MINUTES

EMERGENCY MEDICAL SERVICES & TRAUMA SYSTEM

DIVISION OF COMMUNITY HEALTH

DRUG/DEVICE/PROTOCOL COMMITTEE

October 01, 2014 – 09:00 A.M.

MEMBERS PRESENT

Jarrod Johnson, DO, Chairman, MFR
David Slattery, M.D., LVF&R
Troy Tuke, Clark County Fire Department
Frank Simone, NLVFD
Clem Strumillo, Community Ambulance
Chad Fitzhugh, Mercy Air
Eric Dievendorf, AMR
Mike Barnum, MD, AMR
Chief Scott Vivier, Henderson Fire Dept
Bryan Bledsoe, DO, MWA
Chuck Gebhart, Boulder City Fire Dept.
Brandon Hunter, MWA
August Corrales, JTM

MEMBERS ABSENT

Rebecca Dennon, JTM
Derek Cox, LVF&R
Rick Resnick, EMT-P, MFR
K. Alexander Malone, MD, NLVFD
Tressa Naik, M.D., Henderson Fire Dept.

SNHD STAFF PRESENT

Christian Young, MD, EMSTS Medical Director
John Hammond, EMSTS Supervisor
Judy Tabat, Recording Secretary
Mary Ellen Britt, EMSTS Manager
Gerry Julian, EMS Field Representative

PUBLIC ATTENDANCE

Eric Anderson, MD, MWA
Stephen Johnson, MWA
Jim McAllister, LVMS
Irene Barlow, CSN Student
Sydni Senecal, CSN Student
John Ebert, CSN Student
Thomas Sullivan, CSN Student
Jennifer Aguilar, CSN Student
Dale Carrison, DO, CCFD
Jason Driggars, AMR
Matthew Hartshorn, AMR
Luis Bello, CSN Student
Amber Johnson, CSN Student
Nick Goyak, CSN Student
Stephanie Montes, CSN Student
Alberto Puentes, CSN Student

CALL TO ORDER - NOTICE OF POSTING OF AGENDA

The Drug/Device/Protocol Committee convened in Conference Room 2 at The Southern Nevada Health District on Wednesday, October 01, 2014. Chairman Jarrod Johnson, D.O. called the meeting to order at 09:08 a.m. The Affidavit of Posting was noted in accordance with the Nevada Open Meeting Law. Chairman Johnson noted that a quorum was present.

I. PUBLIC COMMENT

Public comment is a period devoted to comments by the general public on items listed on the Agenda. All comments are limited to five (5) minutes. Chairman Johnson asked if anyone wished to address the Committee pertaining to items listed on the Agenda. Seeing no one, he closed the Public Comment portion of the meeting.

II. CONSENT AGENDA

Chairman Johnson 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, August 06, 2014

Chairman Johnson asked for a motion to approve the consent agenda which included the minutes of the August 06, 2014 Drug/Device/Protocol Committee meeting. *Motion made by Member Corrales, seconded by Member Tuke and carried unanimously.*

III. REPORT/DISCUSSION/POSSIBLE ACTION

A. Discussion of Adding Enabling Language Regarding Emergency Lights & Siren Transports to the Emergency Medical Care Protocol Manual

Dr. Young stated that the Office of Emergency Medical Services & Trauma System was tasked by the Medical Advisory Board (MAB) to write a position statement in support of limiting the use of emergency lights and siren (ELS) during transport of cardiac arrest patients without ROSC. That letter was dated September 16, 2014 and sent out to all agencies saying that ELS should be used in any situation in which the EMS attendant believes the patient's condition will be worsened by a delay equivalent to the time that can be saved by emergency transport.

Dr. Carrison felt that they should have a more candid discussion with regard to who they are transporting and at what point do they call in and get termination of resuscitation. Dr. Bledsoe agreed and commented that in the 7 years he has been here he has never been called for termination of resuscitation.

Dr. Slattery added that when they looked at this several years ago the inconsistency across when termination was being requested and being granted was highly variable among hospitals and felt that should be addressed.

Dr. Young stated that those cases should be followed up on where termination orders were requested and declined by bringing it to field supervisory staff to request a reason. Once they get a handle on those cases and find out where the discomfort is they can identify the outliers. He added that the ELS memorandum went out as an adjunct to the new protocols and questioned if the memo would be sufficient or does it also need to be added to the protocols or addressed as an educational component.

Dr. Slattery felt that the memo is fine. It provides the enabling language for which was requested.

Dr. Johnson stated that the Committee could visit the Termination of Resuscitation Protocol at the next meeting.

