

Lee County



MEDSTAR

Clinical Guidelines

(a Supplement to the Lee County Common Treatment Guidelines)

&

Medical Director's Memorandums

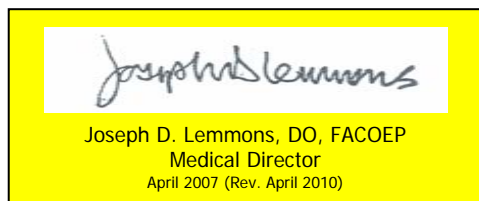
Effective Date: April 2007
Current Revision Date: April 2010

Lee County MEDSTAR Clinical Guidelines & Medical Director's Memorandums



Index

Cover	Page 1
Index	Page 2
Intent and Usage Guideline	Page 3
Critical Care Assessment Guideline	Page 4
Airway Management/Drug Assisted Intubation Guideline	Page 5
Airway Maintenance Pharmacology Guideline	Page 6
Ventilator Management Guideline	Page 7
Non-Invasive Ventilator Management Guideline	Page 8
Thoracostomy Tube Maintenance Guideline	Page 9
Hemodynamic Monitoring Guideline	Page 10
Hypoperfusion Guideline	Page 11
Post-Resuscitation Induced Hypothermia Guideline	Page 12
Blood/Blood Products Guideline	Page 13
Pain/Anxiety Management Guideline	Page 14
Nausea/Vomiting – Motion Sickness Guideline	Page 15
Intracranial Bolt/Ventriculostomy Maintenance Guideline	Page 16
Destinations Guideline	Page 17
Medical Director's Memo – Orders	Page 18
Medical Director's Memo – Chest Tube Drainage Systems	Page 19
Medical Director's Memo – LVADs	Page 20
Medical Director's Memo – C-Collars for Trauma Transfers	Page 21
Medical Director's Memo – EZ-IO Insertion Sites	Page 22
Equipment Variances	Page 23



The clinical guidelines herein serve as a supplement to and as appropriate, supersede the Lee County Common Treatment Guidelines. The enclosed guidelines have been developed for use by the Lee County MEDSTAR Paramedics during the treatment and transport of critically ill or injured patients (scene and inter-facility missions alike). MEDSTAR Paramedics are expected to adhere to the prescribed guidelines while exercising due regard for the patient's condition and subsequent response to therapy. If autonomy exists within a guideline, the choices shall be defined accordingly. Any deviation from a guideline must be defensible. When in doubt, MEDSTAR Paramedics should seek consult from medical control (for scene missions) and the transferring physician (for inter-facility missions) in order to provide the most effective and beneficial intervention possible. *In the event that a transferring physician or the transferring physician orders are unavailable the MEDSTAR Paramedics, once en-route to the receiving hospital, can and should manage patients in accordance with the guidelines herein.* It is understood that a paramedic credentialed as MEDSTAR Paramedic should follow and adhere to the MEDSTAR Clinical Guidelines when working as a ground paramedic for Lee County Emergency Medical Services.

The Lee County Medical Director is responsible for but not limited to authorizing a paramedic to become credentialed as a flight/critical care paramedic, the maintenance of the critical care credentialing, chart audits and the research and development of new care practices and standards.

Our Mission

To be patient care advocates, to alleviate pain and suffering and to furnish the safest transportation to appropriate care facilities for the residents and visitors of Lee County and Southwest Florida. Our highly trained professionals use state-of-the-art technology to meet the needs of those who are in need of critical care services.

Our Vision

To be a leader in our profession and serve as a role model for other air medical/critical care transport services. To be the first choice and only choice for critical care transport in Southwest Florida.

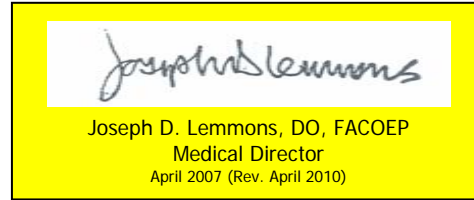
Our Standards Policy

Any and all patients served by Lee County MEDSTAR will be evaluated, treated and furnished transportation in a safe, prompt, reliable, courteous and clinically competent manner.



