Southern Nevada Health District

MINUTES

EMERGENCY MEDICAL SERVICES & TRAUMA SYSTEM

DRUG/DEVICE/PROTOCOL COMMITTEE

May 4, 2011--10:00 A.M.

MEMBERS PRESENT

Richard Henderson, MD, Chairman
David Slattery, MD, LVFR
Michele McKee, MD, UMC
Eric Dievendorf, EMT-P, AMR
Nancy Cassell, EMS Professor, CSN
Jarrod Johnson, DO, Vice Chair, MFR
Eric Anderson, MD, MedicWest
Derek Cox, EMT-P, LVFR
Chief Troy Tuke, CCFD

MEMBERS ABSENT

Chief Scott Vivier, HFD
Gina Schuster, EMT-P, Community Amb
K. Alexander Malone, MD, NLVFD
Mary Levy, RN, UMC
Scott Scherr, MD, Sunrise Hospital

SNHD STAFF PRESENT

Rory Chetelat, EMS Manager
John Hammond, EMS Field Representative
Trish Beckwith, EMS Field Representative
Mary Ellen Britt, Regional Trauma Coordinator
Judy Tabat, Recording Secretary

PUBLIC ATTENDANCE

Christian Young, MD, BCFD
Steve Johnson, EMT-P, MWA
Philis Beilfuss
Rick Resnick, Mesquite Fire & Rescue
Chris Baker, RN, TriState CareFlight
Steve Patraw, BoundTree
Mark Calabrese, EMT-P, MWA
Dale Carrison, DO, CCFD
Tracey Metcalf, RN, TriState CareFlight
Larry Johnson, EMT-P, MWA
Michael Maute, TriStar
Bud Adams, CSN
Brian Anderson, Community Amb
Chief Tom Miramontes, LVFR

CALL TO ORDER – NOTICE OF POSTING OF AGENDA

The Drug/Device/Protocol Committee convened in the Clemens Room of the Ravenholt Public Health Center on Wednesday, May 4, 2011. Chairman Richard Henderson, M.D., called the meeting to order at 10:12 a.m. The Affidavit of Posting was noted in accordance with the Nevada Open Meeting Law. Dr. Henderson noted that a quorum was present.

I. CONSENT AGENDA

Chairman Henderson stated the Consent Agenda consisted of matters to be considered by the Drug/Device/Protocol Committee that can be enacted by one motion. Any item may be discussed separately per Committee member request. Any exceptions to the Consent Agenda must be stated prior to approval.

Minutes Drug/Device/Protocol Committee Meeting, April 6, 2011

Dr. Henderson asked for a motion to approve the minutes of the April 6, 2011 Drug/Device/Protocol Committee meeting. A motion to accept the minutes was made, seconded and passed unanimously.

II. REPORT/DISCUSSION/POSSIBLE ACTION

A. Review of Legal 2000 Patient Transport Guidelines

Dr. Henderson stated that new language was added to the Legal 2000 Guideline to read, "Upon EMS activation to an inpatient psychiatric facility, stable patients may be transported to the hospital that recently medically cleared the patient, even if that facility is not the closest or has the lowest hold census."

A motion was made to accept the added language as written. The motion was seconded and passed unanimously.

B. Review of Cardiac Arrest (Adult CCC CPR) Protocol

Dr. Slattery stated that this Committee must make a decision whether to deviate from or stay consistent with the American Heart Association (AHA) guidelines for adult cardiac arrest. In his opinion, based on the cardiac arrest and continuous chest compression (CCC) data from Arizona, CCC/CPR trumps any other decision and felt there is usually enough manpower on scene that this is probably going to be more of an academic distinction rather than a true distinction in the field. He referred to his revised protocol handout and stated that it is essentially the same protocol that is currently approved by the Health District with the exception of #7 where the non re-breather (NRB) mask ventilation or passive ventilation component of it was removed. He stated that regardless if you have an advanced airway, BLS airway or a Supraglottic airway, when you have enough manpower you're delivering ventilations at a rate of 8-10 times a minute or every 6 to 8 seconds which is consistent with AHA guidelines.

Ms. Beilfuss disagreed and stated that AHA is at no point suggesting that you do CCC with Bag Valve Mask (BVM) ventilation. Dr. Slattery related that neither is this protocol, it suggests that when available you move to advanced airway. Ms. Beilfuss stated that she is interpreting #7 to read as soon as you have time, put an oral airway in and BVM in opposition to compressions. Dr. Slattery stated that it is not in opposition to compressions, this will be a training issue.

Dr. Carrison questioned why Oropharyngeal Airway (OPA) is being used since the military experience has absolutely proven that Nasopharyngeal Airway (NPA) is highly successful with no complications compared to OPA. Dr. Slattery felt it is a good point in the tactical environment and added that it can certainly be added but felt that most providers and training centers initially train with the OPA and BVM.

Dr. Slattery stated that as discussed in previous meetings, the initial protocol was modeled off of Dr. Bobrow's study in Arizona that allowed EMS providers to either do 100% Non Re-Breather (NRB) mask on the patient and do chest compressions in the first 3 to 4 minutes of the cardiac arrest or do CCC plus BVM. Because there are 2 different concepts he feels it makes this protocol confusing and that was the reason for bringing it back.

Dr. Henderson questioned what the outcome data say is best NRB or BVM. Dr. Slattery stated that there was no difference in those outcomes.

After considerable discussion Dr. Slattery stated that a decision has to be made with the understanding that by going with this protocol they will be deviating from AHA for that specific issue which is BVM versus advanced airway and questioned whether or not we stop doing chest compressions to give 2 breaths.

Mr. Cox stated that the protocol currently reads that you have an option. Chief Tuke felt that is where the confusion lies; the medics don't know what to do because there is an option. He felt that a decision needs to be made, put it in the protocol one way and be done with it. Dr. Henderson stated that the Committee seems to be in agreement not to interrupt compressions to ventilate but the sticking point is whether to use the passive NRB or try to interpose ventilations with the BVM.

Dr. Slattery stated if the NRB mask was comfortable with everyone he would agree 100% but felt that the bridge between that and securing the airway is not really well established.

Mr. Cox felt that an advanced airway is going to be done within 6 to 8 minutes and suggested stating in the protocol that within 4-6 minutes if an advanced airway is not in place then you revert back to the traditional 30:2. If you are not comfortable with that language then stay with the NRB, do CCC and an advanced airway is going to be done within 6 to 8 minutes.

Mr. Adams expressed concern over the delivery of the oxygen with the passive oxygenation NRB. Being at the lips, there is a lot of dead air space to get down into the lungs. He questioned the amount of air space that is moved during chest compressions and if it's adequate. He added if a NRB is applied to a patient in the initial stages of cardiac arrest to get the AED on and start the chest compressions he would applaud that but was concerned with the interpretation of "either/or" in the protocol itself. He felt an event needs to be placed in the protocol whether it be 5, 6, 10 minutes or language that states by the time you get to your 2nd round of medications because most medics lose track of time at cardiac arrests and he felt that would resolve a lot of the confusion.

Dr. Slattery stated that those are excellent points and agreed there probably isn't enough ventilation with just a pressure change that occur with chest compressions only and that is why in the first couple of minutes it wouldn't matter if we left that airway alone. He felt that is the reason for the confusion because it's uncomfortable for those providers to still use the NRB mask and not make that switch to BVM and then to advanced airway. He felt that the cleanest way is to have interspersed ventilations until the advanced airway has occurred and then it's a non issue.

Dr. Henderson suggested having the language in #7 read: "Have additional rescuer insert Nasopharyngeal Airway (NPA)/Oropharyngeal Airway (OPA) and place NRB." Dr. Slattery again questioned what you do at that 6 minute bridge between that and securing the airway.

Dr. Henderson stated that the protocol states to consider advanced airway and he would interpret that to say stay with your NRB until you decide to intubate.

Dr. Slattery stated he would be opposed to that motion. He felt the answer is to make a decision whether we are going to do ventilation or not. If we do pass the NRB mask portion of it we also have to address what's going to happen after that 4 to 6 minute period and for our BLS providers. How are they going to ventilate and are they going to stop chest compressions to deliver those ventilations?

Dr. Henderson requested that they go ahead and have the motion pass here for item #7 and then look at item #17, because that is when you get into the 6 minutes. Mr. Cox agreed and stated he will make another motion to add to it.

A motion was made to change the language in #7 to read: Have additional Rescuer insert Nasopharyngeal Airway (NPA)/Oropharyngeal Airway (OPA) and place Non-Rebreather (NRB) mask on patient at 10-15 lpm. The motion was seconded and passed unanimously.

