# MEDICAL CONTROL COMMITTEE

# MINUTES

## Myrtle Beach

## February 19, 1993

| Members Present | Others Present |
|---|---|
| James Turner, M.D. | Gordon Weigle, M.D. |
| Carol Baker, M.D. | Ron Steen, M.D. |
| John Sorrell, M.D. | Al Futrell |
| Jim Raymond, M.D. | G. L. Rainsford, M.D. |
| Debra Perina, M.D. | John Zirkle |
| Douglas Norcross, M.D. | Al Smith |
| | Joe Fanning |
| | Phyllis Beasley |
| | Jim Catoe |
| | Bill Minikiewicz |
| | Thomy Windham |
| | John Zirkle |
| | Phil Clark |

**MINUTES APPROVED**

The meeting was opened by Dr. Raymond, Chairman. He called for review and approval of the minutes of the November 11, 1992 meeting. There being no objections the minutes were approved. Dr. Raymond then reviewed the agenda for the day, noting that the first two items on the agenda involved the state approved drug list.

**ADDITIONS TO THE DRUG LIST**

Al Smith was requested to present the requests for additional drugs. Mr. Smith presented requests for labetalol HCl, sodium nitroprusside and nitroglycerin, and nifedipine.

Mr. Minikiewicz requested the opportunity to make the presentation since some of these drugs were alternative proposals if others were not approved. He began with a request for approval of nifedipine for field use for hypertension. He presented a number of journal citations for support

of this drug. He stated that 25% of the EMS services across the country are using nifedipine. He also pointed out the results of several field studies supporting the use of nifedipine without significant adverse reactions. Dr. Sorrell stated support of the drug where transport time exceeded 30 minutes. Dr. Perina expressed concern about the side effects, and the half life of the drug. Why add this when another drug can accomplish the same thing. She suggested that a drug should be used that is short acting. Dr. Baker expressed concern that the medication might be over-utilized in an effort to just drop blood pressure regardless of the problem, when dropping the blood pressure might not be indicated.

Mr. Smith expressed concern about adding a number of drugs that may be duplicative in action, but which require the paramedics to maintain competency of knowledge on many drugs. Mr. Minikiewcz stated that overload of paramedics is not valid since all services do not use the same drugs. Mr. Smith and the committee, however, pointed out that the paramedic must be responsible for the use of all drugs for which he is trained.

Dr. Sorrell made the motion that nifedipine, under P. O. administration of the fluid contents, under direct medical control, be added to the list of approved drugs. The motion carried. Dr. Perina dissented.

Mr. Minikiewcz withdrew his other requests since they had similar indications.

Mr. Smith then presented albuterol for addition to the drug list. Requests came from N. Myrtle Beach Fire Dept., Beaufort Co. EMS and Berkley County EMS.

Dr. Perina said that she wondered if the people requesting this drug wanted the drug or the ability to aerosolize. So is the need for a new drug or a new route of administration?

Dr. Sorrell said that terbutaline isn't FDA approved as an aerosol while albuterol is, also, albuterol is cheaper because it is made for aerosol. Its use is also more widespread.

Dr. Perina made the motion to approve albuterol aerosol as an addition to the drug list. Dr. Baker seconded the motion. The motion carried.

Mr. Smith next presented a request for proparacaine (ophthalmologic analgesic) for the purpose of anesthetizing the eye in certain eye injury situations. Dr. Sorrell said that this drug would allow paramedics to irrigate the eyes of persons whose eyes would uncontrollably stay shut. He felt that it held little potential for danger and was a much needed medication.

Dr. Sorrell made a motion, seconded by Dr. Norcross, that proparacaine be approved as an addition to the state drug list for the purpose of anesthetizing eye lid reflex to facilitate irrigation of the eye. The motion carried.

**SUB-COMMITTE RECOMMENDATIONS FOR DELETIONS FROM THE DRUG LIST**

Dr. Baker was asked to present the subcommittee's report on its study of the present drug list, with special attention to the changes shown in the new ACLS guidelines. **Among the changes presented were the following drugs being recommended for deletion. These were theophylline, nalbuphine HCL, diphenylhydantoin sodium, isoproterenol HCL, and phenobarbital.**

Dr. Sorrell said that these recommendations were made because the group felt that there were other medications available to accomplish the same things.

Dr. Perina made a made a motion that the above five drugs be deleted, and that terbutaline administered by aerosol be deleted. Dr. Baker seconded the motion. The motion carried.

**As the result of this motion terbutaline can only be administered sub-cutaneously.**

**SUB-COMMITTEE RECOMENDATIONS FOR CHANGES IN ADMINISTRATION OF PRESENT DRUGS**

Dr. Norcross made a motion that all cardiac drugs be changed in administration to meet the new ACLS guidelines. Dr. Baker seconded the motion. The motion carried.

**Dr. Baker then presented recommendations for changing the protocols for epinephrine. She recommended that the protocols for epinephrine be changed to provide for:**

- **Class I can be a standing order, 1 mg. every 3 - 5 minutes**
- **Class II must be under medical control on line, authorized within a range of dosages.**

Dr. Turner made the motion that epinephrine be brought into current ACLS guidelines, that going beyond class I has to be under direct medical control. Dr. Baker seconded the motion. The motion passed. (*See notes at the end of the minutes for definition of Classes.)

**Dr. Baker recommended that the adult dosage range be broadened for epinephrine.** Dr. Norcross made the motion that this change be made as stated. Dr. Perina seconded the motion. The motion passed.

In later discussion Dr. Perina suggested that in regards to the routes of administration -- in review of the protocols she felt that E.T. tubes should be de-emphasized as a route of administration.

D-5W was also questioned for clarification. Mr. Smith said that normal saline or lactated ringers is the fluid of choice. Although D-5W remains acceptable, he suggested that any of the above

may be used. The committee agreed that no other changes were needed for D-5W.

Dr. Baker then presented changes for drugs that were not covered in ACLS protocols. She made a motion that diphenhydramine be revised to allow up to 50 mg. IV under standing orders, or up to 100 mg. total dose, under direct medical control supervision. And that another set of protocols be developed for children. Dr. Sorrell seconded the motion.

