



# PRC Meeting

Wednesday November 10, 2021  
9:30 AM to 12:00 PM

**\*\*The Committee does not anticipate a need for a closed session during this meeting\*\***  
**\*\*VIRTUAL ONLY\*\***

<b>Meeting called by:</b>	Dr. Timothy Chizmar
<b>Type of meeting:</b>	Protocol Review Committee

<b>PRC Agenda Items</b>		
<b>Call to order</b>		Dr. Chizmar
<b>Approval of minutes</b>	September minutes	
<b>Announcements</b>	PRC ALS vacancy	Dr. Chizmar
<b>Old Business</b>		
<b>New Business</b>	Ventricular Assist Devices Droperidol Cardiac arrest in pregnancy (LUD) Sodium bicarbonate indications PEA/Asystole Algorithm	Dr. Chizmar Dr. Stone/T.Burns Dr. Chizmar/Dr.Stone Dr. Stone/T. Burns Dr. Chizmar
<b>Journal Club</b>	1) Droperidol articles (x2)	Dr. Stone/T.Burns
<b>Discussion(s)</b>	Approved supraglottic airways Stroke - 45 min discussion	Dr. Chizmar Dr. Chizmar
<b>Adjournment</b>		Dr. Chizmar

<b>Next Meeting</b>	2022 Protocol Schedule TBD	

Updated 10/27/2021 4:00pm

**MIEMSS Protocol Review Committee**  
**November 10, 2021**

Attendance: Attendance Sheet provided electronically. September Minutes were sent out. Mark Buchholtz made motion to accept Minutes as posted, second by Director Schenning. Motion unanimously passed.

The meeting was called to order at 9:32am by Dr. Chizmar.

The PRC ALS Career (Alternate) position is vacant on the PRC. If there is interest from an ALS Clinician, send a letter of recommendation along with a CV from the EMSOP sponsoring the nomination. Congratulations and thank you to Paramedic Pat Carmody for years of service on the PRC.

**Protocol Administrator Position:** Will notify the PRC when the announcement for the Protocol Administrator position is posted on the State website.

**Ventricular Assist Device Proposal:** Dr. Chizmar presented the protocol. Drs. Lawner and Margolis also evaluated this proposal as they work closely with VAD coordinators in respective academic centers. VAD patients are becoming more common, as the devices are not solely being used as a bridge to transplant anymore. The protocol aims to address the EMS assessment and treatment of unstable VAD patients. This guidance would be added to the cardiac section of the protocols. In addition to the main protocol, we will add a clarification for interfacility transport – that VAD patients who are being discharged home and have no acute VAD issues, can go by ALS (vs. SCT).

The proposed VAD protocol was discussed in detail. Points of emphasis included: assessment of the device/batteries/driveline, alarms, and patient assessment for hypoperfusion and non-VAD causes of altered mental status/instability. We will add contact information for the VAD coordinators in the area (patients generally know their coordinator very well). We are also including a few reminders about transporting the backup bag with batteries and associated equipment. We will advise that EMS clinicians should transport to the facility where the VAD was placed, if the patient's clinical condition allows, and if the patient's symptoms are potentially related to the device. For all other conditions that obviously have no nexus to the VAD, we will advise transport to closest ED without manipulating the device.

Dr. Margolis: discussed ALS care of VAD patients. There is often apprehension with VAD patients, not only with hypoperfusion, but also hypovolemia (so-called suction events that can occur). This protocol is based upon NASEMSO model clinical guidelines, with additions from both Hopkins and Maryland groups.

Dr. Seaman: SCT clinicians are more comfortable treating these patients. Dr. Seaman feels there should be someone available on the phone to help walk thru 24/7/365. He suggests an Alert Box. Each patient has a VAD Coordinator number. Dr. Chizmar can follow-up and get the number for the local VAD centers. Will include, at minimum: Maryland, Hopkins, MedStar WHC.

Dr. Levy: Suggested EMRC as the one call. Tweak CPR verbiage to specify only manual (hands) CPR; no automated CPR devices for these patients.

Dr. Floccare: They carry VAD cards on the aircraft. Might want to consider having the cards available electronically/plastic. There is an important/difficult consideration - where the VAD patient should be

transported. VAD Coordinator may get a call from the patient. Also, we need to involve SYSCOM/EMRC. We want to ensure that the center who put the VAD in is involved in the discussion as to where the patient should go. Encourage dual consultation, something that should be attempted when considering destination. Discussion about dual consult with Captain Burns and Dr. Seaman.

Cyndy Wright-Johnson: Can reach out to Christiana, York, Hopkins, Morgantown and Hershey. Hopkins has had a few peds patients. In any given year, it is probably two children statewide. Will contact Children's and Hopkins and will turnaround quite quickly. PEMAC would be ok with moving this protocol forward for adults, and pediatrics will revisit in 2022. Protocol moves forward for adults.

**Droperidol Proposal:** Captain Tim Burns (Montgomery County) presented the droperidol protocol proposal along with discussion of the journal articles. Essentially, we propose a switch out from haloperidol to droperidol.

Reviewed the article from JEM: American Academy of Emergency Medicine Position Statement: Safety of Droperidol Use in the Emergency Department. See Proposal included with the PRC documents for this meeting (attached). Dr. Stone provided historical perspective from the late 90's on the use of droperidol. Using doses as low as 2.5 IM, you could get the patients under control with this dose.

