



**MINUTES**

**EMERGENCY MEDICAL SERVICES & TRAUMA SYSTEM**

**JOINT  
DRUG & DEVICE COMMITTEE  
PROCEDURE/PROTOCOL COMMITTEE**

**May 2, 2007—09:30 A.M.**

**MEMBERS PRESENT**

Allen Marino, M.D., Chairman  
Dale Carrison, D.O., MA (Alternate)  
Jo Ellen Hannom, R.N., CCFD  
Larry Johnson, EMT-P, MWA  
Chief David Petersen, MFR  
Richard Main, EMT-P, AMR  
Jason Meilleur, EMT-P, MWA

Richard Henderson, M.D., HFD  
David Slattery, M.D., LVFR  
Bruce Evans, EMT-P, NLVFD  
Sandy Young, R.N., LVFR  
Scott Vivier, EMT-P, HFD (Alternate)  
Jon Kingma, EMT-P, BCFD

**MEMBERS ABSENT**

Thomas Geraci, D.O., MFR  
Aaron Harvey, EMT-P, HFD  
Brent Hall, EMT-P, CCFD

John Higley, EMT-P, MFR  
Julie Siemers, R.N., MA

**SNHD STAFF PRESENT**

Rory Chetelat, EMS Manager  
Trish Beckwith, EMS Field Representative  
Rae Pettie, EMS Program/Project Coordinator  
Lan Lam, Administrative Assistant

Mary Ellen Britt, R.N., Regional Trauma Coord.  
John Hammond, EMS Field Representative  
Judy Tabat, Recording Secretary

**PUBLIC ATTENDANCE**

K. Alexander Malone, M.D., NLVFD  
Brian Rogers, EMT-P, MWA  
Randy Howell, EMT-P, HFD  
Jennifer Hall, EMT-P, AMR  
Nancy Harpin, R.N., UMC

Steve Patraw, EMT-P, MWA  
Tim Crowley, EMT-P, LVFR  
Derek Cox, EMT-P, LVFR  
Justo Trujillo, EMT-P, CCFD

**I. CONSENT AGENDA**

The Joint Drug & Device and Procedure/Protocol Committee convened in the Clemens Room of the Ravenholt Public Health Center on Wednesday, May 2, 2007. Chairman Allen Marino, M.D., called the meeting to order at 09:34 a.m. and the Affidavit of Posting was noted in accordance with the Nevada Open Meeting Law. Dr. Marino noted that a quorum was present.

Minutes Joint Drug & Device and Procedure/Protocol Committee Meeting April 4, 2007

Dr. Marino asked for a motion to approve the minutes of the April 4, 2007 Joint Drug & Device and Procedure/Protocol Committee meeting. A motion was made, seconded and passed unanimously to approve the minutes as written.

**II. REPORT/DISCUSSION/POSSIBLE ACTION**

**A. Discussion of Addition of Continuous Positive Airway Pressure Device to the Official Air Ambulance, Ground Ambulance & Firefighting Agency Inventory**

Chief Evans stated that after hearing some of the discussions that ensued about Lasix and treating Congestive Heart Failure (CHF) patients he looked into options available and has seen tremendous success with the use of Continuous Positive Airway Pressure (CPAP) which provides another opportunity to treat the patient aggressively without providing an advanced airway and having the risk of a bad outcome from a missed or difficult intubation. He presented the use of CPAP as an optional item that would ultimately be placed on the rigs by July 1, 2008 to allow the Fire Departments and private agencies to incorporate this into their budget and strategic planning.

Dr. Carrison felt that capnography, end-tidal CO<sub>2</sub> detection would do more as a primary tool for airway management and be the best utilization of resources and funds available.

Ms. Young stated that Las Vegas Fire & Rescue does support CPAP and felt that it should be considered as an optional piece of equipment but added that Dr. Slattery did have a few concerns with the protocols presented. He would like to see the protocol limited to a narrower focus for use and to start out with pulmonary edema. Also he felt the indications need to be stricter by making it a respiratory rate greater than 30 breaths per minute and SpO<sub>2</sub> of less than 90%.

Dr. Marino commented that as a system we want to demonstrate excellence in cardiopulmonary emergencies and felt that the next step should be looking at capnography to its full potential. He added that he would also like to invest more time reviewing data presented on diagnosing CHF versus pulmonary edema, COPD and pneumonia.

Mr. Johnson agreed with Chief Evans stating that he has seen CPAP work with great outcomes in Texas where CHF patients were in the 1,000's. He questioned whether the numbers were that high in our system.

Dr. Carrison stated that as a system we need to take the time to test new equipment in order to make an intelligent decision on whether or not it is worthwhile. He felt if an agency was willing to take the initiative to collect the data then we can revisit and determine if this is a resource that we should be utilizing. He added that a lot of time and investment in the educational piece would need to be done to ensure paramedics are able to identify CHF.