In discussion it was brought out that we need a recommended dose within a dose range. The problem with a minimum or maximum dosage is that it will not allow a prescription of a lower minimum dosage. Someone suggested that we could test on the standard dosage but allow more leeway.
After this discussion the motion passed.

Bretylium was changed only as required to meet the changes in the ACLS guidelines.

Dr. Baker made the motion that furosemide be changed to allow 40 mg. by standing order and up to 300 mg. be allowed under direct medical control supervision. And in children up to 2 mg. per kilo with direct medical control supervision. Dr. Sorrell seconded the motion. The motion passed.

Dr. Sorrell made a motion that morphine sulfate protocols be changed as follows: (1) indications be added as premedication for cardioversion. (2) Also that the adult dosage be changed to "to 5 mg." (3) Also that the typo regarding children's dosage be changed to ".1 to .2 mg per kilo". (4) "Use only with direct medical control." (5) " After IV administration the patient must be closely monitored."

Dr. Sorrell also said that the paramedic must be vigilant in monitoring patients with attention to vital signs -- recorded every 5 to 10 minute intervals.

Dr. Perina seconded the motion. The motion passed.

**Dr. Baker reported that no changes were recommended in nitro spray. However she added that children under 12 were a contraindication for nitrolingual spray.** She made these changes as a motion, seconded by Dr. Sorrell. The motion passed.

No changes were recommended for Nitronox. **Dr. Sorrell suggested that nitronox and all other drugs be listed by generic names in the drug guide.**

**The subcommittee recommended that oxytocin that be used "for postpartum females only."**

**The subcommittee changed the protocols for procainamide HCL only to meet the changes in the new ACLS guidelines.**

Dr. Baker made the motion that sodium bicarbonate be approved to be administered as a drip, under medical control supervision (may add up to 50 mEq to 500-1000cc of IV fluid, with infusion rate being allowed to be determined by direct medical control). Allow to mix IV as a drip and broaden indications. Dr. Sorrell seconded the motion. The motion passed.

Dr. Baker next presented recommendations on diazepam. She made the motion that the dosage be changed to read "up to 10 mg., slow IV. Also that transcutaneous pacing be added as an indication. Also added the proviso that after administration the patient should be closely observed. Also that it should be administered only under direct medical control. Dr. Sorrell seconded the motion. The motion passed.

**Lidocaine HCl was changed only to meet changes in the ACLS guidelines.**

The subcommittee also suggested that the committee may want to consider adding magnesium sulfate in response to new ACLS guideline changes. **Dr. Raymond suggested that this item be studied and considered at the next meeting.**

## SUBCOMMITTEE RECOMENDATIONS ON IMPLEMENTING SUGGESTED CHANGES

**Dr. Sorrell suggested that the next procedure for implementing these recommendations is to assist Al Smith in putting it all in the drug guide.**

**The new document should then be mailed to the Medical Control Committee for review and approval.**

## REVIEW OF TRAUMA DESIGNATION STATUS FOR ANDERSON HOSPITAL

Jim Catoe then presented the status of Anderson Memorial Hospital. He pointed out that the committee had designated Anderson Hospital with several conditions. The hospital responded on December 28, 1993 that conditions have been met in all areas. The Q.A. monitoring for anesthesia response is the most difficult to judge.

Questions arose regarding the interpretation of the Q.A. data. Need clearer definitions.

Dr. Perina made a motion, seconded by Dr. Baker that Anderson Hospital be approved as a Level II Trauma Center, without contingencies.

## INTERHOSPITAL TRANSPORT FORM

Dr. Sorrell reported that since the interhospital transport form requires the signature of the sending physician, and since the physician is often not present when the decision is made to transport the service is often in a bind. They can either refuse to transport the patient or continue to transport, but outside the regulations as stated by DHEC. Dr. Sorrell said that he feels that a number of transports were being made without physician signatures and that he recommended that the requirements be changed to allow a nurse to sign under the order of a physician. Presently the physician is not aware of the need for a signature or that the form is not available on the nursing floor.

Other concerns would be the possibility of the ambulance service not being concerned about having valid interhospital transport forms. No compromises should be made to place the EMT in jeopardy for not having valid orders.

Dr. Perina made a motion that the interhospital transport form be changed to authorize the signature of a physician or a licensed nurse under the order of a physician. Also that the hospital make a copy of the physician's orders within the hospital or nursing home. Dr. Baker seconded the motion. The motion passed.

In further discussion it was suggested that we have not fully educated the appropriate personnel within the hospital to include nursing administration. **The staff was requested to make sure that all departments within the hospital and/or nursing home, which might be involved in sending patients under interhospital transport, be included in the mailing list for new instructions.**

## STAFF REPORTS

Mrs. Beasley gave a report of the actions of the Trauma Systems Committee which had met on January 21, 1993. In this meeting three subcommittees were formed: Trauma plan, Trauma Center Designation, and Trauma Data. The Trauma planning subcommittee has also met and established a work plan for developing the plan. It also developed a schedule of assignments of appropriate people, subcommittees or organizations which should be responsible for planning and/or implementation of the different components of the plan. Priorities were also assigned. Statewide guidelines for both triage and bypass protocols; guidelines for interfacility transport and public information (to promote participation in the system) were among top priorities.

Dr. Raymond requested information on the participation of hospital administrators on the Trauma Systems Committee. **Staff reported that their participation had been disappointing, but promised to continue to give strong encouragement to the administrators to participate in the planning process.**

Joe Fanning presented the report on the activities of the DNR Committee. The DNR Committee has met twice. The committee members have participated enthusiastically and have made much progress. If sufficient progress can be accomplished they plan to submit proposed legislation for this legislative term.

Dr. Sorrell asked about update of critical care protocols. Staff has updated these except for the drug list changes. When these changes are made the protocols will be changed according and mailed out.

**Staff was instructed to poll the members and determine the best possible date for a committee meeting in late April.** The agenda being completed, Dr. Raymond declared the meeting adjourned.

*Notes regarding the classes noted on page 3:

The 1992 JAMA supplement addressing emergency cardiac care identifies certain pharmacologic and treatment recommendations from Class I -- Class III based on the supporting scientific evidence as follows:

- **Class I.** A therapeutic option that is usually indicated, always acceptable, and considered useful and effective.
- **Class II.** A therapeutic option that is acceptable, is of uncertain efficacy, and may be controversial.
- **Class IIa.** A therapeutic option for which the weight of evidence is in favor of its usefulness and efficacy.
- **Class IIb.** A therapeutic option that is not well established by evidence but may be helpful and probably is not harmful.
- **Class III.** A therapeutic option that is inappropriate, is without scientific supporting data, and may be harmful.

# Medical Control Committee

## Minutes

## April 23, 1993

| Members present: | Others present: |
|---|---|
| Jim Raymond, M.D | Doug Warren |
| Doug Norcross, M.D. | Jim Catoe |
| Ed DesChamps, M.D. | |
| Jim Turner, M.D | |

Dr. Raymond opened the meeting and called for approval of the minutes of the last meeting. The minutes were approved.

**Review of the "Approved Drug List Document"**

The first item on the agenda was to review the "Approved Drug List Document." The information in this document includes all the information about each drug that each Paramedic should know. This includes the main indications and contraindications, side effects, therapeutic effects, dosage, routes of administration, and special information. The process for reviewing this document was to review each drug individually.

The following drugs were approved with changes as reflected in the attached document:

| | |
|---|---|
| Activated Charcoal USP | Adenosine |
| Albuterol Sulfate | Atropine sulfate |
| Diazapam | 50% Dextrose |
| Diphenhydramine | Dobutamine Hydrochloride |
| Furosemide | Glucagon USP |
| Heparin Lock Flush | Morphine Sulfate |
| Naloxone | Nifedipine |
| Nitrous Oxide(50%) & Oxygen(50%) | Oxytocin |
| Nitroglycerin | Proparacaine |
| Procainamide Hydrochloride | Sodium Bicarbonate |
| Syrup of Ipecac | Terbutaline Sulfate |

All IV solutions

The following drugs were also approved. However the committee asked staff to check some of the important data concerning these drugs:

Epinephrine
Lidocaine Hydrochloride
Bretylium Tosylate

It was suggested that a standard mixture table be placed at the end of the book. The committee also suggested that the document highlight certain areas. They suggested that all procedures requiring on-line direct medical control be placed in a box, setting them apart. It was also suggested that any reference to drugs of less than 1. mg. be listed as "0." to emphasize the decimal.
Other suggestions included making sure that indications, relating to all drugs, were clear and consistent in terminology and instructions through the document. Staff was requested to look closely for consistency in terminology in all areas. The document is to be revised, using the committee's direction at this meeting, and mailed to every committee member for final review and approval. This document (attached), with changes as suggested in the meeting, is included as a part of the minutes of this meeting.

Each of the changes recommended by the committee were the result of discussion and consensus, and required no motions. The document, as revised, is presented as a part of the minutes.

**Drugs Considered for Deletion from the Drug List**

Further considerations regarding drugs involved a revisit of the decision in the last meeting to delete five drugs. The EMS Advisory Council, when presented with this decision, chose to request a field survey on use of these drugs before they were deleted. The drugs recommended for deletion by the committee were theophylline, nalbuphine HCL, diphenylhydantoin sodium, isoproterenol HCL, and phenobarbital. The survey results suggested unanimous agreement on deletion of all but nalbuphine HCL (Nubain). The committee agreed, by consensus, to revise their recommendation to delete all but nalbuphine HCL.

**Proposed Additions to the Drug List**

A number of drugs were recommended for addition to the drug list. The subcommittee had recommended the addition of thiamine and magnesium sulfate to the drug list. Dr. DesChamps also presented a new drug "flumazenil" for consideration. The committee discussed the benefits and possible problems on each of these, but determined that there was not sufficient written justification to consider these drugs at this time. It was agreed that since there is an annual review of drugs in February of each year, these could be appropriately considered at that time. Until that time they could be studied, both in the actual number of occasions they might be needed and the situations surrounding the management of the drug administration.

**Interhospital Transport Form**

Staff presented the interhospital transport form, as revised under the direction of the minutes of the last medical control committee meeting. The committee accepted the form, with recommendations for one addition. This was that a line should be added that states that "the patient's records should accompany the form." The form as revised is attached as a part of the minutes.

**Report on Trauma Systems Activities**

Mr. Catoe presented the status of the activities of the Trauma System Committee and subcommittees. He reported that the Trauma Plan subcommittee had met twice and the Designation subcommittee had met once, each developing preliminary reports. The Data subcommittee will meet on May 13. Another meeting of the Trauma System Committee is tentatively planned for the last week in June. As instructed in a previous meeting the Trauma System Committee would meet in the morning and the Medical Control Committee would meet in the afternoon.

**Report on the Status of Proposed "DNR" Legislation**

A brief report on the status of activities of the "DNR" Committee revealed that they have completed a draft of proposed legislation. The approval of this legislation document by members of the EMS Advisory Council is in the process of being accomplished through a mailing of the latest revised proposal and telephone calls to the members for their approval/disapproval.

**Arterial Lines:**

In other business the committee discussed a proposal from Dr. Kratz of "Meducare" in which he asked that properly trained paramedics be allowed to transport patients with arterial lines in place. It was suggested that this concept be presented as a pilot project, perhaps at the next meeting, should Dr. Kratz be interested in doing so. The committee could then review the request to allow one service under specific local plans to pilot such a proposal.

The Committee agreed to meet again during the last week in June.

There being no further business the meeting was adjourned.

