

Subjects were most often prescribed ciprofloxacin on discharge (47%) followed by trimethoprim/sulfamethoxazole (24%).

Conclusion: Resistance to cefazolin, trimethoprim/sulfamethoxazole, ciprofloxacin, and gentamicin was non-existent in this small retrospective study. In contrast, there may be a high resistance rate to nitrofurantoin in this patient population. Ciprofloxacin, a relatively broad-spectrum antibiotic, may not be necessary for the treatment of infected ureteral calculi.

367 Influenza Scholarly Activity During Pandemic and Non-Pandemic Years

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Study objectives: To determine and quantify a change in publication of influenza-related editorials and original research during an influenza pandemic as compared to non-pandemic seasons.

Methods: We undertook a retrospective bibliometric evaluation of all published articles in Pubmed from 4-2-2006 through 3-27-2010 containing the keyword "influenza." The Centers for Disease Control and Prevention (CDC) influenza surveillance system weeks were used to evaluate weekly publication numbers. Week 13 in 2009 was used as a starting point for the study period since the first case of the novel H1N1 2009 strain of influenza was identified that week. The same weeks from the preceding three years served as controls. Articles not representing original research were identified by using the follow limits on "Publication Type" within Pubmed: Editorial, Letter, Addresses, Bibliography, Biography, Comment, Corrected and Republished Article, Dictionary, Duplicate Publication, English Abstract, Festschrift, Historical Article, Interactive Tutorial, Interview, Lectures, News, Newspaper Article, Overall, Patient Education Handout, Periodical Index, Portraits, Published Erratum, Scientific Integrity Review, Webcasts. Weekly publication rates for the study period were compared with the weekly average of the preceding three years. We calculated a t-test of means of the weekly publication rate, original research publication rate and editorial publication rate comparing the pandemic season with the preceding three years.

Results: The average number of total weekly publications during the pandemic was 110.2 v. 69.9 during the preceding three years ($p < 0.000$). Average weekly original research publications during the pandemic increased significantly (84.6 v. 57.9, $p < 0.0000$). While there were a significantly larger number of editorials and commentaries during the pandemic (25.6 v. 12.0, $p < 0.000$), this difference did not entirely account for the greater number of total publications, and in fact, the percentage of total publications that were original research was greater during the pandemic than the preceding years (83.0 v. 77.0, $p < 0.000$).

Conclusion: Scientific study of the novel 2009 H1N1 influenza strain significantly increased during the 2009-10 influenza season. Total gross publications related to influenza increased during the pandemic by 58%, an average of 40.3 articles per week. The majority of this increase is due to original research. This study is limited by the accuracy of classification of articles within Pubmed. It did not take into account the difference between when studies were performed and when they were published. The novel 2009 H1N1 strain of influenza spurred scientists to pursue and publish influenza-related research, advancing the field significantly in a very short period of time.

368 Theoretical Systems Analysis Comparing Physiologic Endpoints of Standard AHA and Compression-Only CPR

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Study Objectives: Several recent studies suggest that compression-only CPR (C-CPR) has similar or superior outcomes to the standard AHA guidelines CPR (S-CPR). However, it has been difficult to rigorously study the key metabolic and hemodynamic endpoints in the acute clinical environment. A systems analysis approach employing a mathematical model of human physiology (Guyton/Coleman/Summers model) was used to compare the expected physiologic perturbations of S-CPR and C-CPR strategies

Methods: The computer model contains over 6000 variables of biologic interactions and encompasses a variety of physiologic processes of interest during the performance of CPR. The model is constructed on a foundation of basic physical principles and mass balances in an integrated scheme connected through algebraic loops and differential equations to create a global homeostatic system. A series of computer simulations recreated the protocols of S-CPR and C-CPR (100 compressions/minute). Critical physiologic endpoints predicted by the model for each of the strategies were compared during the performance of the initial 4 minutes of simulated high quality CPR.

Results: The S-CPR protocol resulted in a 34% lower average systemic blood flow as compared to a C-CPR strategy. This difference produced a small increase in the blood and tissue acid load with a 10% higher serum lactate concentration and 3% lower ventricular tissue pH. However, the model also predicted that performing S-CPR could result in slightly better blood and tissue oxygen content (4% and 15% respectively).

Conclusion: There has been some debate concerning the operational strategy that should be used to optimize the patient's physiologic condition during the performance of CPR. A theoretical systems analysis of the problem using a computer model of human physiology suggests that S-CPR provides slightly better oxygenation but at the cost of increasing the tissue acid burden as compared to C-CPR.

369 "Point of View" Video Documentation In the Emergency Department: Feasibility and Patient/Provider Perception

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Study Objectives: Point-of-view video recording (POVVR) is an emerging, hands-free technology used in law enforcement to record encounters. It has not previously been described in medical encounters. POVVR may have the ability to save time and improve documentation accuracy, reducing liability risk and enhancing reimbursement, and could be an important teaching tool. The goal of this investigation was to determine the feasibility of recording patient encounters in the ED using POVVR and to determine if POVVR is accepted by patients and care providers when used during clinical encounters in the ED.

Methods: This was a prospective, observational study of the AXON POVVR (Taser International, Scottsdale, AZ) conducted at an urban, Level 1 Trauma Center. The device was used by 6 emergency physicians during a 30-day surveillance period. The emergency physician wore the unit during their shift. Patients who were going to be seen by the emergency physician were approached by a trained research associate for study enrollment. Patients who were <18 years old, who were with other people in the exam room, did not speak English, were critically ill, had chief complaints involving genitalia or sexual assault, were considered to be vulnerable adults, or with an altered mental status were excluded. The POVVR was used during the encounter of consenting patients. Consenting patients were given a survey after the encounter to determine their perception of the device. Patients were asked to agree or disagree with the following statements: "The recording device was intimidating," "the recording device made me nervous," "the recording device kept me from telling my physician certain things," "I didn't notice the recording device," and "I liked the recording device." The emergency physician was also surveyed after each shift with a 10-point numeric rating scale (NRS) describing comfort of wearing the device (1=uncomfortable, 10=comfortable) and the ease of using the device (1=difficult to use, 10=easy to use). The successful video recording of the encounter was recorded. Data were analyzed using descriptive statistics.

Results: The 6 emergency physicians saw 895 patients during the study period, 318 (35.5%) were excluded, 41 (4.6%) were discharged prior to being approached, 38 (4.2%) refused to discuss the consent, 81 (9.1%) refused after discussing the consent, leaving 417 (46.6%) consenting eligible patients. 393/417 (94.2%) encounters were successfully recorded; the emergency physician couldn't get the camera to record in 17 (4.1%) encounters, and forgot to turn it on in 7 (1.7%) encounters. 3/417 (0.7%) agreed that they were intimidated by the device, 1/417 (0.2%) agreed it made them nervous, 0/417 (0%) agreed it kept them from telling the emergency physician certain things, 57/417 (13.7%) agreed they didn't notice the device, and 305/417 (73.1%) agreed they liked the device. The physician NRS for device comfort was 5.7, 95% CI 4.8 to 6.6, and ease of use 7.8, 95% CI 7.3 to 8.2.

Conclusion: The use of POVVR appears feasible in the ED, with most encounters successfully recorded. We found acceptance of the device by both patients and emergency physicians. Further study will be needed to determine the utility of the information recorded by the device relative to a typical medical record.

370 Health Information Exchange Consent Policy Influences Emergency Department Patient Data Accessibility

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Study Objectives: The New York Clinical Information Exchange (NYCLIX) has implemented a health information exchange (HIE) capability across several New York