Dr. Marino stated that if it is made an optional item we would need to decide if the protocol is exactly the way we want it, but if we make it a trial item, an agency can propose that this is what they are going to use and how they are going to monitor it and then the medical director could set up the protocol for the agency.

Mr. Vivier stated that he liked the idea of letting the medical director be able to determine the protocol since it will change over time as it is used. He added that he does not want to be limited to only one CPAP device and would like to be able to use any of the CPAP devices out there to decide which one is best.

Chief Evans believes that a trial period with a slated schedule to revisit in June of 2008 is a workable goal. He added that he would like to compare two sides of the Valley and get Henderson Fire involved because it's two different environments which would gather two different sets of data.

Dr. Carrison questioned whether more than one agency can do the trial from the Health District's standpoint. Mr. Chetelat stated each agency would need to submit their proposal for an independent trial of the device and file the appropriate paperwork at the SNHD EMSTS office.

A motion was made to approve the addition of Continuous Positive Airway Pressure Device as a trial piece of equipment for any agency whose petition and protocol are approved by the SNHD EMSTS office. The motion was seconded and passed unanimously by the committee.

B. Discussion of Revisions to BLS/ILS/ALS Protocols

Changes have been incorporated into the draft regulations document by italicized and underlined text.

- Throughout document changed name from Clark County Health District to Southern Nevada Health District
- Throughout document changed “Intravenous Fluids (IVF) to Normal Saline (NS)
- Throughout document changed all Morphine doses to: 0.1mg/kg max single dose of 10mg
  
- Forward
  - Addition of “and the Spinal Immobilization” in paragraph 4 as a protocol that must be followed in the specific sequence noted.
  - Change of name to Office of Emergency Medical Services & Trauma System
  - Change Website URL
  - Change Chief Health Officer: Lawrence Sands, D.O., MPH
  - Change to EMS Agency Medical Directors
  - Change to EMS Staff

- General Patient Care (H.7.a)

There was some discussion to consider including mental status and psychiatric patients in the triage guidelines for patients placed in the hospital waiting room.

Dr. Henderson felt that if a patient who has not taken any drugs and not acting out in a violent way could be placed in the waiting room and the hospital could provide security. Ms. Young explained that we cannot leave them unattended without giving report to triage then it becomes the responsibility of the hospital.

Dr. Carrison questioned whether we are trying to address a problem that we don't have and asked how many transport agencies are getting held up with mental patients in the hospital for over a half hour. Ms. Young felt that this was a safety issue that we may put psychiatric patients in the waiting room but added that education needs to go to the hospital staff because they may have the understanding that we need to ask permission.

Mr. Vivier recommended adding the “vital sign” of mental status as Alert & Oriented x 4 with a GCS of 15 to Section H.7.a. It was also suggested to add “single dose” to Section H.7.b. regarding Morphine Sulfate and/or Phenergan.

- Acute Coronary Syndrome

Language was added requiring ALS providers to obtain IV access prior to Nitroglycerin administration.

- Allergy / Anaphylaxis

Dr. Henderson suggested that “distress” be changed to allergic reaction in this protocol for clarification.

- Altered Mental Status

Dr. Henderson questioned why this protocol states to give nasal Narcan first instead of just saying administer Narcan and leave it up to the medic which route they decide and verify the dose in the formulary. Dr. Marino commented that it would be the same for Versed.

Mr. Vivier stated in keeping consistent with all other protocols he would like to see the doses listed for each route in the protocol as a sub-bullet but not mandate a particular order. The committee agreed.

Dr. Marino felt that since introducing intranasal (IN), attempt vascular access should be reworded to “consider” vascular access since it would be an optional item. The committee agreed.

- Behavioral Emergencies

Changed “attempt” vascular access to “consider” vascular access.

Added option of intranasal route of administration for Versed.

- Cardiac Dysrhythmia: Asystole

Dr. Carrison questioned the term “prolonged” and felt that patients in cardiac arrest don’t need sodium bicarbonate. Mr. Cox reported that ACLS guidelines do not give a timeframe they just say consider the H’s & T’s, or possible underlying causes.

Mr. Vivier agreed and suggested removing item #3 altogether and stating the language is treat 5 H’s & 5 T’s per ACLS.

The committee decided to table this discussion pending more information on Sodium Bicarbonate from Trish Beckwith.

- Cardiac Dysrhythmia: Bradycardia

There was some discussion to include Intranasal (IN) route for sedation. Ms. Beckwith stated the thought being it could be used in the interim especially in a patient that you may not be able to get IV access right away. The committee agreed and it was suggested to sub-bullet all three routes and doses.