(with corrections made on 6/30/93)

# MEDICAL CONTROL COMMITTEE

## Minutes

## June 30, 1993

| Members | Others |
|---|---|
| Dr. Jim Raymond, Chairman | Al Futrell |
| Dr. Bob Malanuk | Joe Fanning |
| Dr. Ed Deschamps | Alonzo Smith |
| Dr. Richard Bell | Phyllis Beasley |
| Dr. Doug Norcross | Dr. Michael Stein |
| Dr. Debra Perina | |
| Dr. John Sorrell | |

Dr. Raymond opened the meeting and asked for approval of the minutes from the April meeting. Dr. Raymond pointed out that on the last paragraph of the last page of the minutes, the heading "chest tubes" should be changed to "arterial lines." Following agreement for that change, the minutes were approved.

The first order of business was discussion/approval of the recommendations from the Trauma System Committee. Dr. Bob Malanuk asked for clarification regarding the subcommittee's recommendations for defining the number of patients seen by the surgeons at the trauma centers. The subcommittee's recommendations defining the trauma patient, the recommended numbers of patients seen at the trauma centers, and the recommendation regarding the redesignation process schedule and method had not been passed for consideration by the Medical Control Committee. However, discussion followed regarding these subjects to provide the Medical Control Committee's feedback to subcommittee chairman, Dr. Michael Stein.

Dr. Malanuk expressed concern that specifying the number of patients to be seen at a Level III trauma center (50) might discourage and eliminate some trauma centers from participating in the system. There was also much discussion concerning whether the numbers should apply only to Level I and II trauma centers and whether a set number of trauma patients was necessary for trauma center personnel to maintain their skills. Dr. Doug Norcross stated that the reason this issue was addressed initially was that the federal model trauma plan calls for state plans to address the numbers of patients to be seen at trauma centers. Dr. Rick Bell suggested that we may be able to avoid specific numbers by adopting a policy stating that trauma centers should see enough trauma cases to be "sufficient to maintain the skills of the primary caregivers involved and to maximize the resource utilization of the institution as monitored by the quality improvement program."

Dr. Raymond stated that the Medical Control Committee would refrain from taking any action on any part of the Trauma System Committee's recommendations to define the trauma patient and to define the numbers of patients to be seen at any level of trauma center. Dr. Stein's Designation Subcommittee will readdress these issues and bring adapted recommendations to the next Trauma System Committee. Staff agreed to research whether the federal model trauma care plan requires that specific numbers must be addressed in the state plans.

Dr. Raymond then asked the committee to address the remaining recommendations of the Trauma System Committee. **The next recommendation had been submitted by the Designation Subcommittee and revised by the Trauma System Committee to read: "ACS criteria must be used as a guideline for the purpose of designation of trauma centers." Dr. Bell asked that the word "designation" be dropped from the phrase "ACS designation criteria" since the ACS does not have the authority to designate trauma centers. Dr. Norcross made a motion to accept this recommendation with the deletion of the word designation; the motion was seconded by Dr. Debra Perina. The motion passed.**

For feedback purposes, the committee then began a discussion of the unapproved recommendation that "Redesignation should involve on-site review of the trauma center every 3 years and quality assurance program must be an important element in the redesignation process." Dr. Norcross stated that he felt that the QA review should be defined; that in his hospital the trauma clinic frequently has difficulties getting charts and this hinders their ability to keep a written QA program. Dr. Bell said that for verification purposes it is important that evidence be available to show that any problems in trauma care have been identified, addressed and brought to closure. He said that this documentation process shows outside observers that the trauma center is being operated effectively. Dr. DesChamps said that the main reason quality assurance was stressed for the redesignation process was to not burden the Level I and II trauma centers with having to complete the lengthy designation survey every two or three years. Dr. Norcross asked for the Designation Subcommittee to define QA more specifically in their revised recommendation.

The committee then addressed the last recommendation which had been proposed by the Data Linkage Subcommittee and approved by the Trauma System Committee. **The recommendation was to "Use the medical record number as the identifier to link records of various data bases, provided that there is an established system to protect data at DHEC and that the hospital association agrees with the process." Dr. Norcross asked that the recommendation be amended to include any identifier, if the medical record number was not available. Dr. Sorrell made a motion to accept the amended recommendation and the motion was seconded. The motion passed.**

**Review and approval of the Drug List Document:**
The next agenda item was the review of the last draft of "The State Approved Drug List" document. Mr. Al Smith presented the document to the Committee. He stated that information written on the

larger majority of the drugs on the list had been previously approved by the committee, with only very minor changes such as correcting spelling and format errors.

Mr. Smith said that he had made changes on five of the drugs based on the response of the committee in their last review of the document. He explained the changes as reflected in final documents, using an overhead projector to ensure that the changes made at this meeting were incorporated verbatim, thereby eliminating the need for further review.

The drugs Mr. Smith presented with recommendations for significant alterations were: (1) Atropine sulfate, (2) Bretylium Tosylate, (3) 50% Dextrose (4) Epinephrine, and (5) Morphine sulfate. The final copy on each of these drugs as agreed upon by the committee is attached as part of these minutes.

The next drug presented was Albuterol sulfate. The committee had recommended to the DHEC board that this drug be used for pediatric patients with specific pediatric dosages. The Board did not approve the use of this drug because it did not have FDA approval for the proposed pediatric administration. The committee gave considerable discussion to this dilemma. The consensus was that this was a necessary drug in the treatment of pediatric patients. Dr. Perina volunteered to research the use of this drug for pediatric care with hopes of proving its use as a standard of care, even though it did not have specific FDA approval for this purpose. She will provide this information, along with the support of the pediatricians, for presentation to the "Board."

The Committee through unanimous consensus agreed to approve the "State Drug List" document with the exception of Albuterol sulfate. They agreed to this with the idea that the original document for albuterol would be used for the interim period, and that pediatric administration for albuterol could and would be added once the DHEC Board gave approval.

The Committee discussed the fact that there must be some drug for this purpose. Since the committee had recommended that terbutaline be dropped from the drug list some drug is need to meet the need that albuterol will serve for pediatric patients. Mr. Futrell suggested that he would be able to "hold" the notice to the field that terbutaline is deleted from the drug list. This will provide an alternative until the issue of albuterol is resolved. He said that he would also put out a note to the field that terbutaline could still be used until the matter with albuterol could be resolved.

