TECHNOLOGY BRIEF

PROM
The Pediatric Stroke Outcome Measure (PSOM)

Description
Clinical research in childhood stroke requires the use of validated outcome measures. However, such measures are lacking in this population – until now.

The Pediatric Stroke Outcome Measure (PSOM) is comprised of a detailed neurological examination. It was developed at The Hospital for Sick Children, implemented in the out-patient stroke clinic in 1995, and has undergone pilot testing of inter-rater reliability showing a 91% concordance rate.

The PSOM was designed and validated for children with both types of ischemic stroke, arterial ischemic stroke (AIS), resulting from occlusion in the arterial supply to the brain, and cerebral sinovenous thrombosis (CSVT), resulting from occlusion in the venous drainage of the brain. This measure objectively rates deficit severity (likert-scaled from 0 - 2) in each of 5 domains: sensorimotor right, sensorimotor left, language production, language comprehension, and cognitive / behavior, with total possible deficit severity score 10. Each domain 'subscale' is scored as 0=no deficit, 0.5=mild deficit normal function, 1=moderate deficit, slow function or 2= severe deficit, missing function. The PSOM is appropriate for newborns through to age 18 years and therefore enables deficit severity in individual children to be followed over time. This feature is important as developing brains are both vulnerable yet plastic.

Therapeutic Area
- Ischemic Stroke

Advantages
- PSOM has been validated as useful for retrospective scoring using health records charts and prospective scoring for longitudinal studies.
- A digital version of the PSOM is available for research and clinical use.

Additional Information
- Publication: 10.1177/088307380001500508
- Publication: 10.1161/STROKEAHA.111.639583

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