MEDSTAR

Critical Care Assessment Guideline



Scene Safety
(including Body Substance Isolation)

Initial Assessment (Primary Exam)

- A = Airway
- B = Breathing
- C = Circulation
- D = Disability
 - AVPU
 - Defibrillation
- E = Exposure/Estimation (Broselow)

Secondary Assessment (Systems Exam)

- General Impression
- Vital Signs
- Objective Exam
 - Neurological
 - Airway/Pulmonary
 - Cardiovascular
 - Gastrointestinal/Genitourinary
 - Musculoskeletal
 - Integumentary
- SAMPLE History
 - Symptoms
 - Chief Complaint
 - OPQRST
 - Admitting Diagnosis
 - Allergies
 - Medications (Prescribed)
 - Past Medical History
 - Last Oral Intake
 - Events Leading
- Social History
- Surgical History
- Family History
- Current Medications/Infusions
- Diagnostic Lab/Radiographic Studies

Compromised?

Refer to Appropriate Treatment Guideline

Ensure basic control measures are established as required:

- Airway Protection/Management
- Oxygen Therapy
- Ventilatory Management
- Perfusion Management
- Hemorrhage Management
- Intravenous/Intraosseous Access
 - Crystalloid infusions for Priority 1 missions
- Thermoregulation
 - Isothermic blanket wraps & warm crystalloid
- Hearing Protection
- Corneal Protection

Non-Invasive Monitor Assessment

- Cardiac
 - Standard Monitoring
 - 12 Lead ECG (when applicable)
- Blood Pressure
- Capnography
- Pulse Oximetry
- Blood Glucose (when applicable)
- Temperature

Invasive Monitor Assessment
(as applicable)

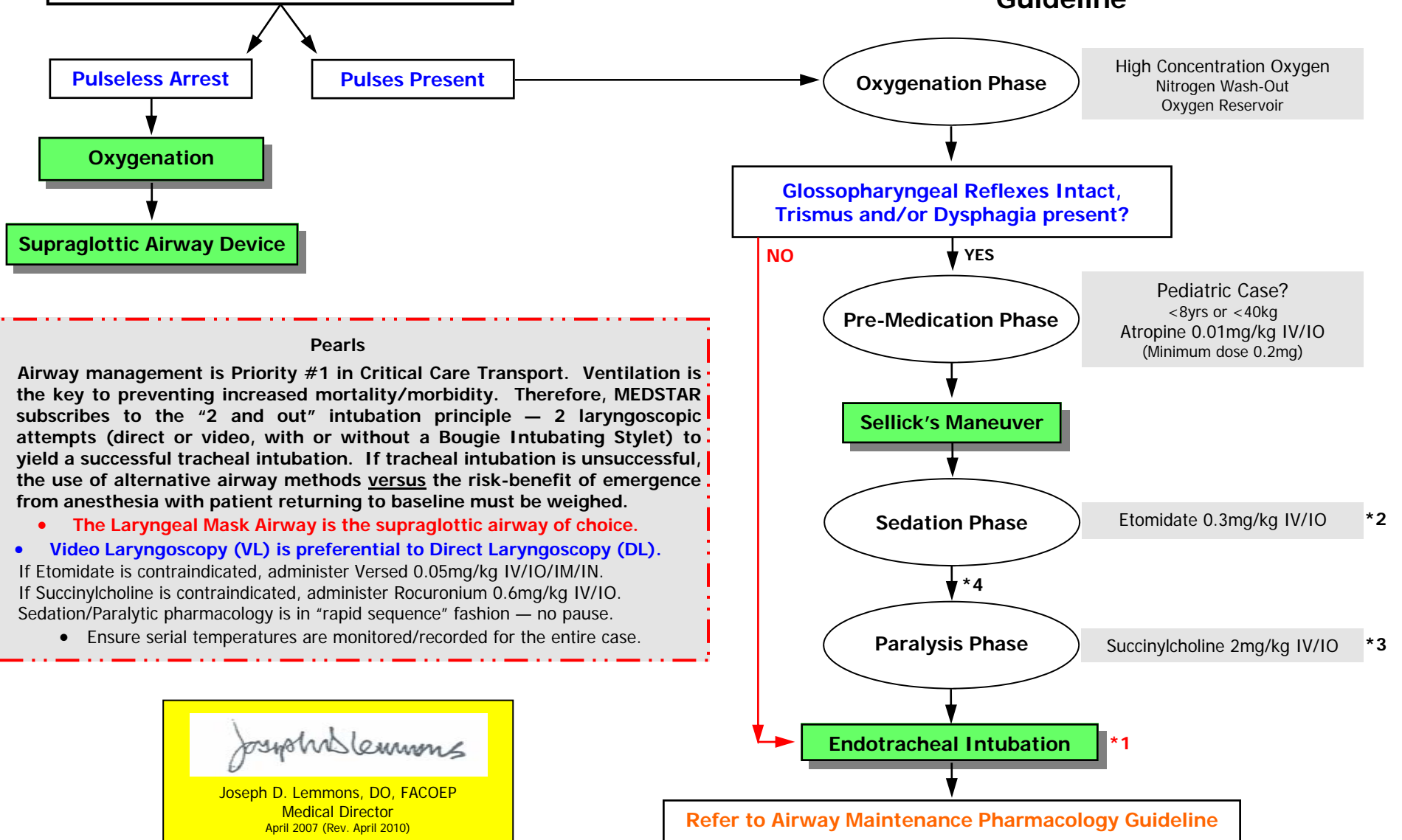
- Hemodynamic
 - Pulmonary Artery
 - Arterial
 - Central Venous