Mr. Futrell said that he would have to approach both the Board and legal counsel to request re-consideration of their decision on albuterol.

Mr. Smith then presented changes to the document pertaining adenosine based on staff review of the current ACLS guidelines. The result of these changes is also included in the attached.

Dr. Bell made the motion that the Committee approve all the changes on the drug list which were discussed in today's meeting. Dr. Norcross seconded the motion. The motion passed.

Dr. Sorrell asked why the committee hadn't considered the addition of magnesium sulfate to the drug list. Mr. Fanning said that it was because we were trying to follow the policy of considering drug request only once a year. Dr. Perina suggested that when standards for patient care change, such as the ACLS standards, the drugs affected should probably be promptly considered. It was the consensus of the committee that this procedure should be followed. Dr. Sorrell then said that since magnesium sulfate fell into this category he would like to request consideration of adding this drug at the next meeting. The committee agreed to his request.

The committee agreed that the third week in September would probably be the best time to hold the next Medical Control Committee meeting. The committee will be polled by telephone to determine the best date.

The meeting was then declared adjourned.

Dr. Sorrell suggested that we look at standardizing what is considered cardiac arrest for reporting purposes.

Dr. DesChamps stated that he might also present the new drug, Mazicon.

# MEDICAL CONTROL COMMITTEE

## Minutes

## September 21, 1993

| Members | Others |
|---|---|
| Dr. Debra Perina | Lewis Moore, Spartanburg Co. EMS |
| Dr. Bob Malanuk | Al Futrell |
| Dr. Ed Deschamps | John Zirkle |
| Dr. Carol Baker | Alonzo Smith |
| Dr. Douglas Norcross | Phyllis Beasley |

In the absence of a designated committee chairman, Dr. Perina agreed to be acting Medical Control Committee chairman for this meeting. She opened the meeting by asking for a review of the minutes of the June 30, 1993, meeting. **Dr. Malanuk made a motion to accept the minutes as written. Dr. DesChamps seconded the motion. The motion was passed.**

Dr. Perina then introduced the second item of the agenda: issues related to the routes and dosages of drugs administered under on-line medical control as cited in the recently released drug list. Mr. Smith explained that the EMS Advisory Council had asked that the Medical Control Committee review several concerns about the new drug list; specifically, deviation from routes and dosages on the drug list which called for on-line medical control, and dosages for epinephrine given in anaphylaxis. He introduced Lewis Moore from Spartanburg Co. EMS who represented his service's medical control physician, Dr. Sansbury, to state his concerns regarding maximum dosages of drugs administered in the field and the issue of noncompliance with the drug list.

In addition to the above issues, Mr. Moore also expressed concern about restrictions placed on the dosage of atropine in organophosphate poisoning and administration of epinephrine drip in methods other than a central line.

The concern about infusing an epinephrine drip through a peripheral venous line was that the 1992 JAMA guidelines said it "should" be infused through a central line. The Committee discussed this issue and concurred that using a central line in the field was not permitted for the paramedic in South Carolina and the JAMA guidelines are not binding. Mr. Smith emphasized that, under current guidelines, paramedics are trained to establish a large peripheral vein in this situation.

Mr. Moore then mentioned that since the drug list cover letter stated that methods of administration

of drug doses other than those reflected in the drug list were "noncompliance," the freedom of the medical control physician to practice medicine was being restricted. He gave specific examples of this. One example was the use of atropine in organophosphate poisoning only with medical control. Another example was the medical control restriction on IV epinephrine use in the anaphylactic reaction.

Dr. Perina pointed out that the Committee considered the risk of giving atropine inappropriately in misdiagnosed organophosphate poisoning reaction to be significant. Therefore this risk mandates medical control contact. The Committee acknowledged that while this may appear to restrict medical practice, it, in fact, only limits the skills practiced by the paramedic and is designed to protect him. It was also pointed out that this list had undergone much closer scrutiny than previous lists in order to produce a quality drug list document. This document provides wider options for medical practice by the physician, but at the same time provided reasonable protection to the paramedic and patient. Dr. Baker suggested defining an initial standing order dose to specific signs and symptoms. After much discussion, the Committee agreed that Dr. DesChamps would check with Dr. Stan Schuman in Charleston who is an expert in agromedicine and the issue will be discussed at the next meeting.

In addressing the requested changes regarding IV epinephrine issue the Committee expressed the same concerns. After much discussion, **a motion was made by Dr. Norcross that "the epinephrine drug list sheet be amended to allow administration of an initial dose up to 0.5 mg of epinephrine 1:10,000 IV in cases of severe anaphylaxis on standing order if medical control contact is not possible or feasible in the situation. The reason for not contacting medical control must be documented, and any dose above 0.5 mg must have on-line medical order. The motion was seconded. The motion passed.**

Discussion returned to the overall issue of allowing on-line orders to deviate from the dosage ranges in the drug list. The Committee made it clear that one purpose of the list was to limit the scope of paramedic practice and provide protection for the medic while allowing for medical discretion in some areas. There was no intention of permitting drug doses not in compliance with this drug list. Further, additions or changes to the drug list may be requested by individual EMS providers and their medical control physicians and will be considered by the Medical Control Committee.

Next, the Committee discussed adding magnesium sulfate and flumazenil to the state drug list. The Committee noted that a formal, written request had not been received for the addition of magnesium sulfate. Dr. Perina asked that Dr. Sorrell submit the request and justification for consideration at the next meeting. Dr. DesChamps proposed the addition of flumazenil to the list, but said he did not submit a formal request of its consideration. He asked that the use of the drug be discussed especially in regard to its effectiveness in benzodiazepine overdose. The Committee expressed a number of concerns about the use of this drug and shared mixed experiences with it. Concerns included side effects such as seizures, arrhythmias and possible death in some patients in the cases of combination overdoses. An additional concern was the need to obtain a more in-depth patient

history than is possible in the field. The Committee took no action and asked Dr. DesChamps to bring back additional research on the use and effects of the drug.

