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Annals of Emergency Medicine

Volume 74, NO. 4 : October 2019

## 16A GLOBAL RESEARCH HIGHLIGHTS

### PEDIATRICS

**FREE**  **471 Validation of the Pediatric Appendicitis Risk Calculator (pARC) in a Community Emergency Department Setting** (Original Research)

DM Cotton, DR Vinson, G Vazquez-Benitez, E Margaret Warton, ME Reed, UK Chettipally, MV Kene, JS Lin, DG Mark, DR Sax, ID McLachlan, AS Rauchwerger, LE Simon, AB Kharbanda, EO Kharbanda, DW Ballard, for the Clinical Research on Emergency Services and Treatments (CREST) Network

*What question this study addressed:* How does the pediatric Appendicitis Risk Calculator (pARC) compare with the Pediatric Appendicitis Score (PAS) for the diagnosis of appendicitis? *What this study adds to our knowledge:* In this prospective validation study conducted at 11 community emergency departments, the pARC was more accurate than the PAS for appendicitis (area under the curve 0.89, 95% CI 0.87 to 0.92 versus 0.80, 95% CI 0.77 to 0.82).

 **481 Palliative Care in the Pediatric Emergency Department: Findings From a Qualitative Study** (Original Research)

A-J Côté, A Payot, N Gaucher

*What question this study addressed:* Using semistructured focus groups of health care professionals from multiple specialties, the authors examine the barriers, roles, and solutions for providing pediatric palliative care in the emergency department. *What this study adds to our knowledge:* Emergency physicians can help create a caring environment for the child and family in need of palliative care by eliciting and listening to their wishes, contacting their health care teams, and eliminating distressing symptoms.

**493 Diagnostic Performance of Ultrasonography for Detection of Pediatric Elbow Fracture: A Meta-analysis** (Systematic Review/Meta-Analysis)

SH Lee, SJ Yun

*What question this study addressed:* Meta-analysis of 10 articles involving 519 patients found a pooled summary sensitivity of 96% (95% confidence interval 88% to 99%), specificity of 89% (95% confidence interval 82% to 94%), and false-negative rate of 3.7% (95% confidence interval 2.5% to 6.5%). Performers of ultrasonography who have extra training in musculoskeletal ultrasonography demonstrated higher specificity. *What this study adds to our knowledge:* This study summarizes the literature, reporting pooled test characteristics for point-of-care ultrasonography to diagnose pediatric elbow fractures.

**503 New Cluster of Acute Flaccid Myelitis in Western Pennsylvania** (Case Report)

N Cramer, N Munjal, D Ware, S Ramgopal, D Simon, MC Freeman, MG Michaels, C Stem, K Thakkar, JV Williams, A Panigrahy, DNW Neville, S Owusu-Ansah

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- SRS** **509 Does Room Air Reduce Mortality Among Term Neonates Requiring Respiratory Support at Birth?** (Systematic Review Snapshot)  
*B Long, MD April*

PAIN MANAGEMENT AND SEDATION

- 512 A Randomized, Placebo-Controlled Trial of Ibuprofen Plus Metaxalone, Tizanidine, or Baclofen for Acute Low Back Pain** (Original Research)  
*BW Friedman, E Irizarry, C Solorzano, E Zias, S Pearlman, A Wollowitz, MP Jones, PD Shah, EJ Gallagher*

*What question this study addressed:* When added to nonsteroidal anti-inflammatory drugs, do muscle relaxants improve functional outcomes for acute low back pain? *What this study adds to our knowledge:* In this well-powered, 4-arm, controlled trial of 320 adults, outcomes were similar at 7 days whether patients supplemented ibuprofen with placebo, baclofen, metaxalone, or tizanidine.

- 521 Oral Paracetamol Versus Combination Oral Analgesics for Acute Musculoskeletal Injuries** (Original Research)  
*J Gong, M Colligan, C Kirkpatrick, P Jones*

*What question this study addressed:* Does the combination of acetaminophen 1,000 mg, ibuprofen 400 mg, and codeine 60 mg provide greater analgesia than acetaminophen 1,000 mg alone? *What this study adds to our knowledge:* In this adequately powered, randomized, double-blind trial of 118 adults with acute musculoskeletal pain, pain scores were similar at 60 minutes in both groups. There were more adverse events in the combination group.

