PILOT score

To assess the Pediatric Intensity Level of Therapy (PILOT) score alone and in combination with Emergency Department (ED) GCS and Rotterdam CT score of initial head CT to predict functional outcomes in children with traumatic brain injury (TBI).

Children (n=108) aged 31months-15years with moderate to severe TBI were prospectively enrolled at two sites. The ability of PILOT, ED GCS, and Rotterdam scores to predict the 6-month Pediatric Injury Functional Outcome Scale (PIFOS) was evaluated using multivariable regression models with enrollment site, age, and sex as covariates.

PILOT total (sum) score was more predictive of PIFOS (R2=0.23) compared to mean (R2 = 0.20) or peak daily PILOT scores (R2=0.11). PILOT total score predicted PIFOS better than ED GCS (R2=0.01) or Rotterdam score (R2=0.06) and was similar to PILOT, ED GCS, and Rotterdam score combined. PILOT total score performed better in patients with intracranial pressure monitors (n=30, R2=0.28, slope=0.30) than without (n=78, R2=0.09, slope=0.36).

The PILOT score correlated moderately with functional outcome following TBI and outperformed other common predictors. PILOT may be a useful predictor or moderator of functional outcomes [1].

1)
Flaherty BF, Jackson ML, Cox CS Jr, Clark A, Ewing-Cobbs L, Holubkov R, Moore KR, Patel RP, Keenan HT. Ability of the PILOT score to predict 6-month functional outcome in pediatric patients with moderate-severe traumatic brain injury. J Pediatr Surg. 2019 Jul 8. pii: S0022-3468(19)30449-X. doi: 10.1016/j.jpedsurg.2019.06.022. [Epub ahead of print] PubMed PMID: 31327541.