness rating scale worldwide. Although it is a sensitive and accurate way of assessing a patient's level of consciousness, it is time-consuming and requires training. We designed the Simple Coma Scale (SCS) as a simplified version of the GCS. In this study, we examined whether the SCS could predict favorable neurogenic outcomes at discharge, survival, and GCS scores in patients with traumatic brain injury (TBI). We analyzed the data of 1,230 patients registered in the Japan Neurotrauma Data Bank (Project 2015) between April 2015 and March 2017. In the SCS, eye, verbal, and motor scores are given based on a 3-point scoring system, with similar wording ("Normal," "Something Wrong," and "None") used for all scores. The SCS is based on a 7-point scale. The Glasgow Outcome Scale was used to assess the outcomes. For the receiver operating characteristic (ROC) curves with the objective variable of good prognosis at discharge in the SCS and GCS, the area under the curve (AUC) for the SCS was 0.740 (95% confidence interval [CI]: 0.711–0.769), and that of the GCS was 0.757 (95% CI: 0.729–0.786). For ROC curves with survival as the objective variable, the AUC of the SCS was 0.751 (95% CI: 0.724–0.778), and that of the GCS was 0.764 (95% CI: 0.737–0.791). The SCS, similar to the GCS, may predict good prognosis and survival at discharge. Further analyses will continue to examine the usefulness and practicality of the SCS.