Training and Consistency in Stroke Assessments

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See related article, pages 2507–2511 and 2557–2559.

Stroke is a global disease. It needs global tools for description and outcome assessment, common definitions for risk factors, common definitions for complications such as symptomatic hemorrhage, and common investigation protocols.

Research into treatments for stroke depends on enrollment of large numbers of patients, possible only through international cooperation. Wide variation in initial stroke severity requires us to describe the population that we enroll. The National Institutes of Health Stroke Scale is now the most widely used scale for measuring stroke severity in clinical trials and lies second only to the modified Rankin Scale for reliability. The articles by Lyden and colleagues in this issue provide reassurance in this respect. By demonstrating that even among general (nonexpert) users, the National Institutes of Health Stroke Scale can achieve good interrater reliability, Lyden and colleagues have found that with translation into Italian, the scale can achieve similar reliability as the English version. The lower reliability of the scale in their hands among nurses contrasts with the more extensive analysis of the English version by Lyden. He and colleagues find that nonneurologists are just as reliable in their application of the scoring rules. Training can be robustly applied across multiple venues and specialties. This pattern appears to be consistent with other scales such as modified Rankin Scale. Of course, language forms only a component of National Institutes of Health Stroke Scale both with regard to scoring and instructions; mostly the scoring is based on observation of physical performance. Validity of the National Institutes of Health Stroke Scale in other languages thus does not guarantee that interview-based assessments such as the modified Rankin Scale will achieve similar consistency after translation.

It would be intriguing to re-examine trials to assess the extent to which the expertise or reliability of the individual rater contributes to the variation in severity ratings, to outcome assessments, and perhaps even to the trial conclusion. This must be a topic for continued effort because description of patients’ baseline characteristics and outcomes plays such a crucial role in determining whom we should treat and how effective are our interventions.

We should congratulate Dr Lyden and colleagues for taking an imperfect tool and guiding its use in a way that has made it an invaluable part of every modern stroke trial and a mandatory skill for professionals in at least one country.

Disclosures
None.

References

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