- 530 Comparison of Oral Ibuprofen at Three Single-Dose Regimens for Treating Acute Pain in the Emergency Department: A Randomized Controlled Trial** (Original Research)  
*S Motov, A Masoudi, J Drapkin, C Sotomayor, S Kim, M Butt, A Likourezos, C Fassassi, R Hossain, J Brady, N Rothberger, P Flom, J Marshall*

*What question this study addressed:* Do ibuprofen doses of 600 or 800 mg improve analgesia relative to 400 mg in emergency department patients with a variety of pain syndromes? *What this study adds to our knowledge:* In this adequately powered, randomized, double-blind trial of 225 adults, there were similar decreases in pain scores at 60 minutes with all 3 dosages.

- 538 The Reality of Pain Scoring in the Emergency Department: Findings From a Multiple Case Study Design** (Original Research)  
*FC Sampson, SW Goodacre, A O’Cathain*

*What question this study addressed:* How do emergency department (ED) providers perceive and use pain score data? *What this study adds to our knowledge:* Using a qualitative case vignette-based study of 36 providers and 19 patients in 3 EDs in England, the authors found staff use the scores to guide care and assess patient experience, but often are conflicted about the patient’s reported score and their perceptions of the patient’s pain intensity.

NEUROLOGY

- FREE CME** **549 Missed Serious Neurologic Conditions in Emergency Department Patients Discharged With Nonspecific Diagnoses of Headache or Back Pain** (Original Research)  
*NM Dubosh, JA Edlow, T Goto, CA Camargo, Jr, K Hasegawa*

*What question this study addressed:* Among emergency department (ED) patients discharged with nonspecific diagnoses of headache or back pain, how many return within 30 days with a serious neurologic condition or in-hospital death? *What this study adds to our knowledge:* Among 2,101,081 ED patients discharged with headache, 10,374 (0.5%) returned and had a serious condition, the most frequent being cerebrovascular occlusion. Among 1,381,614 ED patients discharged with back pain, 2,850 (0.2%) returned and had a serious condition, the most frequent being intraspinal abscess.

- 🔗 **562 Safety and Feasibility of a Rapid Outpatient Management Strategy for Transient Ischemic Attack and Minor Stroke: The Rapid Access Vascular Evaluation–Neurology (RAVEN) Approach** (Original Research)  
*BP Chang, S Rostanski, J Willey, EC Miller, S Shapiro, R Mehendale, B Kummer, BB Navi, MSV Elkind*  
*What question this study addressed:* Is rapid access to a specialized transient ischemic attack and minor stroke clinic a safe and feasible alternative to hospitalization after a brief initial emergency department evaluation? *What this study adds to our knowledge:* None of the 162 patients experienced a disabling stroke within 90 days. No thrombectomies or thrombolytics were administered during follow-up. Approximately one third of the patients received alternative diagnoses in the clinic.
- 572 The Future of Minor Stroke and Transient Ischemic Attack: The RAVEN Approach Is Promising but Not Ready for Prime Time** (Editorial)  
*TE Madsen, CR Wira*
- 🔗 **575 Do Calcium Antagonists Decrease Mortality or Dependency in Acute Ischemic Stroke?** (Systematic Review Snapshot)  
*RE Bridwell, B Long, MD April*
- 578 Clinical Policy: Critical Issues in the Evaluation and Management of Adult Patients Presenting to the Emergency Department With Acute Headache (Executive Summary)** (Clinical Policy)  
*SA Godwin, DS Cherkas, PD Panagos, RD Shih, R Byyny, SJ Wolf*
- 🔗 **e41 Clinical Policy: Critical Issues in the Evaluation and Management of Adult Patients Presenting to the Emergency Department With Acute Headache** (Clinical Policy)  
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INFECTIOUS DISEASE