The Committee then addressed the pilot project proposal from Dr. Kratz of Meducare to allow paramedics to transport patients with arterial lines by ground ambulance, without an RN on board, as long as the lines are capped off and not used for monitoring. Dr. Norcross further explained the pilot project and said that allowing paramedics to transport these patients by ground ambulance would preclude the necessity of using the Meducare helicopter and its nursing staff, creating an unnecessary expense and tying up the helicopter when it may be needed for trauma cases. Dr. Norcross emphasized that this project would allow only the transport of these arterial line patients, not the use of the arterial lines and would not ask or allow the paramedic to monitor the lines. **Dr. Malanuk made a motion to approve the pilot project for transport of arterial line patients. The motion was seconded by Dr. DesChamps. The motion passed. Dr. Malanuk then made a second motion that Div. of EMS staff begin the development and implementation of a paramedic training module to allow the transport of arterial lines on a statewide basis as soon as possible.** Dr. Norcross commented that as this training module is developed the staff should look down the line to allowing monitoring of these lines also. **The motion was seconded by Dr. Deschamps. The motion passed.**

Dr. Norcross said that if paramedics will be transporting patients with dopamine and dobutamine, the Committee may need to consider paramedics monitoring through central lines to keep a nurse from having to go on transports.

Mr. Zirkle expressed concern about the impact that expanding specialty skills would have on the statewide curriculum. He expressed a need for the Committee to give strong consideration before approving certain new or complex skills for paramedics that will require additional training, but that they may not be able to practice at the local provider level. To keep adding these type skills to the statewide curriculum detracts from the core skills and procedures a paramedic must know and unless he is involved locally in the specialty skills area, he won't remain competent in them.

Dr. Norcross then suggested the Committee should consider allowing paramedics to transport trauma patients with chest tubes. Dr. Perina and Dr. Norcross will obtain more information on this and report back to the Committee.

Ms. Beasley then gave an update on trauma system activities. She reported that the Designation Subcommittee met on August 26 to discuss and rework recommendations regarding patient volumes and severity, and designation criteria which had been presented, but not approved at the last Trauma System Committee meeting. She reviewed the revised recommendations which set guidelines for minimum patient numbers and severity types to be seen by the primary surgeons at each level trauma center and the patient volumes for each level trauma center. Dr. Malanuk expressed his prior concern about trauma centers which have many surgeons seeing trauma not being able to meet these numbers. This concern was supported by other members of the Committee. Ms. Beasley

emphasized that these numbers were developed only as recommendations for guidelines and also that these numbers would apply only to the surgeons who were the primary trauma surgeons. She stated that these recommendations were presented to the Medical Control Committee for informational purposes and so that the members may be aware of the recommendations prior to the next Trauma System Committee meeting.

She then reviewed the Designation Subcommittee's recommendations regarding the redesignation process. The recommendations included a two-year quality assurance review cycle and a complete redesignation application process every six years. Dr. Malanuk stated that he believed a two-year cycle was too short a time period and that there should be a quality assurance review at the three year mark with a full redesignation process on the sixth year. Ms. Beasley explained that the subcommittee had recommended a two-year cycle based on the staff's poll of the systems used in several other states.

Ms. Beasley further reported that regional triage and transport protocol planning has begun in the Lowcountry and Upstate regions. The Lowcountry region has established protocols for Berkeley County and will meet next in Colleton and Beaufort Counties. The Upstate region recently held a strategy meeting and has decided to first meet with all the designated trauma centers in the region to determine their special capabilities. They will then hold a meeting with the nondesignated hospitals to inventory their trauma care capabilities. Following establishing the hospital resources, a meeting will be held with the EMS providers. The Upstate expects their regional planning to be completed by the end of December 1993.

Ms. Beasley said that the redesignation process of Greenville, Richland and MUSC trauma centers is underway. Their applications have been received and reviewed by staff and the site visit teams and dates have been established. Orangeburg Regional Medical Center's application for a Level III trauma center is expected by the end of September. Lastly, Ms. Beasley reported that the staff's request for a one-year extension of the trauma grant was recently approved.

Under new business, Mr. Zirkle passed out a survey to sample the Committee members' opinions regarding the level of participation of the course physician medical director in paramedic and intermediate EMS courses. He asked that it be returned within 10 days.

**Dr. Baker made a motion that, based on the national PALS guidelines, the age limit for intraosseous infusion be moved up to six years old. The motion was seconded by Dr. Perina. The motion passed.** Further discussion then centered on taking intraosseous infusion off pilot project status. The Committee decided to review any feedback received from existing programs and to ask Dr. Bob Seigler to share data he received in a recent survey of intraosseous programs.

Dr. Baker also asked that a discussion on thiamine be added to the next agenda.

The next Medical Control Committee meeting will be held on Monday, November 29, 1993 at 1:00

p.m. following a meeting of the Trauma System Committee at 10:00 a.m. The meeting was then adjourned.

# MEDICAL CONTROL COMMITTEE

## Minutes

## November 29, 1993

| Members | Others |
|---|---|
| Bob Malanuk, M.D. | Mike Stein, M.D. |
| Richard Bell, M.D. | Al Futrell |
| Ed DesChamps, M.D. | John Zirkle |
| Carol Baker, M.D. | Alonzo Smith |
| Douglas Norcross, M.D. | Phyllis Beasley |
| John Sorrell, M.D. | Joe Fanning |
| R. Caughman Taylor, M.D. | |
| Debra Perina, M.D. | |

Dr. Perina served as chairman for this meeting. She opened the meeting by asking for a review of the minutes of the September meeting. **There being no suggested changes the minutes were declared approved.**

Dr. Perina then introduced the two new memberships on the committee. Dr. Taylor is a new member, as a representative of the USC School of Medicine. Dr. Sorrell will serve as the Low Country EMS Region's Medical Director beginning in January and will serve on the committee in that position.

Dr. Perina then asked the committee to consider the recommendations of the Trauma Systems Committee **(attached)** in its meeting earlier in the day. Mrs. Beasley presented a synopsis of the committee's report. The full report is attached. The Committee discussed the components and answered specific questions before approving the recommendation. Dr. DesChamps made the motion, seconded by Dr. Malanuk that the committee accept these recommendations as approved by the Trauma System Committee. The motion passed.

