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INTRODUCTION / AIM

Addressing pain in children is an important task for emergency nurses and physicians. Current literature highlights a significant deficiency in our ability to assess and treat pain in this population even though there is multiple pediatric pain scales available. We compared 3 pain scales used with children in the Emergency Department (ED).

METHODS

A prospective study was conducted on children between 6 and 18 years who presented to 3 pediatric EDs with a musculoskeletal injury and with an initial pain score over 30 mm on a Visual Analog Scale (VAS). They also understood, read and/or spoke either French or English. We compared three pain scales in use with a pediatric population, the VAS, the Faces Pain Scale- Revised (FPS-R) and the Color Analog Scale (CAS) for convergent validity using Pearson correlation coefficient. Children were administered analgesics according to protocol and measures were taken at 60-min post-analgesia.

RESULTS

A total of 495 participants were analyzed, with a global mean age of 11.9 ± 2.9 years. Boys accounted for 55% (272/495) of participants. Pearson s coefficients between scales are: VAS-FPS-R: 0.78; VAS-CAS: 0.92; CAS-FPS: 0.79.

DISCUSSION / CONCLUSIONS

The VAS and CAS show strong convergent validity. Correlation between VAS and FPS-R is lower. VAS and FPS do not seem comparable to measure pain intensity of children with moderate to severe musculoskeletal pain.

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