MEDSTAR

Airway Management/Drug Assisted Intubation Guideline

- Clinical Indications**
- Airway Unprotected and/or Compromised
 - Respiratory Tidal Volume Sub Optimal
 - Pulmonary Toilet Ineffective



Pearls

*1 Airway management is Priority #1 in Critical Care Transport. Ventilation is the key to preventing increased mortality/morbidity. Therefore, MEDSTAR subscribes to the "2 and out" intubation principle — 2 laryngoscopic attempts (direct or video, with or without a Bougie Intubating Stylet) to yield a successful tracheal intubation. If tracheal intubation is unsuccessful, the use of alternative airway methods versus the risk-benefit of emergence from anesthesia with patient returning to baseline must be weighed.

- The Laryngeal Mask Airway is the supraglottic airway of choice.
- Video Laryngoscopy (VL) is preferential to Direct Laryngoscopy (DL).

*2 If Etomidate is contraindicated, administer Versed 0.05mg/kg IV/IO/IM/IN.

*3 If Succinylcholine is contraindicated, administer Rocuronium 0.6mg/kg IV/IO.

*4 Sedation/Paralytic pharmacology is in "rapid sequence" fashion — no pause.

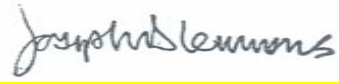
- Ensure serial temperatures are monitored/recorded for the entire case.

Joseph D. Lemmons

Joseph D. Lemmons, DO, FACOEP
Medical Director
April 2007 (Rev. April 2010)

Clinical Indications
Patients who are intubated and mechanically ventilated

Ensure Presence of all Control Measures
(e.g., Oxygenation/Ventilation, IV/IO Access, Non-Invasive Monitoring)


Joseph D. Lemmons, DO, FACOEP
Medical Director
March 2008 (Rev. April 2010)



MEDSTAR

Airway Maintenance Pharmacology Guideline

"Fresh" / DAI Airway Case *1

Administer/Ensure Sedation
Versed 0.025-0.05mg/kg IV/IO/IM/IN q PRN
and/or
Diprivan 5-75mcg/kg/min IV

Administer/Ensure Analgesia
Fentanyl 1-2mcg/kg IV/IO/IM/IN q PRN
or
Morphine 0.025-0.05mg/kg IV/IO/IM/IN q PRN

Administer/Ensure Non-Depolarizing Neuromuscular Blocker
Rocuronium 0.6mg/kg IV/IO q PRN
or
Vecuronium 0.1mg/kg IV/IO q PRN

Post Resuscitation Airway Case *2

Administer/Ensure Sedation
Versed 0.025-0.05mg/kg IV/IO/IM/IN q PRN
and/or
Diprivan 5-75mcg/kg/min IV

Administer/Ensure Analgesia
Fentanyl 1-2mcg/kg IV/IO/IM/IN q PRN
or
Morphine 0.025-0.05mg/kg IV/IO/IM/IN q PRN

Consider Non-Depolarizing Neuromuscular Blocker *3
Rocuronium 0.6mg/kg IV/IO q PRN
or
Vecuronium 0.1mg/kg IV/IO q PRN

Long Term Airway Case

Ventilator Adjustment
Adjust the ventilator settings to ensure comfort before considering pharmacology

Consider Sedation
Versed 0.025-0.05mg/kg IV/IO/IM/IN q PRN

Consider Analgesia
Fentanyl 1-2mcg/kg IV/IO/IM/IN q PRN
or
Morphine 0.025-0.05mg/kg IV/IO/IM/IN q PRN

