The pediatric submersion score predicts children at low risk for injury following submersions
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A risk score can identify children at low risk for submersion-related injury who can be safely discharged from the ED after observation. That is the primary finding of a study to be published in the December 2017 issue of Academic Emergency Medicine (AEM), a journal of the Society for Academic Emergency Medicine (SAEM).

The lead author of the study is Rohit P. Shenoi, MD, associate professor in the Department of Pediatrics at Baylor College of Medicine, attending physician, Texas Children's Hospital, and coordinator of the Houston Trauma Link Coalition.

Dr. Shenoi is active in research and surveillance of accidental pediatric injuries (due to automobile crashes, submersions, and other causes) in Houston and Harris County, Texas. His activities include the preparation of injury fact sheets and maps on accidental childhood injuries at the city, county, and regional levels using fire/EMS, crash, and state trauma registry databases. This data is used to guide injury-prevention programs by organizations such as the Houston Police Department and Greater Houston Safe Kids. His research group prepares the Annual TCH Non-Accidental Injury Report and is spearheading efforts in developing a state-wide electronic surveillance system for submersion injuries.

The study by Shenoi and colleagues suggests that while the pediatric submersion score is useful to a health practitioner in most clinical settings, further study is recommended to determine if the discriminative ability of the submersion score could be improved by including laboratory tests or chest radiographs.

"Emergency physicians frequently face the question whether a pediatric submersion victim must be admitted to the hospital or if the victim can be safely discharged to the community. Considerable judgment is necessary. Data to support consistent high-quality decisions is lacking. "With further study and validation, the effort by Dr. Shenoi and colleagues will be important in future management of low-risk childhood submersion. They have collected information expressly to answer the clinical question whether submersion victims may safely go home from the emergency department. Collecting these data is a significant advance, and Dr. Shenoi’s team used sophisticated statistical methods to develop a proposed guideline, the Pediatric Submersion Score, from the evidence. "As the authors have noted, their single-center experience must be validated in other institutions before physicians can confidently change their standard of care. It is likely that the proposed guideline can be improved over the coming years. Their contribution is a significant beginning. It should increase the safety and cost-effectiveness of this common emergency."

Provided by Society for Academic Emergency Medicine

Otwell D. Timmons, MD, a pediatric intensivist at Levine Children's Hospital at Carolinas Medical Center, Charlotte, North Carolina, commented: