

## The Need for a Prehospital DNR System Withholding CPR in the Prehospital Setting

To the Editor:

The review of patient consent presented in your last issue by R. Jack Ayres, JD, EMT-P, is an interesting synopsis of the topic from a legal viewpoint.

Although a disclaimer is provided, the discussion of involuntary consent skirts the issue of true emergent conditions in which the time delay for obtaining a court order may seriously jeopardize a patient's health. Many states have statutory laws which, when consent cannot be obtained from the patient or relative, permit physicians to initiate life-saving treatment if mentally ill persons without a court order using a "reasonable person" standard,<sup>1</sup> and additional statutory provisions which allow the use of force in the prevention of suicide.<sup>2</sup> Other states employ the common law standard of reasonableness to the same end.<sup>3</sup> An example of such a patient would be an intoxicated, disoriented, and depressed individual who has ingested 100 tablets of a tricyclic antidepressant to commit suicide, and is refusing treatment and demanding discharge.

Of course, obtaining the voluntary, informed consent of adults with decision-making capacity, or a legally acceptable surrogate in those without capacity, always is preferable. However, when those options are unavailable in emergency situations, unless specifically limited by state statutory or common law, most legal and medical scholars would suggest provision of the treatment despite the patient's refusal.<sup>3-6</sup>

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### References

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Response:

I am pleased to respond to the insightful comments of Dr. LaVoie to my earlier article [in *Prehospital and Disaster Medicine*, V5,1, Jan-Mar 1990].

In this connection, Dr. LaVoie correctly points out that some states (including not only Kentucky but also Florida and California) do in fact provide broad-ranging statutory authority for physicians to treat emergently ill patients, to prevent suicide, and to correct the consequences of child abuse. I certainly agree with Dr. LaVoie's implied assumption that such a statutory framework affords the greatest flexibility to the emergency physician, and subject to appropriate safeguards for abuse, in a number of cases represents a preferable alternative to obtaining court orders for such patients.

I certainly did not intend to "skirt the issue" regarding the time delay in obtaining such orders when necessary. In our own clinical practice at Parkland Memorial Hospital in Dallas, we have found that through previous arrangements with the presiding judge of the local district courts, we can obtain very rapid access to a district judge and very rapid determination as to whether or not such orders will be issued. In our practice, this system has proved extremely efficient in emergency circumstances. Thus, I would encourage Dr. LaVoie and others who are interested in this subject to consider the development of legal liaison programs in which reputable counsel can be consulted and advance procedural systems established with appropriate courts to handle such emergencies.

Finally and perhaps most importantly, I agree wholeheartedly with Dr. LaVoie that in any medically or legally equivocal circumstances a prudent health care provider would be well advised to err on the side of preserving life.

I am most appreciative for Dr. LaVoie's thoughtful comments.

R. Jack Ayres, Jr., JD, EMT-P  
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## A Prospective Evaluation of Prehospital Patient Assessment by Direct In-Field Observation: Failure of ALS Personnel to Measure Vital Signs

To the Editor:

The study, "A Prospective Evaluation of Prehospital Patient Assessment by Direct In-Field Observation: Failure of ALS Personnel to Measure Vital Signs," by Spaite et al, on face value is extremely disturbing.

The study implies that, as a standard of care, either a blood pressure and/or pulse was not taken in 37% of the patients (26.5% of adults and 50.0% of children under 18 years of age). The authors concluded that:

"In a state-wide evaluation failure to measure vital signs occurred on a frequent basis. Our data indicated that a concerning lack of attention to the most basic details of patient assessment is common... It is of further concern that such a significant omission could be so widespread and not be detected by supervisory personnel... Furthermore, your results also suggest an apparent ineffectiveness in training and continuing education with respect to the importance of careful patient assessment."

An Editorial comment that follows the study (p. 333) states: "This is a frightening study..."

One must agree that if what one can validly conclude from the study is that, in a state-wide study, ALS responders (or EMTs at any level) arbitrarily omitted vital signs in greater than one-third of the patients assessed, it would, indeed, represent a "frightening" condemnation of the training, level of care, and quality control. However, upon careful reading, this reader can not draw such conclusions based upon the information provided, since too many questions remain unanswered.

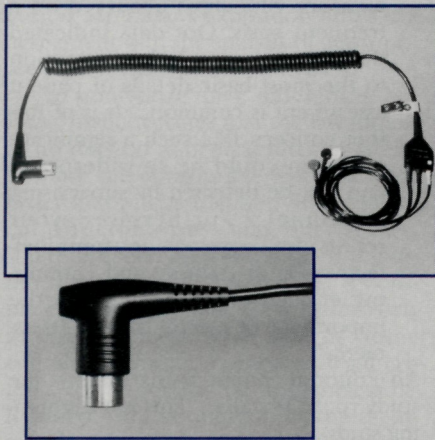
Since the research technician making the observations was "chosen specifically as a non-medical professional," it remains unanswered whether this observer could identify pulse evaluation other than the specific palpating of a radial pulse and counting of the pulse rate using a wristwatch. If responders palpated radial, carotid, or femoral pulses, for presence/absence, quality, and estimated their rate, was this re-

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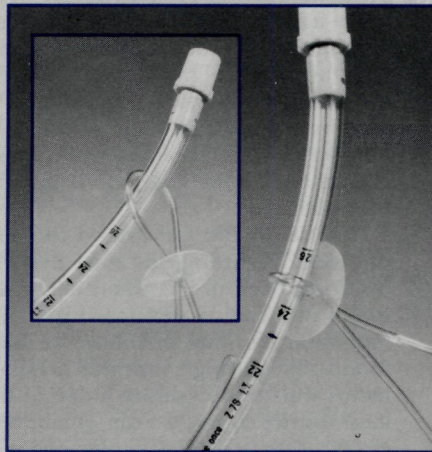
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corded as taking a pulse or not (or was the narrower definition of rate counting the only acceptable method)? When an EKG monitor was attached furnishing a rate and a pulse palpated for palpable presence and quality, was this considered to represent taking a pulse by these untrained observers? If a pulse is palpated for quality the rate can reliably be established from the EKG monitor.