Member Slattery made the motion to approve the Use of Emergency Lights and Siren During Transport memorandum as written. Seconded by Member Tuke and carried unanimously.

B. Discussion of Prehospital Therapeutic Hypothermia

Dr. Bledsoe presented his argument on the use of therapeutic hypothermia (TH) in the prehospital environment. Using the Cardiac Arrest Registry to Enhance Survival (CARES) data from January 1, 2013 to August 31, 2014 from AMR and MedicWest (MW), it noted that MW did 1035 cardiac arrests, and of those 198 had return of spontaneous circulation (ROSC) and only used TH 62 times. AMR did 807 cardiac arrests with 164 ROSC and used TH 59 times. Dr. Bledsoe felt it is not being done overall. He added that these are the questions that need to be asked to have evidence based protocols here in Southern Nevada.

- Does it improve neurologic outcome from cardiac arrest: In the studies he referenced their conclusion was that it demonstrates no benefit for prehospital TH on either mortality or neurologic outcome on patients suffering from out of hospital cardiac arrest. Additionally no benefit has been demonstrated in any sub group of patients but they do recommend ongoing trials to help determine whether intra arrest administration of chilled fluids is a benefit.

- Does it improve out of hospital cardiac survival and outcomes compared to waiting until they arrive at the emergency department for cooling: They have some anecdotal cases but when looked at without bias it does not. The recommendation in 2003 from the American Heart Association (AHA) says that cooling should probably be initiated as soon as possible after ROSC but appears to be successful even if delayed 4 to 6 hours.
- Is it effective and is it cost effective: That would up to the Committee to decide.

Dr. Bledsoe stated that they have to base the protocols on the best available peer review evidence. Initial studies looked positive but the more recent ones do not. It's a dubious benefit and this system has the advantage of short transport times and multiple hospitals in the community with TH capabilities. He felt that hospital TH should continue until the evidence is significant otherwise. He added that if they are going to continue with TH the target temperature should be 36°C instead of 33°C and continue to research the prehospital cooling. He would like to see some intra-arrest studies under an approved research protocol and see if removing TH affects the CARE's data.

Dr. Slattery stated that therapeutic hypothermia in the field is an important part of that bundle of care and the fact that it started in the field is part of that continuum of care. Most hospitals now and most systems do a good job in identifying and cooling patients as well as the rest of the bundle which is managing those patients electrolytes, avoiding hyperventilation, monitoring blood sugar and blood pressure and paying attention to the patient in that first 24 hours. He added that if they cooled all those patients like they did in the Kim Trial, then he would agree that they don't need to be doing this in the prehospital arena. There are opportunities both in the prehospital and well as the hospital phases for them to do a better job of all of those aspects of that bundle of care and one of those would be for the witnessed ventricular fibrillation cardiac arrest, unless there is a contraindication all those patients should be cooled. He shared the CARES data from the City of Las Vegas from 2011 to 2014 and added that this is what they are doing in the community for cardiac arrest patients. Each of the hospitals have their own cooling protocols and processes but felt like there is a lot to work on in terms of opportunity for reaching those patients with a high indication for induced hypothermia. One of his biggest concerns about removing prehospital TH care is that they will lose that momentum of that entire bundle of care.

Dr. Bledsoe stated that the data is good but it reaches no significance if you don't know what part of the bundle accounts for any sort of improvement. You can't say that having not done TH might have resulted in better CPR or quicker transport times. The argument is the bundle is better but he felt that the bundle can't be defined.

Dr. Slattery defined the bundle for post resuscitation care in the prehospital environment which is recognizing the need for starting procedures once the pulse is back.

- Induce Hypothermia
- Screening for a STEMI
- Intense vigilance over avoiding hyperventilation
- Then everything else at the hospital matters.

Dr. Bledsoe questioned how the induce hypothermia got into the bundle; it is not in the AHA recommendations or in the NAEMSP recommendations.

Dr. Carrison stated that there are good arguments on each side of this issue. He gave credit to this system for starting TH in the prehospital environment because at the time the literature seemed to be clear that there was a significant benefit but subsequent trials seem to lack that benefit. Overall for the system he felt there wasn't any evidence with regard to their specifics in this geographic area that they can say absolutely one way or another there is a benefit to prehospital therapeutic hypothermia. In looking at the City Fire data with regard to cooling a selected group, he felt that if they are going to do a select group then they should be designing a study where they could logically look at this issue based on the data and see if it is any benefit to this system.

Dr. Johnson stated that in listening to both sides of the argument it sounded like if EMS starts TH in the field it influences the hospitals to continue that care and felt that the protocol was not designed to direct the hospitals. He added that with regard to carving out a specific population for TH, the protocol is not based on ventricular fibrillation cardiac arrest; it is for patients with ROSC.

Dr. Slattery stated that he provided that data for all rhythms but really just wanted to focus on the ones they wouldn't have any disagreement should be cooled. The purpose of pointing out the opportunities to cool more patients wasn't to drive hospital care but to demonstrate his point that clinical trial data as in the Kim Study is

different than real world data. He advocated for the decrease in the amount of fluids that they give the patient adding that they rarely get through the first liter and was poised to direct my department to do that regardless of the decision today.

Mr. Corrales stated that he applauded the Health District for initiating a therapeutic hypothermia protocol when the evidence became available. On both sides the evidence is overwhelming. It seems like there is very little benefit in TH across the board or across the world however when you look at the details that Dr. Slattery presented of those patients that were successfully resuscitated with TH, the numbers were quite impressive. He commented that as they advance as a system, rather than removing TH, what they really need to do is study this for a limited period of time, maybe a year and include these study points:

- Has adequate ventilation been done
- What time is advance airway management being conducted
- When do we defibrillate
- When do we do medication therapy
- When do we initiate iv access
- What's the temperature of the patient if they are successful in resuscitating them
- What's the environmental temperature
- What's the target temperature

He added that they have an opportunity to jointly study exactly what they do as a prehospital system and then compare that to what they do in the ED, that continuation of care.

Member Corrales made the motion to study the aspects of cardiac resuscitation including therapeutic hypothermia for one (1) year. Seconded by Member Strumillo and a vote was taken. Member Bledsoe and Member Dievendorf were opposed. Motion passed by majority vote.

Member Bledsoe made the motion to withdraw Therapeutic Hypothermia Protocol. Seconded by Member Young and a vote was taken. The motion did not pass.

Dr. Johnson stated that they have a motion and approval for a study and asked the Committee to bring their suggestions on a framework for a study on therapeutic hypothermia next meeting.

C. Clarification of the Use of Alternate Drugs in the Emergency Medical Care Protocol Manual

Deferred for future discussion

D. Discussion of I-Gel Airway Device Trial

Mr. Tuke stated that he mentioned at the last DDP Committee meeting that Clark County Fire along with AMR & MedicWest is going to trial the I-Gel airway device. The difference with the I-Gel is that there is no inflatable cuff and since it is a FDA approved extraglottic device and per the protocol there should be no hurdles for them to do a limited trial.

Dr. Young advised the Committee that the reason this was brought forward as an agenda item was the protocols are written as extraglottic devices which are basically a bookmark of where an extraglottic device fits into the airway management algorithm from a clinical standpoint. It doesn't necessarily mean that any airway extraglottic device can just be introduced, without consensus of the group. These are high risk devices, high risk situations and each of these have a different skill set. There is training involved in the I-Gel, because there is a gastric channel for decompression and currently extraglottic devices are put in by Advanced EMT's but gastric decompression is not an AEMT skill so that would need to be considered. He questioned the methodology and time frame of the trial that is going to be done.

Mr. Tuke stated that based on the way the protocol was written they wanted to use the I-Gel instead of the Combitube to see if there were any noticeable effects, red flags that would prevent them from moving forward as it is already approved by the FDA. They want to see it work in the field on actual patients so it is not a trial in the strict sense of the word.

Dr. Young stated that if everyone is comfortable he felt it would be fine and can leave it up to Mr. Tuke and his staff.

Dr. Bledsoe stated that this protocol was purposely changed to allow for options and felt this was a good product and support it from the AMR/MW side.

Dr. Johnson asked the Committee if there was any opposition to CCFD utilizing this device. Hearing none, the I-Gel Device was approved for use by Clark County Fire.

IV. INFORMATIONAL ITEMS/ DISCUSSION ONLY

Discussion of Nominations for Chairman/Vice Chairman

Dr. Johnson advised the Committee that both seats are open for nomination to be renewed in January, therefore to come with some thoughts in mind of who you would like have nominated for their next meeting.

V. PUBLIC COMMENT

Public comment is a period devoted to comments by the general public, if any, and discussions of those comments, about matters relevant to the Committee's jurisdiction will be held. No action may be taken upon a matter raised under this item of this Agenda until the matter itself has been specifically include on an agenda as an item upon which may be taken pursuant to NRS 241.020. All comments are limited to five (5) minutes. Chairman Johnson asked if anyone wished to address the Committee. Seeing no one, he closed the Public Comment portion of the meeting.

VI. ADJOURNMENT

There being no further business to come before the Committee, Chairman Johnson called for a motion to adjourn; the motion was made, seconded and passed unanimously to adjourn the meeting at 10:16 a.m.