Pearls

- *1 The "Fresh" Airway Case is generally a scene patient that has been intubated by MEDSTAR or just prior to MEDSTAR's arrival. The DAI patient must receive, immediately upon confirmation of a secured advanced airway, sedation, analgesia and non-depolarizing neuromuscular blocker unless contraindicated or otherwise ordered differently. **MEDSTAR DAI Mantra: Drugs needed to intubate, drugs required to maintain.** The non-DAI patient may not require maintenance pharmacology initially. However, the non-DAI patient may suddenly improve thus requiring maintenance pharmacology. Consequently, it is in the patient's (& crew's) best interest to have the maintenance pharmacology prepared for immediate administration.
- *2 The Post Resuscitation Airway Case is generally an inter-facility patient managed with a specific pharmacological regime prior to arrival. Post resuscitation airway patients will have their regime continued unless contraindicated, otherwise ordered differently or conditions in transport dictate otherwise.
- *3 The use of non-depolarizing neuromuscular blockers are appropriate when sedation and analgesia are suboptimal in maintaining intubation and/or ventilation.
 - All agents may be repeated as indicated/necessary ("q PRN") until desired effect has been achieved or relative hypotension/hypoperfusion ensues.
 - Morphine Sulfate is preferential to Fentanyl in the cardiac setting.
 - Rocuronium is preferential to Vecuronium with transport times less than 15 minutes.
 - **Under no circumstances shall a neuromuscular blocker be administered without accompanying sedation/analgesia.**
 - Be alert for tachycardia, hypertension and tearing - these are hallmark signs of inadequate sedation.



MEDSTAR

Ventilator Management Guideline

Clinical Indications
Patients Requiring Mechanical Ventilation

Confirm Placement and Security of Endotracheal/Tracheostomy Tube

Patient on Hospital Mechanical Ventilation?

Yes ↓

Confirm Initial Ventilator Parameters:

1. Mode
2. Tidal Volume (Vt)
3. Ventilation Rate (f)
4. Oxygen concentration (FiO2)
5. Positive End Expiratory Pressure (PEEP)
6. Inspiratory/Expiratory Ratio (I:E)
7. Sigh
8. Sensitivity

Review Recent Arterial Blood Gas Values

Parameters/Values Acceptable?

Yes ↓

Transfer Patient onto Transport Ventilator Maintaining all Parameters, as ordered by the Transferring Physician.

Parameters/Values Acceptable?

Yes ↓

No →

No →

No →

Joseph D. Lemmons
Joseph D. Lemmons, DO, FACOEP
Medical Director
April 2007 (Rev. April 2010)

Transport Ventilator Settings

- Set Mode: SIMV with Pressure Support *1
- Set Vt: 5-10 ml/kg *2
- Set f: Adult 8-16bpm / Pedi 16-40bpm
- Set FiO2: 100-40% (maintain adequate SpO2)
- Set PEEP: 5-15cmH2O
- Set I Time: f < 20bpm @ 1.0sec
f > 20bpm @ 0.8sec
- Set High Pressure Alarm: 15+ Paw
- Set Pressure Support: 10cmH2O *3

Parameters/Values Acceptable?

Yes ↓

Ensure Adequate Sedation, Analgesia and if required, Paralysis for Mechanical Ventilation

Consult Transferring Physician for Inter-Facility Missions

Refer to Airway Maintenance Pharmacology Guideline for Scene Missions

Maintain the Following Clinical Values:

- etCO2 40mmHg
- SpO2 > 93%

Consult Transferring Physician for Inter-Facility Missions or Medical Control Physician for Scene Missions

Pearls

- *1 Default mode is SIMV with Pressure Support. Consider other invasive modes as applicable.
- *2 Ideal body weight—not actual.
- *3 Adjust pressure support to ensure exhaled tidal volume (Vte) does not exceed desired Vt.
- Be prepared for ventilation/perfusion mismatch (VQ mismatch) situations.
 - Mechanical ventilation is preferred to hand ventilation. Avoid hand ventilation whenever possible.
- Sustained airway pressures > 35cmH2O must be investigated & addressed.



MEDSTAR

**Non-Invasive Ventilator Management
Guideline**

Page Intentionally Blank

Joseph D. Lemmons
DRAFT

Joseph D. Lemmons, DO, FACOEP
Medical Director
Date



MEDSTAR

Thoracostomy Tube Maintenance Guideline

Clinical Indications
Patients who require
Thoracostomy Tube(s) Maintenance during
Inter-facility Transport Missions

Confirm Placement and Security of
Thoracostomy Tube(s)

Confirm Thoracostomy Drainage System
Parameters:

1. Gravity vs. Mechanical Suction
2. Dressing to Thoracostomy Site

Parameters/Values Acceptable? →

Parameters/Values Unacceptable? ↓

Consult with Transferring Physician
to Correct Abnormalities

Procedure

1. Prepare the PLEUR-EVAC MINI-SAHARA®
 - Ensure all drainage tubes are connected
 - Ensure the "Air Leak Meter" is filled with required saline solution
 - Set the suction position at $-20\text{cm}/\text{H}_2\text{O}$
2. Briefly clamp the existing drainage system in preparation for PLEUR-EVAC MINI-SAHARA® transition.
3. Disconnect the existing drainage system from the chest tube. In the rare event that the PLEUR-EVAC MINI-SAHARA® is not compatible with the existing drainage system, remove the entire system and if necessary, cut the distal chest tube to accommodate the PLEUR-EVAC MINI-SAHARA®.
4. Reconnect the chest tube to the PLEUR-EVAC MINI-SAHARA®. Ensure all tube connections are securely attached.
5. Remove the distal chest tube clamp.
6. Ensure that the collection receptacle remains below the level of the chest to prevent fluid/air from re-entering the pleural space.
7. If suction was indicated or ordered at the transferring facility, place the PLEUR-EVAC MINI-SAHARA® to suction and maintain that suction during the transport.
8. Ensure constant vital sign monitoring including etCO_2 .
9. Provide analgesia and sedation as necessary.

Pearls

- All chest tube drainage systems will be transferred to the PLEUR-EVAC MINI-SAHARA® for transport. In the event that a PLEUR-EVAC SAHARA® or MINI-SAHARA® is previously established at bedside, maintain and transport with the existing SAHARA® or MINI-SAHARA® set-up.
- Should the thoracostomy tube become dislodged during transport:
 - Do not reinsert the tube
 - Secure the site with an occlusive dressing
 - Be prepared to perform needle thoracostomy
- In the event of sudden deterioration in the patient's status, all thoracostomy tubes will be placed to suction and *not clamped*.
 - Do not "milk" or "strip" any chest or drainage tube.
- The PLEUR-EVAC MINI-SAHARA® must be connected to the patient before connecting to and initiating suction.
- Document drainage quantity and appearance accordingly.

Joseph D. Lemmons, DO, FACOEP
Medical Director
April 2007 (Rev. April 2010)



MEDSTAR

Hemodynamic Monitoring Guideline

Clinical Indications

Patients who require Hemodynamic Monitoring during Inter-facility Transport Missions

Confirm Invasive Monitoring System Parameters:

- Confirm functioning invasive monitoring
- Obtain baseline invasive values

Procedure

1. Evaluate insertion site for patency, security, bleeding, sign of infection.
2. Confirm pressure bag is at 300 mmHg or IV pump is set at 3 mL/hr
3. Attach MEDSTAR transducer cable
4. Tape transducer to phlebostatic axis
5. Zero system
6. Perform dynamic response test (fast flush)
7. Confirm/ compare waveform and values to baseline

Normal Values

Arterial Monitoring:

- Correlate with NIBP values

Central Venous Monitoring:

- Mean 2-8 mmHg

Pulmonary Arterial Monitoring:

- RA (CVP) Mean 2-8 mmHg
- PA Systolic 15-30 mmHg Diastolic 8-15 mmHg
- PAWP (if available) Mean 8-15 mmHg

Pearls

- Care must be taken to avoid any air in system
- Transducer placement crucial for accurate values
- Correlate abnormal values with clinical presentation
- ALL unused ports/lumens require to have occlusive caps
- When presented with more than 2 invasive lines use the following order of preference: #1 Pulmonary Artery - #2 Arterial - #3 Central Venous
- Record values and waveforms at same frequency as non-invasive parameters

Arterial Monitoring

- No medications or infusions
- If catheter is removed hold continuous direct pressure for 5 minutes

Central Venous Monitoring

- No medications or infusions through transduced port/lumen

Pulmonary Artery Monitoring

- No medications/infusions through transduced or distal port/lumen
- Confirm/record baseline depth and re-confirm with each patient movement
- If PCWP waveform is displayed perform the following:
 - Verify balloon is deflated and gated port is closed
 - Re-position patient
 - Withdrawal catheter until PA waveform is displayed and document depth
- If RV waveform or catheter "whipping" is displayed perform the following:
 - Withdrawal catheter until CVP waveform is displayed and document depth
 - After withdraw re-confirm proximal infusion patency
 - NEVER attempt to advance or re-float catheter

Joseph D. Lemmons, DO, FACOEP
Medical Director
April 2009 (Rev. April 2010)



