

disease such as HTN is not accurate, suggesting the need for validation (either through medical record review or direct measurement) to ensure accuracy.

5 Low-dose Ketamine for Analgesia in the Emergency Department: A Retrospective Review

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Background: Pain is a common complaint and is often poorly treated in the emergency department (ED). Low-dose ketamine is a known analgesic, but no reports of its use in the ED are present in the literature.

Objectives: To determine the safety and efficacy of low-dose ketamine for analgesia in the ED.

Methods: A retrospective chart review was performed to identify all adult patients receiving low-dose ketamine for analgesia in our ED. Cases were identified by pharmacy record of ketamine administration, and cases of low-dose ketamine administration were identified by review of the medical record. Low-dose ketamine was defined as the administration of approximately 0.1 to 0.6 mg/kg of ketamine for pain control.

Results: Thirty-five cases were identified in which patients received low-dose ketamine in the ED over a two-year period. Doses ranged from 5 mg to 35 mg. Administration was intravenous in 30/35 (86%) and intramuscular in 5/35 (14%) of cases. Opioids were administered, prior to a co-administered low-dose ketamine, in 32/35 (91%) of the cases. Improvement in pain was observed in 19/35 (54%) cases who received low-dose ketamine. Pain scores were not observed to improve in 8/35 (23%) cases. Insufficient data were available to determine effect for an additional 8/35 (23%). Of these latter cases, five (14% of total) had likely benefit and three (9% of total) had no benefit based on disposition. No significant adverse events were identified in any of the 35 cases.

Conclusions: The administration of low-dose ketamine in the ED appears to be safe. Our retrospective case series shows that low-dose ketamine for pain control may be efficacious in some patients in the ED. However, prospective, randomized, controlled trials are needed to determine the efficacy of low-dose ketamine for analgesia in the ED.

6 Incidence of Ovarian Tumor on 1st-Trimester Pelvic Ultrasounds in the ED

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Objectives: Focused emergency department (ED) 1st-trimester pelvic ultrasound (FTPU) examination for symptomatic pregnant patients has evolved to become standard of care at major EDs. Concerns about the risks of overlooking clinically significant incidental findings on organ-specific scans – risks of omission - continue to be used by radiologists to justify the ordering of “formal” ultrasound imaging - complete regional scan performed by ultrasound technicians and interpreted by radiologist ultrasonologists. Using ovarian tumor as an index for this risk of omission, we analyzed the findings on formal pelvic ultrasounds over a five-year period for incidence of ovarian tumor and compared it with that of about 0.1% reported in OB literature.

Methods: 1,520 consecutive formal FTPUs that were performed as part of the ED evaluation of 1st-trimester pregnant patients from May 2001 to May 2006 were reviewed. Patients were included if they had vaginal bleed and/or pelvic pain and < 14 wks pregnant. Pelvic masses seen on ultrasound were recorded and followed for diagnosis of ovarian tumor. In addition, clinically important incidental findings, defined as requiring emergent interventions or definitive follow-up, were also recorded. The hospital is a Level I trauma with an EM residency and an annual census of 43,000 visits/year.

Results: A total of two for an incidence of 0.14% of ovarian tumors was found in this case series. In addition, seven (0.53%) abnormalities were clinically significant: 1 (0.07%) ovarian torsion, 1 (0.07%) kidney stone, 1 (0.07%) angiomyolipoma, 1 (0.07%) gallstones, 3 (0.20%) endometrial/cervical lesion. Sixty-nine (4.54%) abnormalities were considered minor for findings such as subchorionic hematoma or leiomyomata.

Conclusions: The incidence of ovarian tumors seen in formal FTPU ordered from the ED is rare and similar to that in the normal OB population. It is unlikely that emergency medicine physicians performing focused FTPU scans will encounter increased clinically significant incidental pathology.

7 A Sexual Assault Response Team: the South Bronx Experience

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Background: Lincoln Medical Center is the only city hospital serving the South Bronx, the poorest congressional district in the nation. In April 2004, the Bronx Sexual Assault Response Team (SART) was launched to provide specialized care to survivors of sexual assault in this community via a standardized protocol outlined in our paper.

Method: We compared the care received by survivors before and after the inception of SART.

