Vascular risk prediction in ischemic stroke patients undergoing in-patient rehabilitation - insights from the investigation of patients with ischemic stroke in neurologic rehabilitation (INSIGHT) registry.

Abstract:
In-patient rehabilitation following ischemic stroke offers a unique opportunity for risk factor and lifestyle modification. Quantification of risk in this setting may help to tailor therapy, increase physician awareness and patient compliance and thus to reduce recurrent vascular events. To validate the predictive value of established secondary stroke risk scores. One thousand one hundred sixty-three patients undergoing in-patient rehabilitation following recent ischemic stroke in 15 German neurologic rehabilitation centers were included 0.9 ± 0.5 months after the index event. Outcome information was available for 846 participants (72.7%) after a mean follow-up of 13 ± 2.3 months. Patients' mean age was 66.3 ± 12.3 years and 42.5% were women. The National Institutes of Health Stroke Scale (mean 4.0 ± 3.9), modified Rankin scale (median 2, range 0-5), and Barthel Index (median 90, range 0-100) indicated good functional status. A recurrent fatal or nonfatal stroke during follow-up occurred in 6.7% and combined vascular events (stroke, myocardial infarction, vascular death) in 10.9%. The predictive accuracy for recurrent stroke was slightly higher on the Essen Stroke Risk Score than on the Stroke Prognostis Instrument II (area under the curve 0.62 vs. 0.56), while both scores had a similar predictive
accuracy for combined vascular events. Risk stratification on the Essen Stroke Risk Score and Stroke Prognostis Instrument II provides a moderate accuracy for the prediction of recurrent stroke and vascular events in patients undergoing neurologic in-patient rehabilitation. Although individual risk prediction may remain imprecise, the use of these scores should be encouraged.