Dr. Stone discussed the "American Academy of Emergency Medicine Position Statement: Safety of Droperidol Use in the Emergency Department" article.

Midazolam: Still have midazolam as a first drug for a rapid onset. Droperidol less likely to cause respiratory depression. Base Stations have to be clear with direction. If we do not obtain optimal effect with 2.5mg dose, then need to go to medical consult. Black box dosing for droperidol over 5mg.

Captain Burns data showed essentially no use of haloperidol below the age of 13. Dr. Anders commented that PEMAC will meet tomorrow.

Dr. Chizmar provided a poll. Results are 18 for 0 against – to move the proposal forward pending PEMAC recommendations. Therefore, will move the droperidol proposal forward. Will keep haloperidol pharmacology page for situations when droperidol is in short supply.

**Cardiac Arrest in Pregnancy:** Lateral uterine displacement is probably taught but not captured in the protocol formally. Dr. Levy good example of a collaborative effort, gives his full support. Dr. Stone acknowledged Captain Burns and Chief Kaufman efforts in the development of this addition. Dr. Chizmar asked if there are any objections to this proposal. There were none. Protocol moves forward.

**Sodium Bicarbonate:** Does not need to be given to every cardiac arrest patient. Revisions to allow for evidence-based approach to using this medication for certain patients in wide PEA. Also removes medical consultation requirement. Captain Burns: reading cardiac arrest reports and noted giving a lot of Sodium Bicarbonate. Wanted to realign that paradigm. Well within the AHA/ACLS guidelines. Treat reversible causes. Dr. Levy noted TCA/phenobarbital overdoses may benefit from sodium bicarbonate (will add this).

Dr. Chizmar also recommended the "pretreatment with Sodium Bicarbonate indication for IV contrast" due to lack of evidence to support this. Dr. Margolis concurs.

No objections to moving the PEA/Asystole and sodium bicarbonate limitation/revision forward.

**Supraglottic Airways:** Protocol broadens the options for extraglottic (EGA)/supraglottic (SGA) airways. The protocol would require one of the following airways: King LT, iGel, LMA, or Air-Q. Jurisdiction and Jurisdictional MD would select one from the list. They would be required to have all sizes of the given airway for patients from newborn to adult. Drs. Floccare and Anders discussed the devices and their benefits. In cardiac arrest, perhaps the EGA is the airway of choice; this will be visited further in 2022. Protocol moves forward.

**Stroke Routing Protocol:** Could the stroke routing protocol be expanded from 30 minutes to a 45 minute radius for patients with suspected LVO stroke (LAMS 4 or greater?). The research pilot noted there are some hemorrhagic stroke patients who also have high LAMS scores. Dr. Chizmar will take the Anne Arundel data to the Stroke QIC for discussion with stroke neurologists.

Dr. Wendell: Dr. Wendell based on looking at Anne Arundel County data and based on some recently publicized guidelines regarding stroke care in different geographical areas, rural vs suburban vs urban areas (Anne Arundel County he considered suburban), they recommended expanding direct transfer to Comprehensive Stroke Centers up to 45 minutes. Dr. Chizmar will send the article out to the Committee Dr. Wendell referred to. Dr. Wendell took a look at several months of their data of LAMS of 4 or > and then did some Google mapping, anyone between Google map and between 30-45 minutes from a comprehensive stroke center. This was displayed for the Committee. They had a large percentage of suspected LVO patients, up to 50 percent, who were transferred from a primary stroke center to a comprehensive stroke center. There were some complications with that data, some of those transfers were bleeds rather than large vessel occlusions. 55 percent of the cases they found were ultimately transferred secondarily from a primary stroke center to a comprehensive stroke center. For a lot of reasons it makes sense to take the patient to the right place the first time. It takes 60 minutes (or more) to transfer a stroke patient from a primary stroke center to a comprehensive stroke center.

Dr. Chizmar is interested in getting information from Dr. Floccare re: aviation use for some of these suspected LVO patients. PRC expressed unanimous support to move to 45 minutes. Dr. Chizmar is meeting with Stroke QIC today and would like to take to them that there is unanimous support to move to 45 minutes. No objections raised.

Discussed PRC Schedule for 2022. Meetings will be "Virtual" until further notice. The only change is January. The meeting will be held on the fourth Wednesday, January 26<sup>th</sup>. The 2022 PRC dates will be circulated to the group: March 9, May 11, June 13, Sept 14, Nov 9 (9:30am – 12 noon).

Good of the Order: Discussion about other drugs in cardiac arrest (naloxone, dextrose) with Dr. Stone, Chief Kaufman and Director Schenning. Discussion about indiscriminate use and patients with very low BP who may still have a pulse. All agree that ventilation takes priority, as noted in current protocol. Director Schenning states that if someone is in PEA arrest, just go ahead and treat all because you do not know which is the causing factor. Chief Kaufman noted he read a paper recently that says should not be giving naloxone in cases of known cardiac arrest.

Dr. Stone made motion to adjourn PRC meeting at 12 Noon, Second by Dr. Levy.

Adjourned 12:00pm.

