

needed to obtain IV access by urban paramedics was quantified objectively. A nonparamedic observer equipped with a stopwatch was randomly assigned to paramedic ambulances, during which time needed for IV access as well as total on-scene time was recorded. Total IV access time included obtaining a 30-mL blood sample prior to securing the IV line in place. One hundred twenty-five patients (51 trauma and 74 nontrauma) had IV access success rates of 90.2% for trauma patients and 83.8% for nontrauma patients. Total time required to initiate the first IV line (and blood sample) was  $2.20 \pm .20$  minutes for trauma patients and  $2.71 \pm .18$  minutes for nontrauma patients. When blood sampling time was subtracted from the total IV access time (done in a subset of 63 patients), the net time to obtain IV access was  $.58 \pm .09$  minutes. From these data, the authors conclude that IV access can be obtained by well-trained paramedics in less than 90 seconds, supporting the application of fluid resuscitation in prehospital care.

Roger Smith, MD

bronchospasm, methylprednisolone

### High-dose methylprednisolone as initial therapy in patients with acute bronchospasm

Schneider SM, Piphel A, Britton HL, et al  
*J Asthma* 25;4:189-193  
1988

A double-blind, controlled study was performed on known adult asthmatics presenting with acute bronchospasm to examine the beneficial effects of a single large dose of methylprednisolone. Patients with initial FEV<sub>1</sub> of less than 70% predicted were randomized into treatment groups separately, according to chronic steroid dependency. Methylprednisolone (30 mg/kg) or a saline placebo was infused in a double-blind fashion. Then patients were treated by a standard protocol using epinephrine injection or isoetharine by nebulization initially, followed by albuterol inhalation. IV aminophylline was added for patients who failed to improve. Spirometry was performed every 30 minutes. Patients were hospitalized if they failed to improve during the initial or any subsequent 60-minute period. They were discharged when bronchospasm had resolved clinically and the FEV<sub>1</sub> was at least 70% predicted. Treatment failures were patients who required hospitalization within seven days or who had return visits within 72 hours after being successfully treated. The authors found no difference between the methylprednisolone (M) and placebo (P) groups regarding medications used, number of steroid-dependent asthmatics, and initial FEV<sub>1</sub>. However, only 19% in the M group required hospitalization, compared with 44% in the P group. Even steroid-dependent patients in the M group required hospitalization less often than those in the P

group (25% M, 57% P). Finally, hospitalizations for return visits occurred in 22% of M patients compared with 56% of P patients. The authors conclude that early use of single-dose steroid therapy is appropriate treatment for acute bronchospastic attacks.

David Tse, MD

ipratropium, asthma

### Should ipratropium bromide be added to beta-agonists in treatment of acute severe asthma?

Higgins RM, Stradling JR, Lane DJ  
*Chest* 94:718-722  
Aug 1988

Ipratropium bromide has been reported to have an additive effect on bronchodilation when given as an aerosol in combination with albuterol for the emergency treatment of acute severe asthma. A prospective, randomized, double-blind trial of 40 patients with acute asthma was undertaken in which subjects were given either albuterol 5 mg alone or a combination of albuterol 5 mg with ipratropium bromide 0.5 mg. All patients received hydrocortisone 200 mg initially. Response was measured by changes in peak expiratory flow rate. Results showed a 10.8% increase in peak expiratory flow rate at 30 minutes after treatment with use of the combination versus albuterol alone, although this was not statistically significant. Also, fewer subjects had fallen back to baseline at two hours after treatment in the combination group than in the albuterol-only group, suggesting that there may be a beneficial prolongation of response in some patients with the combination.

Bruce Spears, MD

ibuprofen, overdose

### Ibuprofen overdose — A prospective study

Hall AH, Smolinske SC, Kulig KW, et al  
*Western J Med* 148;6:653-656  
Jun 1988

Ibuprofen overdose is a poorly understood entity, often felt to be benign by primary care practitioners. Sixty-one cases of ibuprofen ingestion were collected prospectively by referral to a regional poison center. Data collected included prescription versus nonprescription formula, dose, presence and type of toxicity, outcome, time from ingestion to toxicity, and ibuprofen levels. Sixteen patients were excluded for multidrug ingestions or inability to assess outcome. Of the 45 remaining patients, 39 were 0.9 to 3 years old, six were adults; none were 3 to 16 years old. Five (13%) of the pediatric patients had toxic reactions