Dr. Henderson asked if the dose on the Morphine for pacing could be changed to 5 minutes instead of 10 and felt that it should read “0.1 mg per kilo maximum single dose of 10mg repeat (Q5) at 5 minute intervals”. Dr. Carrison commented that if you do that as a protocol you’re going to have people trying to give 4.2 mg of Morphine. Dr. Henderson questioned whether that would have to be spelled out in the protocol and if so we could say “0.1 mg per kilo maximum single dose of 10 mg repeat (Q%) at 5 minute intervals, round to the nearest dose”.

Ms. Young made the point that Morphine administration in cardiac and burn patients have no end dose. Dr. Henderson stated that the 10 is a maximum single dose, not a maximum total dose. Mr. Vivier stated that in the Abdominal Pain protocol it is a maximum total of 10. Dr. Henderson stated he would remove that.

Ms. Young stated that a patient can be put in the waiting room if given Morphine and this needs to be spelled out in the General Patient Care protocol.

Dr. Marino suggested that in the Disposition section of the General Patient Care protocol, subsection 7b to add “single” before Phenergan and Morphine dose and to remind everybody that not everybody that gets Morphine needs Phenergan.

- Cardiac Dysrhythmia: Monomorphic Ventricular Tachycardia

The question came up if synchronized cardioversion should be changed to defibrillation for the unstable patient. Mr. Vivier stated that ACLS is very clear for monomorphic V-Tach it is synchronized cardioversion first. The ACLS guidelines should be followed.

- **Cardiac Dysrhythmia: Pulseless Electrical Activity**

Mr. Vivier stated that the language in section 3 regarding underlying causes is the same language that should be on the Asystole protocol. He added that it does list Sodium Bicarbonate but now lists the correct use of it to treat acidosis.
- **Cardiac Dysrhythmia: Torsades De Pointes**

Mr. Main stated that he and Dr. Homansky discussed clarifying hemodynamically instability. Dr. Homansky's thought was that if a patient didn't have a blood pressure, defibrillate but if they did take a moment and try to give Magnesium Sulfate.

Mr. Vivier stated that we should keep our language consistent with ACLS. Dr. Malone agreed stating you also run the risk of waiting for a drug to perfuse where you could immediately use electricity.

Mr. Vivier stated that he did not like the language "perform defibrillation" which differs from ACLS. In the treatment algorithm it lists cardiovert; consider defibrillation as the initial treatment. The committee agreed.
- **Cardiac Dysrhythmia: Ventricular Fibrillation or Pulseless Ventricular Tachycardia**

Change section 9 to the ACLS guidelines regarding use of Sodium Bicarbonate.
- **Overdose / Poisoning**

Change "attempt vascular access" to "consider vascular access".

List the doses for each route in the protocol as a sub-bullet but not mandate a particular order. The committee agreed.
- **Pulmonary Edema / CHF**

Ms. Young asked if there is an appetite to change the Lasix dose to .5mg/kg and still allow the crews to give it if they feel it's needed.

Dr. Slattery suggested striking "For patients on chronic lasix therapy, administer twice the prescribed dose" and change the dose to 0.5mg/kg.

Dr. Marino stated he would like to see the maximum dose be 40mg.

Ms. Beckwith stated that John Higley suggested that a caution be added to the Lasix formulary for patients with hypersensitivity to sulfa drugs and with patients taking Lithium and Digoxin. The consensus of the committee was to table this for more information.
- **Trauma**

Mr. Cox questioned item 2 and asked if the list of procedures was meant to educate the medics on the steps to take to control hemorrhaging or can it be deleted since there is new evidence that tourniquets are becoming more popular. The committee agreed to change item 2 to "Control hemorrhage" and to strike the rest.
- **Trauma Field Triage Criteria**

Dr. Marino questioned the change to vertical fall of at least 20 feet. Mr. Chetelat stated and incident occurred where a patient fell on an escalator and it was considered a 20 foot fall. Ms. Young felt that the crew over triaged and this misinterpretation by one provider shouldn't constitute a change to a protocol.

Dr. Carrison agreed stating that ACLS language states a fall of 20 feet, not vertical fall. It was agreed upon to change it to "a fall from a height of at least 20 feet".

Dr. Henderson asked the committee how it is handled if a patient does not want to be transported to a trauma center but meets trauma field triage criteria. Ms. Britt stated that there is a law in place that states a patient must be transported to a trauma center, but we need to clearly address what should be done if the patient refuses. Dr. Carrison stated that you can't take anybody against their will unless they are a danger to themselves or other. Ms. Young suggested to make trauma center contact and let them make the decision which is what the current AMA algorithm recommends. Mr. Vivier suggested adding that language to the Trauma Field Triage Criteria Protocol. The committee agreed to send this issue to the Regional Trauma Advisory Board.

**III. INFORMATIONAL ITEMS/DISCUSSION ONLY**

None.

**IV. PUBLIC APPEARANCE/CITIZEN PARTICIPATION**

None.

**V. ADJOURNMENT**

As there was no further business, Dr. Marino called for a motion to adjourn. The motion was made, seconded and passed unanimously to adjourn at 10:59 a.m.