The Edinburgh Cognitive and Behavioural Amyotrophic Lateral Sclerosis Screen: A cross-sectional comparison of established screening tools in a German-Swiss population

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The Edinburgh Cognitive and Behavioural ALS Screen (ECAS) has recently been developed as a fast and easy cognitive screening tool specifically designed for patients with motor impairments in routine clinical use. The German/Swiss-German version of the ECAS was validated in a German-Swiss consortium. One hundred and thirty-six non-demented ALS patients and 160 healthy controls were included in the study. In addition, the Frontal Assessment Battery (FAB), Montreal Cognitive Assessment (MoCA) and Consortium to Establish a Registry for Alzheimer’s Disease plus Scale (CERAD plus) were administered to subgroups of patients. Results showed that administration of ECAS was fast (mean 24 min). Similar to the population in the UK version, ALS patients performed significantly worse in the ALS-specific functions (p < 0.001), specifically in the domain of language (p < 0.001), verbal fluency (p < 0.005) and executive functions (p < 0.02), but not for the non-ALS-specific functions. Carers reported behavioural abnormalities in about 30% and psychotic symptoms in 6% of the patients. Compared to ECAS, FAB, MoCA and CERAD were more generic and performance was not adjusted to motor speed. We conclude that the German/Swiss-German version of the ECAS is a fast and easy to administer cognitive screening instrument sensitive for ALS-specific dysfunctions and behaviour change.
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