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- 🔗 **580 Guideline-Based Clinical Assessment Versus Procalcitonin-Guided Antibiotic Use in Pneumonia: A Pragmatic Randomized Trial** (Original Research)  
*E Montassier, F Javaudin, F Moustafa, D Nandjou, M Maignan, J-B Hardouin, C Annot, M Ogielska, P-L Orer, T Schotté, J Bouget, S Agha Babaei, P-A Raynal, A Eche, AT Duc, R-A Cojocar, N Benaouicha, G Potel, E Batard, DA Talan*  
*What question this study addressed:* How does a procalcitonin-guided antibiotic strategy compare with a consensus clinical guideline–based approach? *What this study adds to our knowledge:* In 12 French hospitals treating 285 emergency department patients with presumed community-acquired pneumonia who were randomly assigned to one of the approaches, the group antibiotic duration, success, and adverse events did not reveal the difference hypothesized before the trial.
- 592 Increase in Measles Cases—United States, January 1–April 26, 2019** (CDC Update)  
*J Shibata*

- 593 Commentary** (CDC Update)

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### **The Peer Review Process at *Annals of Emergency Medicine***

Most readers highly value the fact that articles in a journal like ours have undergone formal peer review. Many readers also have a relatively simple understanding of that term as describing a single well-defined process of review by expert reviewers, but it is a lot more complicated and nuanced than that. We therefore provide a very brief summary of our procedures to provide appropriate levels of review for most (but not entirely all) the journal content.

Although we try to be a model among journals for the rigor of our peer review process, like most of them (including the most prestigious) this does not mean that all content is peer reviewed in the same way. All original content (particularly research content) in the journal is peer reviewed by one of the many experts on our editorial board, but additional peer review of every submission by members of our reviewer panel is not always necessary or appropriate. Many submissions are not appropriate for the journal for one fairly obvious reason or another (eg, target audience), so like most other journals we reject many manuscripts after review by an editor. For those which are not obviously inappropriate, however, we receive far more submissions than we can publish, so our further process seeks to identify the best of the best.

The vast majority of scientific content that we publish is critically reviewed first by members of our editorial board with specific expertise, and then gets additional scrutiny from our expert reviewers. Our most stringent level of review is reserved for original research, which will form the basis of the scientific record in the future. These submissions are reviewed by at least two of our expert reviewers who are blinded to the identity of the authors. Quite a few papers are reviewed more than once, and sometimes in particularly complex cases 5 or 6 reviewers and editors may be involved, including deputy editors. During this process there is much consultation and discussion between editors, reviewers, and authors and recommendations are made to the authors. Sometimes that discussion exceeds the length of the original paper itself, and it certainly is a laborious and time-consuming process. Editors and reviewers must disclose potential conflicts of interest which are managed as per a rigorous policy (<http://www.annemergmed.com/content/policies-coi>). Virtually no original research is accepted with no revisions whatsoever, and our authors strongly agree that in general the process improves the quality of the final manuscript. Once it has been discussed, revised, and received the final stamp of approval from the supervising editor (whose name is always published with the manuscript for transparency), all original science content in the journal undergoes a final review by the editor in chief before acceptance.

None of this means the final article is irrefutable truth; such a thing does not exist in science where our state of knowledge is (we hope) constantly evolving and no study should be judged in isolation. But it does mean that we've asked all the appropriate questions we could think of, made suggestions, and required revisions to make the paper as complete and transparent to replication as possible.

This process for original research is the most rigorous and is probably what most readers think of as "formal peer review," but the journal contains much other content of a factual and scientific nature which does not lend itself to this approach. For example, we have a number of regular journal features (like News & Perspective, CDC Update, NHTSA Notes, etc) that are updates written by selected topic experts on a routine basis. These are also reviewed by an editor but not sent out for additional review. A very few items, such as ACEP Clinical Policies, are published verbatim from the experts that develop them and are not revised (for obvious reasons); this fact is published along with each.

There are always some exceptions to the above processes as we develop new types of content or relatively unique contributions occur. We try to describe the particular variants of peer review that were used for each of these, or if there was none, that is made clear as well. Our goal is to provide as much oversight as is needed and logistically practical, and to enable readers to determine what that level of oversight was as conveniently as possible.