Dr. Perina explained to the Committee that a Review Committee for Trauma Center designations had been developed for the purpose of review of the Level I Trauma Center applications. This committee was developed to provide broad input, both geographically and professionally. Dr. Norcross had formed the committee as chairman of the Trauma Systems Committee. The committee is composed of 2 emergency medicine physicians, 2 trauma surgeons, 2 emergency or ICU nurses, 1 hospital administrator, one regional medical director, and one prehospital EMS director.

There was some discussion as to the reason for the change in the review body. It was explained that the model trauma plan set up as the national model calls for a review committee with broad representation. The committee, as appointed by Dr. Norcross, provides representation of all types, and excludes those on the medical control committee who in some way represent the three hospitals being reviewed.

Mrs. Beasley reported to the Committee that Orangeburg Regional Medical Center had submitted an application for consideration for designation as a Level III (Community) Trauma Center. She reported that staff had reviewed their application and had found no critical problems. She reviewed the specific findings of the staff report. There was a brief discussion with special concern regarding the areas in which the hospital had problems in the last review cycle. These were mostly in the area of the commitment and ATLS capability of the emergency department physicians and surgeons.

Dr. DesChamps made the motion, seconded by Dr. Baker that the committee approve a site visit at the Orangeburg Regional Medical Center.

The Committee agreed with the suggestion that the site team to visit Orangeburg would be composed of different persons than the team for Orangeburg's previous visit prior site visit. The Committee also determined that the site visit to Orangeburg should be conducted in January and that the Medical Control Committee would be responsible for making the designation determination (be the review committee) at its meeting in February.

Dr. Perina asked for volunteers for the site team. No volunteers came forth at this time and she said that the EMS staff would be contacting potential team members.

There was some discussion as to the appropriate reviewing body for the Orangeburg application. Dr. Norcross made the motion, seconded by Dr. DesChamps, that the Medical Control Committee should be the reviewing body for the application of Orangeburg Regional Medical Center for trauma center designation.

Dr. Perina asked Dr. Baker to present the results of the Intraosseous pilot study which had been undertaken over a period of several years. This study had taken place in several locations in the state. Dr. Seigler recently compiled the data on this pilot, which had been approved since 1987. Ninety-nine cases had been undertaken. These cases were of 0-4 years of age, with sixty four of the cases of the less than 1 age group. Seventy five of the ninety nine cases were successful with functioning intraosseous without complications. Most procedures were completed within less than a minute. Complications were very rare. Seventy five cases took only one attempt, twenty two with two attempts. All EMS services felt that it was important to keep this procedure.

Dr. Baker made the motion, seconded by Dr. Norcross that, based on the results of the study, as reported, the committee should approve the proposal to include intraosseous infusion as part of the Intermediate and Paramedic procedures and curriculum. The motion passed.

Several questions arose regarding the appropriate training.Mr. Futrell suggested that it could be part of the unit based training module, or it could be part of the paramedic course.
Discussion included the methods to train present intermediates and paramedics. Methods include grandfathering those people already certified locally, using inservice education in some services, and allowing the regions to provide special education programs for those that are not included otherwise.

Dr. DesChamps made the motion that the Intraosseous infusion be made a regular part of the state intermediate and paramedic training programs, both teaching and testing. The motion was seconded. The motion passed.

The Committee next discussed the proposed pilot project by Medshore Ambulance to monitor a drug CGP 39393 (a non FDA approved drug) as a part of the GUSTO studies. It is a manufactured medication that is similar to a naturally occurring anticoagulant and is considered to be of similar risk as heparin. Anderson Hospital is participating in the study and wishes to be able to transfer patients between hospitals while being administered this drug. Patients would likely be transported to other hospitals such as Greenville Memorial and Emory University Hospital, also participating in the study. Dr. Sorrell suggested that although it is an experimental drug, we should not do anything to impede a study which is going to be nationwide.

Dr. Perina stated that in a brief review of the proposal she found that the studies to date show it to be at least as safe as heparin in most situations.

Dr. Bell made a motion, seconded by Dr. Malanuk that the request for Medshore Ambulance to monitor this drug during transport, as a part of the GUSTO study and subject to the protocol conditions of the study, should be approved. The motion passed.

Dr. Perina stated that this motion would be subject to the approval by DHEC's legal staff.

Mr. Al Smith presented a proposal for changes to the protocols for administration of epinephrine.

Dr. Baker made a motion, seconded by Dr. Norcross that the protocols as presented for epinephrine be changed in the new document. The staff was requested to make changes as approved by the committee and bring back to the committee for approval at the next meeting.

Mr. Smith then presented a request to make changes in the administration of atropine. After some discussion Dr. Perina suggested that the Committee defer proposals for changes in administration of atropine until more information is available.
The Committee agreed.

The Committee discussed optional skills during interfacility transports such as monitoring arterial lines, chest tubes, pleura vacs, etc..... It was the agreed by the committee that a subcommittee

should be formed to come up with treatment protocols in lieu of training modules for each procedure that is approved. The persons agreeing to serve on the subcommittee for this review were Dr. Baker, Dr. Norcross, and Dr. Perina.

It was agreed that the next Medical Control Committee meeting will be held in February, with major emphasis spent on review of trauma center designations, and proposed changes in the drug list.

The meeting was then adjourned.