Results: Of the 173 SART patients, 100% were triaged

category A. Ninety-five percent were examined within one hour of arrival, as opposed to 63% prior to SART. Colposcopy was done on 87% of SART patients and 27% of pre-SART, with genital injury documented in 55% of SART cases and 28% of pre-SART, and non-genital injury in 56% of SART and 49% of pre-SART patients. 100% of SART patients received STD, HIV, pregnancy, hepatitis and tetanus prophylaxis. No specific records were kept for pre-SART patients. There have been numerous positive incalculable results since the SART was launched including improved relations with Special Victims Unit, the NYPD, and the DA's office; opportunities for leadership roles in the community as survivor advocates; recruitment of SART examiners from our ED staff; increased awareness of the impact of culture on survival from sexual assault; and opportunities for further research.

Conclusion: The South Bronx SART program has resulted in improved health care for survivors of sexual assault and a benefit to the community. This program model has wide implications for care of survivors of sexual assault nationally.

8 Internationalizing the Broselow™ Pediatric Emergency Tape: How Reliable Is Weight Estimation in Indian Children?

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Objective: The Broselow™ Tape is a reliable method of estimating children's weights based on height-weight correlations and can determine standardized medication dosages and equipment sizes using color-coded zones. Our study sought to determine the accuracy and clinical utility of the Broselow tape in the Indian pediatric population.

Methods: We conducted a prospective cross-sectional study of children receiving care at the outpatient department of a government pediatric hospital in Chennai, India, over one month. Actual weight (measured by a standardized weighing device) and estimated weight (determined by the Broselow Tape) were collected for each child. The mean percentage difference (MPD) was calculated to estimate bias. Accuracy was defined as agreement within 10% between the measured and estimated weights, as well as agreement on Broselow color-coded zones. A correction factor was derived using linear regression.

Results: 548 subjects were divided into the three weight-based groups comprised of 175 (<10kg), 197 (10-18kg) and 176 (>18kg) children. The MPDs (\pm 95% CI) were -2.36% (-4.2, -0.5), -11.34% (-12.87, -9.8) and -12.95% (-14.94, -10.95) for each weight-based group. Agreement within 10% was 52.57% (45.17, 59.96) for the <10 kg group, but only 44.67% (37.72, 51.61) for the 10-18 kg group and 33.52% (26.54,

40.49) for the >18 kg group. The Broselow color-coded zone agreement was 70.85% in children <10kg, but only 56.34% in the 10-18 kg group and 37.5% in the >18kg group. Application of a 10% correction factor improved accuracy to 77.15% (71.29, 83.01) for the 10-18 kg group and 63.06% (55.93, 70.19) for the >18 kg group.

Conclusions: The Broselow Tape overestimates weight by more than 10% in Indian children predicted to be >10kg, increasing the risk of medical errors due to incorrect dosing or equipment selection. Applying a 10% weight-correction factor may be advisable. The accuracy and clinical utility of this correction factor requires prospective validation.

9 Use of Therapeutic Hypothermia for Comatose Survivors of Out-of-Hospital Cardiac Arrest in Arizona Emergency Departments

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Background: Improved neurologic outcomes have been demonstrated in patients undergoing mild therapeutic hypothermia after resuscitation from out-of-hospital cardiac arrest. Therapeutic hypothermia was endorsed in 2003 by the American Heart Association, and in 2005 by the International Consensus Conference on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science. Despite widespread acceptance in the scientific community, therapeutic hypothermia may not be routinely used by emergency physicians.

Objective: To evaluate the current use and methods of administration of mild therapeutic hypothermia for comatose survivors of cardiac arrest in Emergency Departments (EDs) throughout Arizona, and to identify barriers to implementation.

Methods: A telephone survey was administered to all ED medical directors in Arizona. Contact information was extracted from the United States Department of Health and Human Services database. Directors were asked about the demographic characteristics of their hospitals and EDs, current use of therapeutic hypothermia, protocols for hypothermia, perceived barriers to use, and potential for future implementation.

Results: Of 61 ED directors, 52 (85%) responded, two (3%) refused, and seven (11%) were unreachable. Therapeutic hypothermia was used routinely in five (10%) of EDs. Two had structured protocols. The most common cooling method used was ice packs and cooling blankets (80%). Two of the EDs using hypothermia were rural and routinely transferred comatose survivors to urban hospitals after initiating hypothermia. Of EDs not using hypothermia, common reasons given included lack of evidence supporting its use (42%) and