MEDSTAR

Hypoperfusion Guideline

Joseph D. Lemmons
DRAFT

Joseph D. Lemmons, DO, FACOEP
Medical Director
Date

Page Intentionally Blank



MEDSTAR

**Post-Resuscitation Induced Hypothermia
Guideline**

Page Intentionally Blank

Joseph D. Lemmons
DRAFT

Joseph D. Lemmons, DO, FACOEP
Medical Director
Date



MEDSTAR

Blood/Blood Products Guideline

Clinical Indications
Patients who require blood and/or blood products during Inter-facility Transport Missions



Patient Preparation

1. Confirm order for blood/blood product
2. Check for:
 - Right patient (match ID band against blood/blood product label)
 - Right blood type/blood product
3. Determine baseline vital signs (including temperature)
4. Ensure additional IV access (infusing crystalloid)



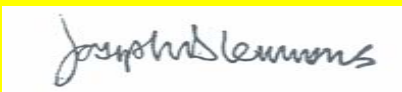
Blood Preparation

1. Check for:
 - Right patient (ID band against blood/blood product label)
 - Right blood type/blood product
 - Blood/blood product expiration date
2. Maintain the temperature of blood/blood product
3. Ensure blood/blood product is on a dedicated line with appropriate blood infusion tubing (filtered)



Treatment Modality

1. Maintain blood/blood product infusion per order
2. Monitor vital signs, including temperature, q10 minutes
3. Document time transfusion concluded
4. Remain observant for transfusion reactions
 - Change in mental status (restless, anxious), fever, headache, chest/back pain, pain at infusion site, hypotension, nausea-vomiting, urticaria, pruritus, respiratory distress, abdominal cramping, generalized bleeding, hematuria, gross signs of disseminated intravascular coagulation (DIC) and shock.
 - If transfusion reaction presents:
 - ✓ Stop/Discontinue the transfusion
 - ✓ Oxygen
 - ✓ Airway Management as appropriate
 - ✓ Shock Protocol... Crystalloid Resuscitation
 - ✓ Allergic Reaction/Anaphylaxis Protocol
 - ✓ Notify receiving facility of adverse reaction
 - ✓ Save remaining blood/blood product and tubing and transfer custody to receiving facility


Joseph D. Lemmons, DO, FACOEP
Medical Director
April 2007 (Rev. April 2010)

Pearls



MEDSTAR

Pain/Anxiety Management Guideline

Joseph D. Lemmons, DO, FACOEP
Medical Director
April 2009 (Rev. April 2010)

- Clinical Indications**
Patients who are experiencing:
- Musculoskeletal Pain
 - Fractures, Crush & Soft Tissue Injuries
 - Skin / Integumentary Pain
 - Burns & Soft Tissue Injuries
 - Ischemic Cardiac Pain
 - Acute Coronary Syndromes
 - Pleuritic Chest Pain
 - Non-Hemorrhagic Abdominal Pain
 - Renal Colic, Cholecystitis, Diverticulitis
 - Neurogenic Pain
 - Herpes/Varicella Zoster
 - Pain Associated Anxiety
 - Non-Pain Associated Anxiety
 - Aviation Anxiety/Phobia

Ensure Presence of all Control Measures
(e.g., Oxygenation/Ventilation, IV/IO Access, Non-Invasive Monitoring)

Isolated Anxiety Event?

YES

Administer Sedation
Versed 0.025-0.05mg/kg IV/IO/IM/IN q PRN

NO

Pain Event?

YES

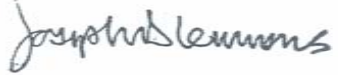
Administer Analgesia
Fentanyl 1-2mcg/kg IV/IO/IM/IN q PRN
or
Morphine 0.025-0.05mg/kg IV/IO/IM/IN q PRN *1

YES

Anxious?

Pearls

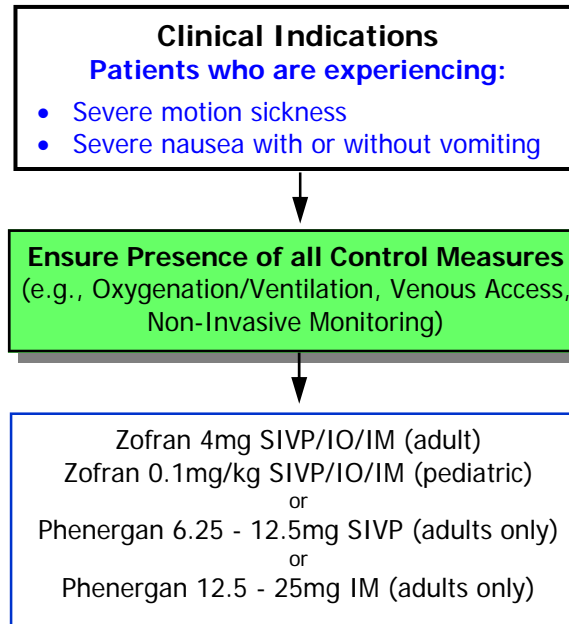
- *1 Morphine Sulfate is preferential to Fentanyl in the Ischemic Cardiac Pain setting.
- All agents may be repeated as indicated/necessary ("q PRN") until desired level of sedation and/or pain management has been achieved or relative hypotension/hypoperfusion ensues.
- Be alert for airway compromise and respiratory depression.
- Ensure the readiness of resuscitation measures such as opiate antagonist and antiemetic therapy.


