

TABLE OF CONTENTS

Annals of Emergency Medicine

Volume 74, NO. 1 : July 2019

17A GLOBAL RESEARCH HIGHLIGHTS

PEDIATRICS

FREE 1 **Delayed Presentations to Emergency Departments of Children With Head Injury: A PREDICT Study** (Original Research)

ML Borland, SR Dalziel, N Phillips, MD Lyttle, S Bressan, E Oakley, SJC Hearps, A Kochar, J Furyk, JA Cheek, J Neutze, Y Gilhotra, S Dalton, FE Babl, on behalf of the Paediatric Research in Emergency Department International Collaborative (PREDICT) Group

What question this study addressed: What is the prevalence of traumatic brain injury on computed tomography scan and clinically important traumatic brain injury in children presenting greater than 24 hours after a minor head injury? *What this study adds to our knowledge:* This prospective cohort study reported that some children initially presenting greater than 24 hours after head trauma (N=981) had traumatic brain injury (3.8%) or clinically important traumatic brain injury (0.8%), with 6 of the 8 patients with clinically important traumatic brain injury having an accompanying skull fracture and all having concerning physical findings such as nonfrontal boggy hematoma.

11 **Utility of the “No Response” Option in Detecting Youth Suicide Risk in the Pediatric Emergency Department** (Brief Research Report)

T Hengehold, S Boyd, S Liddy-Hicks, J Bridge, J Grupp-Phelan

What question this study addressed: Is a youth who fails to answer screening questions at risk for suicidality? *What this study adds to our knowledge:* In this study of 3,388 children aged 12 to 17 years, suicide risk was substantial for both those who answered yes and those who did not respond to any of the 4 screening questions.

 19 **Ultrasonographic Guidance to Improve First-Attempt Success in Children With Predicted Difficult Intravenous Access in the Emergency Department: A Randomized Controlled Trial** (Original Research)

AM Vinograd, AE Chen, AL Woodford, S Fesnak, S Gaines, OU Elci, JJ Zorc

What question this study addressed: This study aimed to determine whether ultrasonography improved first-attempt peripheral intravenous line success rates compared with traditional palpation methods for children with predicted difficult access. *What this study adds to our knowledge:* In this trial of 167 children, ultrasonographically guided peripheral intravenous line placement had a higher first-attempt success rate compared with traditional methods (85% versus 46%; relative risk 1.9; 95% confidence interval 1.5 to 2.4). Physicians placed the majority of ultrasonographically guided peripheral intravenous lines with a long catheter, whereas nurses placed all of the traditional intravenous lines with a short catheter.

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Annals of Emergency Medicine (ISSN: 0196-0644) is published monthly by Elsevier Inc., 230 Park Ave, Suite 800, New York, NY 10169-0901, USA. Periodicals postage paid at New York, NY, and at additional mailing offices.

POSTMASTER: Send address changes to Elsevier, Journal Returns, 1799 Highway 50 East, Linn, MO 65051, USA.

- 🎧 **28 Ultrasonographically Guided Peripheral Intravenous Access: The Answer for Pediatric Patients With Difficult Access** (Editorial)
JR Marin

- 🎧 **30 Managing the Frightened Child** (Expert Clinical Management)
BA Krauss, BS Krauss

INFECTIOUS DISEASE

- 🎧 **36 Use of a Rapid Diagnostic for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* for Women in the Emergency Department Can Improve Clinical Management: Report of a Randomized Clinical Trial** (Original Research)
CA Gaydos, M-C Ako, M Lewis, Y-H Hsieh, RE Rothman, AF Dugas

What question this study addressed: Women receiving pelvic examination and testing for chlamydia and gonorrhea (n=254) were randomized to routine testing (results in 2 to 3 days) versus rapid test results available in the emergency department. Treatment was at clinician discretion. *What this study adds to our knowledge:* In the rapid testing group, 100% of patients positive for chlamydia or gonorrhea were treated versus 56% in the routine testing group. For patients uninfected, approximately 25% were unnecessarily treated in the rapid testing group versus 47% in the routine testing group.

- 🎧 **45 Antibiotic Prescriptions Associated With Dental-Related Emergency Department Visits** (Brief Research Report)
RM Roberts, AL Hersh, DJ Shapiro, KE Fleming-Dutra, LA Hicks

What question this study addressed: According to the National Hospital Ambulatory Medical Care Survey during 2011 to 2015, what is the frequency of various emergency department (ED) dental diagnoses and associated rates of antibiotic prescriptions? *What this study adds to our knowledge:* Dental-related diagnoses accounted for approximately 2.2 million (1.6%) ED visits annually. The most common dental diagnostic codes were unspecified disorders of the teeth and supporting structures (44%), periapical abscess (21%), and dental caries (18%). Antibiotics, usually a narrow-spectrum penicillin or clindamycin, were prescribed in 65% of these encounters. Recommended treatments for many of these tooth-pain-related presentations are dental procedures, not antibiotics. The common use of antibiotics may indicate an unmet need for preventive and urgent dental care access.