How many of these patients were in asystole or unresponsive with another pulseless rhythm? If a functional rhythm and palpable pulse were not achieved pre-hospital—is a lack of taking a blood pressure a serious omission or a saving of critical time?

How many were critical, multisystems trauma patients? What was their distance from a trauma center? Were pulse rates and blood pressure estimated by other methods at the scene and, then quantified more accurately enroute by taking the blood pressure by palpation. If this occurred, did the untrained observer understand that blood pressure had been evaluated in the field (even though not quantified) and, since no stethoscope is used with the palpation method, it had been taken quantitatively in the ambulance. In multisystems trauma patients, such a practice is desirable in order to avoid unnecessary delay in the field (per PHTLS and BTLS courses).

If a patient (or parent of a minor child) is of sound mind and not injured or ill so as to potentially affect their mental ability, it is their right to refuse treatment, if after being warned of the potential danger, a patient continues to refuse treatment it is not “an omission” to not obtain vital signs. How many patients refused treatment prior to the taking of the blood pressure and/or pulse? For how many children included in the study, did a parent refuse treatment?

How many infants and small children were in full cardiac or respiratory arrest? How close to the hospital were they? How many responders were on the crew? In such cases, the furnishing of CPR, intubation, and providing ventilation enroute may have represented a required set of priorities allowing only for pulse palpation and EKG monitoring, but not allowing time for quantitative measurement of pulse rate and blood pressure. In such cases, this could be reasonable and not constitute a glaring omission.

In how many pediatric patients was a pulse counted by auscultation of the apical pulse? Was this recognized by the

untrained observer as “taking a pulse”? How many of the pediatric patients were infants or small children with URIs, low fevers, febrile seizures, or other illness not involving trauma? In many areas, in the case of small children whose overt signs are good, LOC is good, and no other indication of hemorrhage or injury exist (such as tachypnea or tachycardia), if the child is frightened or combative, a policy exists to defer the taking of a quantitative blood pressure pre-hospital in order not to agitate the child. Although one can argue the merit and dangers of such a policy, was such a policy either in the pediatric protocols or a commonly accepted (and physician approved) practice?

### Conclusions

Until these and similar questions are answered, the study is very inconclusive and certainly the reader cannot properly conclude that a frightening lack occurred in the quality of the assessment, the EMT's assessment skills, training, and quality control mechanisms. Based upon the published study and its method, such a broad-based condemnation is unfounded.

However, the subject warrants additional study. Hopefully, others will attempt to duplicate the study. For the study to have meaning, qualified medical personnel who know and can recognize various assessment skills (ie: EKG monitors give quantitative pulse, etc.) should be used rather than unqualified individuals. Also, more attention should be paid to reporting such cases as the omission of pulse counting with a watch and blood pressure by sphygmomanometer are not warranted (such as refusals and patients in arrest, etc.).

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## **A Prospective Evaluation of Prehospital Patient Assessment by Direct In-Field Observations: Failure of ALS Personnel to Measure Vital Signs**

To the Editor:

I read with interest the article entitled “A Prospective Evaluation of Prehospital Patient Assessment by Direct In-Field Observations: Failure of ALS Personnel to Measure Vital Signs” by Spate et al in the October-December 1990 issue of *Prehospital and Disaster Medicine*.

The paper has a number of flaws which I believe to be counterproductive to publication in your journal. This is a terrible mixture of apples, oranges, grapefruits, and pears. Trauma patients apparently were lumped with medical patients. There was such an article out of South Carolina years ago that has been quoted many times as demonstrating that it takes more than 15 minutes to start IVs in the field. That study lumped trauma patients and medical patients producing an outcome that was incorrect. This paper has done it also.

Patients were not stratified according to the severity of illness based on either ISS or trauma score, nor were any type of medical evaluation tools used for a non-trauma patient. No consideration has been taken into account regarding the condition of the patient.

This article has mixed cardiac patients with patients of other types; patients whose injuries resulted from penetrating trauma with blunt trauma. Head injuries are mixed with abdominal injuries.

The authors have identified that blood pressure was omitted in 21.9% of the patients transported Code 3. They neglect to identify what was the cause of the Code 3 transportation.

As I am sure the authors are aware in the ATLS, PHTLS, and BTLS courses, EMTs are admonished to make a decision at the completion of the primary survey as to whether the patient requires rapid transportation to the hospital. If such rapid transportation is required, one may never get to check on the blood pressure, since it is in the secondary survey. The patient may well be packaged and transported. Certainly, there are other methods of evaluating severity of injury such as level of consciousness, eye signs, capillary refill, presence of pulse that is a risk (rate unimportant), and many other conditions when the EMT would not want to waste time checking the blood pressure when there are many other things to be done to salvage the patient and when the patients condition easily can be followed by other means.

It well may be that prehospital care is well below standards in the state of Arizona and that improvements need to be made. Unfortunately, there is nothing in this article that answers the question.

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