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

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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 (± 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 70.85% (55.93, 70.19) 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