- 50 Emergency Department Environmental Contamination With Methicillin-Resistant *Staphylococcus aureus* After Care of Colonized Patients** (Brief Research Report)
SY Liang, DR Jansson, PG Hogan, TW Raclin, ML Sullivan, CE Muenks, S Munigala, SL House, SA Fritz

What question this study addressed: This study sought to determine the extent to which patients with a history of methicillin-resistant *Staphylococcus aureus* (MRSA) colonization or infection in the preceding year contaminated environmental surfaces during an emergency department encounter. *What this study adds to our knowledge:* Of 42 patients enrolled, 25 (60%) remained colonized. The rate of surface contamination with MRSA was highly associated with the patient's MRSA colonization status (76% versus 18%), as well as the number of colonized patient body sites.

- 🎧 **e1 Are Corticosteroids Beneficial in the Treatment of Community-Acquired Pneumonia?** (Systematic Review Snapshot)
T Seagraves, M Gottlieb

- 56 Wound Botulism Outbreak Among Persons Who Use Black Tar Heroin—San Diego County, California, 2017-2018.** (CDC Update)
TM Kalinoski, MA Waxman

- 58 Commentary** (CDC Update)

60 Performance of the CURB-65 Score in Predicting Critical Care Interventions in Patients Admitted With Community-Acquired Pneumonia (Original Research)

A Ilg, A Moskowitz, V Konanki, PV Patel, M Chase, AV Grossestreuer, MW Donnino

What question this study addressed: How frequently do patients classified as being at low risk for mortality by confusion, uremia, elevated respiratory rate, hypotension, and aged 65 years or older (CURB-65) require critical care interventions in the course of their illness? *What this study adds to our knowledge:* Two thousand two hundred thirty-two eligible inpatients with community-acquired pneumonia were retrospectively identified. Of 480 patients in the lowest CURB-65 risk category, few died (0.6%) but 4.2% received vasopressors, assisted ventilation, invasive catheters, an insulin drip, or dialysis.

69 Evaluating Clinical Decision Tools: Can We Optimize Use Before They Turn Us Into Fools? (Editorial)

SM Schenkel, PC Wyer

TRAUMA

FREE  **72 Evaluating Effectiveness of Nasal Compression With Tranexamic Acid Compared With Simple Nasal Compression and Merocel Packing: A Randomized Controlled Trial** (Original Research)

S Akkan, ŞK Çorbacıoğlu, H Aytaç, E Emektar, S Dağar, Y Çevik

What question this study addressed: Is topical tranexamic acid delivered by an atomizer and external nasal compression (without packing) an alternative to traditional nasal packing? *What this study adds to our knowledge:* Investigators in this 135-patient randomized trial found no difference in atomized tranexamic acid with nasal compression compared with nasal packing on the outcome of stopping anterior epistaxis bleeding. Rebleeding rates were also lower in the tranexamic acid group.

 **79 The Effect of Tranexamic Acid on Functional Outcomes: An Exploratory Analysis of the CRASH-2 Randomized Controlled Trial** (Original Research)

DK Nishijima, N Kuppermann, I Roberts, JM VanBuren, DJ Tancredi

What question this study addressed: Does tranexamic acid use in severely injured patients improve overall functional capacity? *What this study adds to our knowledge:* This secondary and exploratory analysis of patients randomized to placebo (n=6,679) or tranexamic acid (n=6,753) suggests that the use of tranexamic acid in injured patients is associated with improved patient function as measured up to 28 days postinjury. This improvement was mainly noted among individuals with the lowest mortality risk (<6%).

 **88 Is Buddy Taping as Effective as Plaster Immobilization for Adults With an Uncomplicated Neck of Fifth Metacarpal Fracture? A Randomized Controlled Trial** (Original Research)

R Pellatt, I Fomin, C Pienaar, R Bindra, M Thomas, E Tan, C Mervin, P Zhang, G Keijzers

What question this study addressed: This randomized, nonblinded trial compared plaster casting with buddy taping in emergency department patients with a boxer's fracture. Primary outcome measure was hand function at 12 weeks, measured by the Shortened Disabilities of the Arm, Shoulder and Hand score. *What this study adds to our knowledge:* Functional outcomes were similar at 12 weeks.

SRS **98 What Is the Incidence of Intracranial Hemorrhage Among Anticoagulated Patients With Minor Head Trauma?** (Systematic Review Snapshot)

M Gottlieb, SM Thottathil, JP Holton

EMERGENCY MEDICAL SERVICES

 **101 Is Use of Warning Lights and Sirens Associated With Increased Risk of Ambulance Crashes? A Contemporary Analysis Using National EMS Information System (NEMIS) Data** (Original Research)

BL Watanabe, GS Patterson, JM Kempema, O Magallanes, LH Brown

What question this study addressed: This retrospective national emergency medical services (EMS) database analysis evaluated the association between lights and sirens use and ambulance crash risk. *What this study adds to our knowledge:* In this 19-million-run database, the overall ambulance crash risk was 12.4 of 100,000 runs. EMS scene response risk was 4.6 of 100,000 without and 5.4 of 100,000 with lights and sirens. The risk during transport was 7.0 of 100,000 without and 17.1 of 100,000 with lights and sirens.