**DESIGNATION SUBCOMMITTEE RECOMMENDATIONS**

**APPROVED BY THE TRAUMA SYSTEM COMMITTEE - 11/29/93**

**RE: PATIENT VOLUME AND INJURY SEVERITY TO BE SEEN AT TRAUMA CENTERS**

1. **Level I trauma centers - 600 patients per year meeting the state requirements for inclusion in the trauma registry.**

2. **Level II trauma centers - 300 patients per year meeting the state requirements for inclusion in the trauma registry.**

3. **Level III trauma centers - 100 patients per year meeting the state requirements for inclusion in the trauma registry.**

**The numbers should be approximate if the hospital meets other requirements to receive designation.**

**RE: REDESIGNATION OF TRAUMA CENTERS**

1. **For Level I and II trauma centers, the redesignation process would consist of a quality assurance review every two years. On the third cycle, or sixth year, the trauma center would be required to submit an application for redesignation.**

2. **The quality assurance, two-year, site visit team will be composed of at least one DHEC Division of EMS staff member and on in-state professional representative, such as a general surgeon with special knowledge of trauma care or an emergency department physician, or a trauma nurse coordinator. The six-year site visit team will be composed of a full out-of-state team.**

3. **If the Level I or II trauma center fails the two-year quality assurance review, then the hospital must undergo a redesignation review process with an in-sate site visit team of one DHEC staff person, one physician and one trauma nurse coordinator. If the hospital fails this application, it will be de-designated. In order to be redesignated, it then must submit to a full application process with review by an out-of-state site visit team. If the hospital fails its two-year redesignation quality review and has to undergo the full application process and is redesignated, the "clock will be reset" and the hospital will not have to undergo another complete application procedure for six years.**

**4. At the Level III trauma centers, the redesignation timetable is the same: a two-year quality assurance review cycle, followed by a six-year full application process. If a Level III trauma center fails its two-year quality assurance review, it must reapply with a complete application and be reviewed by an in-state site visit team. If the hospital then fails the in-state site visit team's review, the Level III hospital must wait until DHEC's next designation cycle to reapply.**

**TRAUMA PLAN SUBCOMMITTEE RECOMMENDATIONS**

**AS APPROVED BY THE TRAUMA SYSTEM COMMITTEE - 11-29-93**

**RE: REGIONAL TRAUMA TRIAGE AND TRANSPORT PROTOCOLS AND PLANNING**

**A. The "Triage Decision Scheme" as written in the '93 edition of the ACS document "Resources for Optimal Care of the Injured Patient will be used as a guideline in planning regional trauma triage and transport protocols.**

**B. Roles and Responsibilities in Development of Regional Trauma Plans:**

**Administrative and Systems Development:**

**1. The State Office of EMS maintains overall responsibility for the development of all Regional Trauma Plans.**

**2. The Regional Trauma Team composed of the regional trauma surgeon, the regional EMS medical director, the regional EMS director, and a state staff trauma person will act as the team and will be responsible for the design and implementation of trauma plans for their region. The regional EMS medical director will act as chairman of the team.**

**3. The team must invite the following in plan development:**

- **a. local EMS medical directors**
- **b. local EMS directors**
- **c. emergency department nurse managers**
- **d. emergency department medical directors or their designees**
- **e. hospital CEOs or their designees**
- **f. chairmen of hospital surgical departments or their designees**

**Administrative Support and Coordination of Resources for the "Team":**

**The regional EMS offices will be responsible for setting up appointments, arranging the meetings, and coordination of communication between all persons participating in the development of the regional plans to include local providers.**

**Triage, Transfer and Bypass Protocols:**

**Specific protocols will be developed to meet the needs of each region. An example of these guidelines would be the "triage decision scheme" as published in the '93 edition of the ACS document "Resources for Optimal Care of the Injured Patient."**

**Responsibility for development and implementation of protocols will rest with the above mentioned committee. The state suggested guidelines for regional triage and transport protocols will be used as a guideline in the development of the regional plans. Final approval of the regional plans rests with the Trauma System Committee.**

**Regional EMS Offices will be responsible for:**

**1. Training of Personnel**

**a. identifying the present needs in the region for trauma training**
**b. designing and implementing quality assurance programs to measure the appropriateness of prehospital trauma care in the region**
**c. considering trauma training needs in determining their plans for training of prehospital personnel within the region**

**2. Human Resources**

**a. identifying the number of hospital and prehospital personnel in their region**
**b. making projections about the number of personnel that will be required in the future and conducting trauma courses based on those projections**

**Trauma centers will be responsible for:**

**1. Considering the trauma training needs of the personnel within their hospital as a priority when developing their training programs**

**2. Considering their responsibility as a designated trauma center for training for trauma personnel in non-trauma centers within their area**

**RE: SUGGESTED STATE GUIDELINES FOR REGIONAL TRIAGE AND TRANSPORT PROTOCOLS**

**I. Identification of Resources**

**A. Identify all regional hospitals by Level I, II, or III or non-trauma center designation. The status of the emergency departments of the non-trauma center hospitals should be established identifying which have 24-hour emergency departments and which do not.**

**B. (Of lesser significance than the above identification of resources), Identify the level of care, by ALS and BLS, available from each EMS provider and rescue squad, as well as any additional trauma-specific training received at each provider.**

**C. Any resources of a Level III trauma center over and above minimum requirements (e.g. neurosurgery on a less than 24-hour basis) should be inventoried and identified as part of the regional plan.**

**II. Protocols**

**A. Regional field triage should be based on the Triage Decision Scheme as adopted by the Trauma System Committee.**

**B. Each Regional Trauma Team should develop local guidelines for initial stabilization and transfer to a trauma center whenever possible. This should include the development of a "Guidelines Poster."**

**C. The regional plan should assure that a mechanism for appropriate, prompt transfer of the trauma patient to a designated trauma center is in place.**

**D. The Level III trauma center will accept all patients from the field within their area who meet established trauma center triage guidelines and the trauma centers should treat or care for these patients at least to the minimum capability of a Level III trauma**

**center. The Level III trauma centers may also determine by regional protocol patients that should bypass to a higher level of trauma care, if that higher level is readily available.**



**E. The Level III trauma center should define the types of patients that they do not have the resources to care for, and prearrange by protocol to provide prompt transfer of those patients to a higher level trauma center for definitive care. Interhospital transfer agreements should be made in writing. Guidelines can be developed based on the chapter regarding interhospital transport in the ACS "Resources of Optimal Care of the Injured Patient."**

**III. Evaluation**

**A. Establish a mechanism at the state level for the evaluation of the state's trauma system. This data will be made available to the regions as needed for their QI activities.**