Joseph D. Lemmons, DO, FACOEP
Medical Director
April 2009 (Rev. April 2010)



MEDSTAR

Nausea/Vomiting - Motion Sickness Guideline



Pearls

- Intravenous Phenergan may be administered through a wide open crystalloid line or by mixing the drug in a 100cc bag of crystalloid and running that wide open while piggy-backed to the primary crystalloid infusion.
- Be vigilant for dystonic reactions - be prepared to administer Benadryl as needed.



MEDSTAR

**Ventriculostomy/Intracranial Bolt
Maintenance Guideline**

Page Intentionally Blank

Joseph D. Lemmons
DRAFT

Joseph D. Lemmons, DO, FACOEP
Medical Director
Date



MEDSTAR

Destination Guideline

Clinical Indications
MEDSTAR Air transports pre-hospital patients (Scene Missions) to the closest, appropriate facility

Trauma / Trauma-Burn Centers

Lee Memorial Hospital
Fort Myers, FL

Level II Trauma Center

Bayfront Medical Center
St. Petersburg, FL

Level II Trauma Center
Pediatric Trauma Center

Tampa General Hospital
Tampa, FL

Level I Trauma Center
Pediatric Trauma Center
Burn Center (Adult & Pediatric)

St. Mary's Medical Center
West Palm Beach, FL

Level II Trauma Center
Pediatric Trauma Center

Broward General Medical Center
Fort Lauderdale, FL

Level I Trauma Center

Memorial Regional Hospital
Hollywood, FL

Level I Trauma Center

Jackson Memorial Hospital/Ryder Trauma Center
Miami, FL

Level I Trauma Center
Pediatric Trauma Center
Burn Center (Adult & Pediatric)
Microsurgical/Reattachment Center

Miami Children's Hospital
Miami, FL

Pediatric Trauma Center

Pearls

- If deemed medically appropriate, Medical Control may approve a "fly-over" to specific specialty care centers.

Joseph D. Lemmons, DO, FACOEP
Medical Director
April 2007 (Rev. April 2010)

Interventional Cardiac Centers

HealthPark Medical Center
Fort Myers, FL

Gulf Coast Medical Center
Fort Myers, FL

Charlotte Regional Medical Center
Punta Gorda, FL

Sarasota Memorial Hospital
Sarasota, FL

JFK Medical Center
Atlantis, FL

Naples Community Hospital
Naples, FL

High Risk OB/GYN Centers

HealthPark Medical Center
Fort Myers, FL

Tampa General Hospital
Tampa, FL

St. Mary's Medical Center
West Palm Beach, FL

Miami Children's Hospital
Miami, FL

Primary Stroke Centers

Lee Memorial Hospital
Fort Myers, FL

Gulf Coast Medical Center
Fort Myers, FL

Charlotte Regional Medical Center
Punta Gorda, FL

Peace River Regional Medical Center
Port Charlotte, FL

Sarasota Memorial Hospital
Sarasota, FL

St. Mary's Medical Center
West Palm Beach, FL

JFK Medical Center
Atlantis, FL

Naples Community Hospital
Naples, FL

Hyperbaric Treatment Centers

Lee Memorial Hospital
Fort Myers, FL

Sarasota Memorial Hospital
Sarasota, FL

Tampa General Hospital
Tampa, FL



Lee County
Public Safety

MEDICAL DIRECTOR'S MEMORANDUM

TO: MEDSTAR Paramedics
FM: Dr. Lemmons
DA: 31 March 2008 (Reviewed April 2010)
RE: Orders

The issue of obtaining/clarifying transfer orders was discussed at length at our last MEDSTAR staff meeting on 20 February 2008. I made it clear that the transferring physician was ultimately responsible for the care of the patient until arrival at the receiving facility. With that said, any additional orders required prior to transfer must be obtained from the transferring physician, engaging the facility staff to expedite and document such orders. **At no time are the transferring paramedics to secure orders from the receiving physician prior to leaving the transferring facility and at no time is a paramedic permitted to write orders or otherwise document on any hospital record.** Once en-route to the receiving hospital, the paramedic may then refer to the Lee County Common Treatment Guidelines and the MEDSTAR Clinical Guidelines to appropriately manage the patient's medical condition.