🔊 **110 Lights and Siren: A Risky Business?** (Editorial)

K Tanaka, RA De Lorenzo

112 EMS Can Safely Transport Intoxicated Patients to a Sobering Center as an Alternate Destination (Original Research)

SM Smith-Bernardin, M Kennel, C Yeh

What question this study addressed: The case volume, referrals to the emergency department (ED), and clinical reasons for referral were recorded and categorized. *What this study adds to our knowledge:* Of 11,596 sobering center visits, 35% were referred by emergency medical services, 12% by the ED, and smaller numbers from several other sources. One patient was found dead in the sobering center restroom from cocaine intoxication. Of the total sobering center visitors, 506 were secondarily transferred to an ED for various reasons: tachycardia (26%), alcohol withdrawal (19%), pain (excluding chest pain) (19%), altered mental status (13%), and emesis (13%); there were no deaths.

119 Conquering Consultations: A Guide to Advances in the Science of Referral-Consultation Interactions for Residency Education (Residents' Perspective)

J Baylis, EM Miloslavsky, R Woods, TM Chan

THE PRACTICE OF EMERGENCY MEDICINE

🔊 **126 The Effect of Shared Decisionmaking on Patients' Likelihood of Filing a Complaint or Lawsuit: A Simulation Study** (Original Research)

EM Schoenfeld, S Mader, C Houghton, R Wenger, MA Probst, DA Schoenfeld, PK Lindenauer, KM Mazor

What question this study addressed: Does the practice of shared decisionmaking change the likelihood that a patient with a bad outcome will initiate a lawsuit? *What this study adds to our knowledge:* According to a written simulation of delayed diagnosis presented to a nonrandom general population through the Internet, the use of shared decisionmaking may alter patients' sense of fault and reduce liability risk.

🔊 **137 Simulation, Selection, and Mechanical Turk: Can Cases Presented Online Help Us Learn About Shared Decisionmaking and Medical Malpractice?** (Editorial)

GW Ramsey

140 Triage Performance in Emergency Medicine: A Systematic Review (Systematic Review/Meta-Analysis)

JS Hinson, DA Martinez, S Cabral, K George, M Whalen, B Hansoti, S Levin

What question this study addressed: This study examined the reliability, as well as the sensitivity and specificity of predicting mortality (emergency department [ED], in-hospital, 1 day, and 7 days after the ED visit), critical illness, and hospitalization for 5 ED triage scales. *What this study adds to our knowledge:* Not enough studies with similar methodology exist to compare the scales' validity for the outcomes identified. None of the scales demonstrated consistently high reliability.

🔊 **153 Does the Addition of Vasopressin to Catecholamine Vasopressors Affect Outcomes in Patients With Distributive Shock?** (Systematic Review Snapshot)

SK Roumpf, BR Hunter

IMAGES IN EMERGENCY MEDICINE

17 Middle-Aged Woman With Neck Pain

SL Adelman, JM Watson, RG Bhat, JE Davis

-  **18 Elderly Female With Sudden Arm Weakness**
C-D Wang, Y-P Hsu, C-W Hsu, Y-C Yu, W-C Huang
-  **156 Man With Blurred Vision**
WN Davis, M Radomski
-  **157 Man With Scrotal Pain and Swelling**
C-W Tsai, C-W Hsu, KCW Chu, W-C Huang
-  **e5 Woman With Left-Sided Chest Pain**
L Jennings, A Matuskowitz, P Suranyi
-   **e7 Elderly Woman With Abdominal Pain and Melena**
K-C Hu, J-L Chang, C-W Hsu, W-C Huang
-   **e9 Man With Progressive Dyspnea**
C-S Chen, C-H Lin
-  **e11 Woman With Acute Left Thigh Pain**
K Emoto, Y Suyama, T Abe, S Yoshino, M Kiyota

CHANGE OF SHIFT

- 158 Man in the Hall**
A Chou

ANNALS OF EMERGENCY MEDICINE JOURNAL CLUB

-  **160 Bag-Valve-Mask Ventilation After Induction for Intubation: PreVenting Hypoxemia?**
WT Davis, RP Radecki, RJ Spiegel

CORRESPONDENCE

- 163 Effect of Urinalysis on the Role of Pelvic Examination in Patients With Possible Genitourinary Infection**
M Akhter/C Tejani, AB Sivitz, S Farrukh, K Patel
- 164 Additive Value of Pelvic Examinations to History**
AW Swartz/C Tejani, AB Sivitz, S Farrukh, K Patel
- 166 Hypothermic Cardiac Arrest Patients' Selection Criteria for Extracorporeal Life Support Rewarming in Extreme Cases**
P Podsiadlo, S Kosiński, T Darocha, O Hugli, M Pasquier/G Strapazon, S Rauch, G Cipollotti, A Forti, H Brugger

- 170 BOOK AND MEDIA REVIEW**
-

READER SERVICES

24A Information for Readers

27A Calendar for Continuing Education

40A Classified Advertising Rates & Data

41A Classified Advertising

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<http://www.annemergmed.com/content/instauth>

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