

عنوان مقاله:

Accuracy of Pediatric Emergency Care Applied Research Network Rules in Prediction of Clinically Important Head Injuries; A Systematic Review and Meta-Analysis

محل انتشار:

مجله بین المللی کودکان, دوره 5, شماره 12 (سال: 1396)

تعداد صفحات اصل مقاله: 16

نویسندگان:

.Sajjad Ahmadi - *Emergency Medicine Department, Maragheh University of Medical Sciences; Maragheh; Iran*

Mahmoud Yousefifard - *Physiology Research Center and Department of Physiology, Faculty of Medicine, Iran University of Medical Sciences; Tehran, Iran*

خلاصه مقاله:

Objective: the present meta-analysis was designed to determine the value of Pediatric Emergency Care Applied Research Network (PECARN) rule in prediction of clinically important traumatic brain injury (ciTBI). Methods: Extensive search was conducted in the databases of Medline, Embase, Scopus, Web of Sciences, Cinahl up to the end of August 2017. The search records were screened and summarized by two independent reviewers, and eventually the findings were presented as summary of receiver operating characteristics (SROC), sensitivity, specificity and diagnostic odds ratio with 95% confidence interval (95% CI). Results: Data from 10 studies were included in this meta-analysis. Area under the curve (AUC) of SROC for PECARN model in prediction of ciTBI in children younger than 2 years old was 0.85 (95% CI: 0.82-0.88). Sensitivity, specificity and diagnostic odds ratio of this model were also calculated to be 0.98 (95% CI: 0.92-1.0), 0.56 (95% CI: 0.48-0.64) and 82.53 (95% CI: 16.23-419.63), respectively. AUC of SROC for this model in prediction of ciTBI in children aged 2-18 years old was also found to be 0.97 (95% CI: 0.95-0.98) with a sensitivity, specificity and diagnostic odds ratio of 0.98 (95% CI: 0.95-0.99), 0.60 (95% CI: 0.53-0.67) and 80.73 (95% CI: 30.59-213.05). Conclusion: The findings of this study are indicative of a high screening value for PECARN model in prediction of ciTBI and classification of patients. So it is recommended that the decision rule be used in routine practice for children referring with mild traumatic brain injuries

کلمات کلیدی:

Brain Concussion, Brain Injuries Technique, Decision Support, PECARN

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/892378>

