

**To the Editor:**

We read with interest the abstract by Krommer et al entitled, "In-Field, Extremity Amputations: Prevalence and Procedure in Emergency Services," [*Prehospital and Disaster Medicine* 1992;7 (Suppl. 1):33s]. The authors concluded that training related to in-field extremity amputation should be emphasized by emergency medical services (EMS) agencies and reinforced through continuing education. Ninety-six percent of those responding to the authors' survey stated this training was not available through their EMS agency.

We wish to report that a field amputation training program has been available in California since 1991. We developed a training course which teaches physicians to perform amputations and fasciotomies under austere conditions (*Ann Emerg Med* 1992;21:613). Although this laboratory is part of the overall Medical Disaster Response (MDR) training course, which targets victims in a major earthquake, the techniques used are applicable to any field amputation. The training includes didactic sessions which discuss indications for amputations, anesthesia, fluid management, and treatment and prevention of rhabdomyolysis. A laboratory session also is offered, where participants perform amputations and fasciotomies on fresh, human cadaver material under direct supervision. In addition, we have received a grant from the American College of Emergency Physicians to produce a video demonstrating this training. To date, we have trained more than 150 physicians.

We are concerned that the survey results showed that in 11% of cases, EMT-Paramedics were considered responsible for performing amputations. In large, metropolitan EMS systems, it is our opinion that such a procedure should be performed by a physician with prior experience and training. It is not possible to justify amputation as part of the paramedic scope of practice under these conditions. Instead, it would be better to require "Go" team support at the local trauma center. Under austere disaster conditions or in rural situations where a trained physician is not immediately available, other rules may apply.

If we consider that only a handful of in-field amputations occur in EMS systems throughout the country, it appears more cost-effective for community physicians to obtain this specialized education and training through an already established system (like the MDR project), than to require each EMS agency to develop a completely new program.

To the best of our knowledge, no other training program of this type currently exists. We welcome comments from others who may be aware of other such programs.

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**To the Editor:**

I read with interest the article entitled, "An Analysis of Invasive Airway Management in a Suburban Emergency Medical Services System," by Krisanda et al in the April-June 1992 *Prehospital and Disaster Medicine*.

The authors are to be congratulated for a carefully researched and most interesting paper.

I would like to express a couple of concerns from my point of view as Medical Director of an ambulance service. Firstly, as an anaesthesiologist, I am painfully aware of the degree of hypoxia that can accompany an unsuccessful intubation, especially with repeated attempts. And this can happen even under the near ideal circumstances of an operating room intubation. I believe there is a potential for taking patients, who were in fact breathing successfully, and rendering them hypoxic. Your authors stated that even experienced providers only were successful on the first attempt in 57% of cases.

My other concern is that the article does not answer or even ask the one most important question relating to this procedure, "Did the patients benefit?" An assumption is made that intubation inevitably benefited all these patients. It would be most interesting to compare such a group of patients with a group in which their airways were managed by competent, well-trained ambulance officers, but without intubation.

I had one unfortunate experience of watching a very comprehensively trained paramedic in one United States system follow his protocol for a patient with COPD to the full. The patient, who when they started was somewhat distressed but unable to speak, initially was given suxamethonium, then diazepam, intubated, and ventilated, causing some bleeding in the process and damaging a tooth. In my own system, the patient would have been given one to two liters of oxygen and transported in comfort to a hospital. I am quite sure the patient would have done at least as well.

Many assumptions have been made about paramedic procedures, which have gained a momentum all their own. Perhaps, we should look more often at whether we actually are improving outcome significantly by these aggressive and not entirely innocuous procedures, as in the article by Lavery et al in the same issue.

I am not by any means saying that no patients need to be intubated, but I believe it to be an invasive and potentially harmful procedure, for which one must have good grounds.

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**To the Editor:**

Some years ago, there was a change in the nomenclature as well as the prehospital treatment recommended for a patient at risk of a spinal injury: neutral treatment or neutral positioning was recommended to replace the practice of applying cervical traction. The implementation of this change was gradual; the information has been disseminated to the field provider slowly (over several years), mainly through EMS texts, educators, and conference speakers. The result has been a positive evolution in patient care.

In the interest of providing better patient care, it may be time for another change in terminology. I believe that it may be worthwhile to replace the term "spinal immobilization" with the more accurate term "spinal motion restriction" or "spinal motion restriction procedures." Immobilization, as defined by *Webster's Dictionary*, is to render incapable of movement. In prehospital care, we cannot provide immobilization as the word is defined. Review of the literature corroborates this fact. Studies show that even the halo device, perceived by many to be the