



UNIVERSITY OF MARYLAND

MARYLAND INSTITUTE FOR EMERGENCY MEDICAL SERVICES SYSTEMS

22 S. GREENE STREET • BALTIMORE 21201-1595 • AREA CODE 301-328-6846

OFFICE OF THE DIRECTOR

January 30, 1990

TO: Recipients of the revised "Maryland Medical
Protocols for Cardiac Rescue Technicians and
Emergency Medical Technician - Paramedics"

FROM: Ameen I. Ramzy, M.D.
State EMS Director

This communication is to provide all recipients of the protocols with common information about questions which were discussed during the orientation sessions prior to the implementation of the revised protocols on January 1, 1990, as well as questions which have arisen since the implementation of the protocols. This memorandum should not be considered a summary of the protocols, but rather is intended to highlight a few key points and to clarify certain points. All recipients of the protocols, both prehospital ALS providers and receiving/consulting physicians are urged to read the new protocols completely.

1. Communications - On-line medical direction (physician consultation) is required for Priority 1 patients, and Priority 2 patients who have persistent symptoms or who need therapeutic intervention. Priority 2 patients (who have not received medications other than O₂), whose symptoms have resolved, and whose vital signs are normal must still have communications with the receiving facility, but this is to provide patient information to the receiving facility rather than to obtain medical direction.

When EMS communications are established, the priority of the patient should be stated as well as the type of call. For example, for a Priority 2 patient for whom medical direction is needed, the communication with either the Central Alarm (or EMRC), and the hospital, should begin with "This is Medic or Paramedic (#) requesting medical direction for a Priority 2 patient." Another example would be "This is Medic or Paramedic (#) with a Priority 2 patient, calling to relay patient information only." It is inferred that a physician will be on-line for calls requiring medical direction. It should also be noted that on-line medical direction may

be obtained at any time for any patient if desired by the prehospital provider. (Page 5)

2. Mutual courtesy and respect are expected between prehospital EMS providers and physicians, both on the scene and on the radio. (Page 6)
3. The initial IV fluid for a patient in cardiac arrest, either from a traumatic arrest or a medical arrest, is lactated ringers. The rationale for lactated ringers in a medical cardiac arrest is that the Board of Physician Quality Assurance feels that this might be of theoretic value in providing a physician-ordered fluid challenge in patients in electromechanical dissociation, and that having this fluid hanging in all cardiac arrest patients would be simpler. A question which has arisen is - what should be done if a cardiac patient has an IV of D5W, and the patient subsequently arrests? The following should be utilized: if a patient is found in arrest lactated ringers should be utilized; if a patient arrests prior to transport, medical direction should be utilized to determine if the IV fluid should be changed. If the patient arrests during transport, D5W should be left in place unless otherwise directed by medical direction. In terms of technique for changing IV fluid solution, this is better done either by changing at the hub or by using a piggy-back with a stopcock. The use of an additional needle to piggy-back to the original IV tubing should be discouraged, for provider safety. (Page 8)
4. The protocol for suspected myocardial infarction indicates that if chest pain of suspected cardiac origin persists after administration of oxygen, the ALS provider can administer one nitroglycerin tablet within specified guidelines. This allows the ALS provider to report the patient response to the consulting physician. This means that even if this patient is then deemed to be a Priority 2 patient, consultation (medical direction) must still be established. It should also be noted that caution should be exercised when administering nitroglycerin to patients who have not previously taken this medication, as these patients may have hypotension when receiving nitroglycerin. (page 11)

5. As in the past, communications should be established as early as possible. With reference to the cardiac algorithms, when communications are genuinely impossible, proceeding past the "*" requires additional documentation along with marking the "exceptional call area" on the run sheet. (Page 15)
6. Unconscious persons (not associated with traumatic injuries) - Within this protocol, the venous blood sample is to be taken by a closed vacutainer technique. This is specifically intended to minimize the risk of accidental needle sticks which might occur using a syringe and needle to draw blood and then inject this blood into a vacutainer tube. Also within this protocol it should be noted that while a range of Narcan administration is available, it must be emphasized that Narcan administration is not intended to restore full consciousness in the prehospital setting, but simply to restore respiratory effort. (Page 24)
7. Sustained Ventricular Tachycardia - While sustained ventricular tachycardia with a pulse and unconsciousness is a rare occurrence, this protocol allows the CRT to countershock in this critical situation. (Page 17) This protocol, however, does not prevent the EMT-P from utilizing synchronized cardioversion when it is immediately available. (Page 54)
8. The protocol for suspected Sudden Infant Death Syndrome (SIDS) requires the ALS provider to begin CPR and move the patient to the medic unit prior to establishing communications and obtaining physician consultation. SIDS is a particularly difficult situation for everyone involved and it is extremely important to realize the potential impact of your interactions with the family. (Page 44)
9. New Protocols - The Hospice/EMS Palliative Care Protocol which was implemented on January 1, 1989, is incorporated into the revised protocol book (Page 103). New protocols for Behavioral Emergencies (Page 129) and Hazardous Material Exposure (Page 133), have also been added.

10. External jugular IV - This skill is now available for use by EMT-P's (Page 123). The external jugular IV may be used by the EMT-P when an extremity IV is unsuccessful or when there is judged to be inadequate IV access in the extremity and IV access is essential. It should be recalled that the external jugular stick may be painful for the patient, and can be a very "positional" IV in terms of flow rate; good backflow should be evident, and the IV tubing must be firmly secured to the IV catheter.

Thank you for your attention to these matters. I hope this information is helpful in your provision of patient care. As further questions arise, please feel free to direct these from you local ALS program/Medical Director, through your Regional Medical Director to me, so that others can benefit from the questions which are raised.

AR:mee