Initial core temperatures ranged from 22 C to 26 C. Bypass rewarming to 37 C took from 52 to 190 minutes. All patients survived at least 24 hours, and three of the five are currently alive with normal neurologic function. Both children who were apneic and pulseless on arrival survived. The authors point out that early cardiopulmonary bypass by median sternotomy provides more rapid and effective rewarming than conventional core rewarming techniques without the hazards of "rewarming shock" and allows for open cardiac massage, direct defibrillation, and ventricular decompression if necessary. Median sternotomy cardiopulmonary bypass also is technically faster to perform on a pulseless patient compared with femoral artery-to-vein cardiopulmonary bypass. *[**Editor's note:** There are multiple options reported for the rewarming of profoundly hypothermic patients and much controversy as to which is best. Of greatest importance is to know which options are available at one's medical center and how to activate them rapidly when they are needed.]*

David Glaser, MD

child abuse; retinal hemorrhage

Head injury in very young children: Mechanisms, injury types, and ophthalmologic findings in 100 hospitalized patients younger than 2 years of age

Duhaime AC, Alario AJ, Lewander WJ, et al
Pediatrics *90:179-185*
Aug 1992

This prospective study examined 100 consecutive children aged 24 months or less who were admitted with a diagnosis of head injury. The authors compared the circumstances and mechanisms of trauma, injury type and severity, and ophthalmologic findings. Criteria for hospital admission included abnormal mental status, loss of consciousness, abnormal neurologic examination, skull fracture, or intracranial bleed. A standardized questionnaire was used to determine the circumstances of the accident, and all children underwent a complete physical examination, including fundoscopy. Such additional studies as skeletal surveys, computed tomography scans, magnetic resonance imaging, skull films, and bone scans were performed when clinically indicated. An algorithm was developed that used these data to classify the injury as inflicted or accidental. Twenty-four injuries were classified as inflicted. Mechanism of injury was listed as falls in 73, no history of trauma in 14, motor vehicle accident in nine, impact by a moving object in two, and admitted assault in two. Of the 100 children, 43 had a skull fracture, 32 had concussion of soft tissue injury only, and 25 had intracranial hemorrhage. Retinal hemorrhage was noted in ten. There was a significant association between inflicted injury and intradural hemorrhage ($P < .0002$). Among accidental injuries, there was an association between greater impact forces and complex skull injuries. All three epidural hematomas occurred from falls of less than 4 ft, while all intradural hemorrhages occurred from greater mechanisms. All ten patients with retinal hemorrhages had subdural hematomas. Nine were victims of inflicted injury. The tenth patient with retinal hemorrhages was in a high-speed motor vehicle accident and died of his injuries. Four of the 100 patients died; all had subdural hematomas, and three were from inflicted injuries. The authors conclude that both type and magnitude of force must be considered in the evaluation of head injuries. Skull fractures are produced by translational forces such as falls, while subdural hematomas result from rotational forces such as motor vehicle accidents and shaking. Retinal hemorrhages have been reported in a variety of circumstances but are overrepresented in nonaccidental trauma, and therefore, their presence requires one to consider nonaccidental trauma.

Suzanne Chilton, MD

impetigo; mupirocin; erythromycin

Cost-effectiveness of erythromycin versus mupirocin for the treatment of impetigo in children

Rice TD, Duggan AK, DeAngelis C
Pediatrics *89:210-214*
Feb 1992

The most common dermatologic infection in children is impetigo contagiosa. Investigations have demonstrated a preponderance of *Staphylococcus aureus* alone or in combination with group A streptococci as etiologic agents. Due to the emergence of resistant bacteria and its low cost, erythromycin has become the drug of choice. This study compared the cost-effectiveness of erythromycin with a new topical antibiotic, mupirocin, in treatment of impetigo in 93 children. Patients were randomly assigned to ten days of erythromycin or ten days of topical 2% mupirocin applied three times daily. No significant difference was found in clinical effectiveness as measured by percent cured or time to resolution. Cost per case differed significantly by group (erythromycin, $56.85; mupirocin, $62.30; $P < .05$) due to extra visit and additional medication needed by those treated with mupirocin. There was a higher incidence of side effects among those treated with erythromycin, and 43% of the erythromycin group were willing to pay more for another medicine to avoid the side effects experienced. The authors conclude that the medication prescribed can be based on parental preference because the increased cost of mupirocin is offset by side effects and number of school days and workdays lost with the use of erythromycin.

Merle Miller, MD

laceration

Lacerations involving glass–The role of routine roentgenograms

Avner JR, Baker MD
Arch Dis Child *146:600-602*
May 1992

This prospective study examined 226 children who presented to two urban emergency departments during a 21-month period with lacerations involving glass. The goal of the study was to determine if visualizing the bottom of the wound at presentation and finding it free of glass was sufficient to rule out any glass contamination of the wound. Each wound was visually inspected by a triage nurse or a physician, and length, depth, presence of glass fragments, and visualization of the bottom of the wound were recorded. On initial evaluation, glass was found in ten of the wounds, and these were then excluded. Of the remaining 216 wounds, when the bottom of the wound was not visualized, 12 of 56 (21%) contained glass by radiograph. When the bottom was thought to be visualized, 11 of 160 (7%) contained glass. Retention of glass fragments was associated with the depth of the wounds but not the length or the type of glass. All but one of the wounds containing glass were assessed to be deeper than 0.5 cm. The authors concluded that radiographs are still useful in evaluating lacerations due to glass. Visual inspection reduced, but did not rule out, the possibility of embedded glass. Radiographs were especially important in evaluating wounds 0.5 cm or more in depth. *[**Editor's note:** The initial examination was not performed routinely by a physician using adequate local anesthesia and hemostasis. In addition, these wounds were not probed routinely either digitally or with instruments. A more reasonable and cost-effective method of approaching these wounds would have been to perform a more carefully controlled examina-*