Mr. Cox suggested adding additional language to read: "If no advanced airway is placed after 4 minutes, traditional synchronous ventilation will be done". Dr. Slattery stated that it would address that bridge period between the NRB mask and the intubation if we are at that 4 minute level. Dr. Johnson suggested adding that additional language as #8.

A motion was made to add additional language as #8 to read: "If after 4 minutes of CCC CPR, if no advanced airway has been placed, initiate BVM ventilation at 6 BPM. The motion was seconded and passed unanimously.

C. Discussion of Revisions to Procedure Protocols

Dr. Henderson asked the Committee if there was any discussion or changes needed regarding the Procedure protocols. No discussion or action was taken.

D. Discussion of Revision to the Formulary

Dr. Henderson asked the Committee if there was any discussion or changes needed regarding the Formulary. No discussion or action was taken.

E. Discussion of Cyanokit Protocol

a. Discussion of Compassionate Use for Pediatrics

b. Update on Restocking/Logistics

Dr. Slattery refreshed the Committee on the Cyanokit® stating that Chris Sproule from Las Vegas Fire & Rescue obtained the Cyanokits for bioterrorism protection through MMRS grant funding. A protocol was put together but there were a couple of logistic issues that the Health District wanted us to address in terms of restocking, deployment and education which he felt has been addressed. The current protocol for cyanide poisoning is for indications in the field or for adult patients that have smoke inhalation plus cardiac arrest or smoke inhalation plus hypotension. Currently, the protocol does not allow use in children because the medication is not FDA approved for pediatric use in the United States. The question regarding treating pediatric patients came up during training and Dr. McKee was tasked to bring back a decision from her colleagues regarding recommendations in terms of direction and if we can find a solution for treating a smoke inhalation child that is in cardiac arrest.

Dr. McKee stated the tasked question was whether or not we were going to give the Cyanokit® in pediatric patients that are in full arrest. One of things that our group discussed was how much of the time we get a return of spontaneous circulation in a pediatric patient in full arrest and looking at the data it's anywhere from 2 ½ to 9 ½ % of the time and that is for all comers not just smoke inhalation exposures. So with a low return of spontaneous circulation and the fact that it is not FDA approved she stated that the consensus from the group was not to interfere with regular ABC (Airway, Breathing, Chest compressions) management and to defer to the use of the kit to the hospital.

Dr. Henderson questioned how giving another medicine would interfere with ABC's.

Dr. McKee stated that as long as it's not interfering, she felt you would get no discussion that it shouldn't be used. She questioned whether as a system we are going to look at the data and say that we would like to have evidenced based medicine for the reason that we know it to be effective because that data doesn't' exist. She felt that a more appropriate question would be if we are going to go off label for compassionate use whether or not we want to enter into a study protocol because the numbers are so small.

Dr. Anderson stated that it would be 10 years before we would have an answer. He didn't think anyone would be pulled off of the airway and compression management of a child to be administering the medicine; it would be an extra provider on scene. He added that he sees no harm in giving it and he would want it for his son.

Dr. McKee stated that if you are going to say that it is not going to interrupt ABC's, then it really should be brought into cardiac arrest, altered mental status or signs of hypoprofusion. It shouldn't just be in full arrest patients.

Dr. Slattery stated that because we don't have pediatric outcome data and safety data there's no suggestion at least from the adult literature that there is any big harm but the reason we just initially asked about those patients in cardiac arrest is those are the ones that probably have the highest cyanide levels. The patients that are altered mental status probably have time to get to the Emergency Department (ED). He stated that this Committee respects your opinion and the opinion of your colleagues and questioned if they would consider compassionate use if we actually had a compassionate use protocol put through our Institutional Review Board (IRB).

Dr. McKee reiterated that as long as it's clear that they are not interrupting ABC's and there is an extra provider administering the Cyanokit® she would agree to an IRB visitation of this but recommended that they broaden the scope of the patient.

A motion was made to approve the use of the Cyanokit® in pediatrics. The motion was seconded and passed unanimously.

Dr. Slattery explained to the Committee how a compassionate use protocol works and he stated he will work on getting that submitted to the IRB.

III. INFORMATIONAL ITEMS/DISCUSSION ONLY

None

IV. PUBLIC APPEARANCE/CITIZEN PARTICIPATION

None

V. ADJOURNMENT

As there was no further business, Dr. Henderson called for a motion to adjourn. The motion was made, seconded and passed unanimously to adjourn at 11:02 a.m.