Respectfully,

Joseph D. Lemmons, DO, FACOEP
Medical Director



Lee County
Public Safety

MEDICAL DIRECTOR'S MEMORANDUM

TO: MEDSTAR Paramedics
FM: Dr. Lemmons
DA: 22 July 2009 (Revised April 2010)
RE: Chest Tube Drainage Systems

Unless otherwise directed by a physician order, all chest tube drainage systems encountered by MEDSTAR (Air or Ground) will be transitioned to and maintained on a PLEUR-EVAC MINI-Sahara® System. In the event that a PLEUR-EVAC SAHARA® or MINI-SAHARA® is previously established at bedside, the MEDSTAR Paramedics will maintain and transport with the existing SAHARA® or MINI-SAHARA® set-up.

If you have any questions about this directive, please refer to the MEDSTAR Thoracostomy Tube Maintenance Guideline or contact Lt. Hamel.

Respectfully,

Joseph D. Lemmons, DO, FACOEP
Medical Director



Lee County
Public Safety

MEDICAL DIRECTOR'S MEMORANDUM

TO: MEDSTAR Paramedics
FM: Dr. Lemmons
DA: 20 January 2010 (Reviewed April 2010)
RE: LVAD Transports

By way of this email, permission is granted to air transport *primary anomaly* left ventricular assist device (LVAD) patients direct from a scene to Tampa General Hospital without having to first contact local medical control. This directive now negates the need to contact local medical control for specific "fly-over" verbal orders as prescribed by the MEDSTAR Clinical Guidelines.

Note: This directive is for primary anomaly LVAD events – patients with LVADs who are in a stable wide complex tachycardia or ventricular fibrillation.

If you have any questions about this directive, please feel free to contact me or Lt. Hamel.

Respectfully,

Joseph D. Lemmons, DO, FACOEP
Medical Director



Lee County
Public Safety

MEDICAL DIRECTOR'S MEMORANDUM

TO: MEDSTAR Paramedics
FM: Dr. Lemmons
DA: 16 March 2010 (Reviewed April 2010)
RE: Cervical Collars for Trauma Transfers

Unless otherwise directed by a physician order, please ensure that all inter-facility trauma patients being transferred to Lee Memorial for Trauma Services are transported with a cervical collar in place – even if the c-spine has been cleared by the initial receiving facility.

This directive is at the request of Lee Memorial Trauma Services, is evidence based and is a long-standing best practice.

If you have any questions about this directive, please feel free to contact me or Lt. Hamel.

Respectfully,

Joseph D. Lemmons, DO, FACOEP
Medical Director



Lee County
Public Safety

MEDICAL DIRECTOR'S MEMORANDUM

TO: MEDSTAR Paramedics
FM: Dr. Lemmons
DA: 06 April 2010
RE: "EZ-IO" Insertion Sites

By way of this email, it understood that air medical/critical care transport is a separate discipline of medicine with unique challenges and circumstances. As such, this directive sanctions the use of all Food and Drug Administration approved EZ-IO insertion sites in accordance with the product insert published by Vidacare. The currently approved insertion sites are:

- Humeral head (preferred site due to its rapid absorption rates into the central circulation)
- Proximal tibia
- Distal tibia

If you have any questions about this directive, please feel free to contact me or Lt. Hamel.

Respectfully,

Joseph D. Lemmons, DO, FACOEP
Medical Director



Lee County
Public Safety

Florida Department of Health
Bureau of Emergency Medical Services
Variations for Lee County MEDSTAR

64J-1, F.A.C. Requirement

MEDSTAR Variance

- | | |
|---|---|
| • ET Tubes 9.5-11MM | 2.5-5.0 Uncuffed / 5.0-9.0 Cuffed |
| • Magill forceps, pedi & adult | Mid-size only |
| • Infant BVM | Infant Mask with Pedi BVM/Vent |
| • IO needle 15 or 16ga | EZ-IO System (15ga – 15, 25 & 45mm) |
| • Three way stop cocks | None |
| • Micro drip sets | Selec-3 IV sets (10, 15 & 60 gtt/s) |
| • Pediatric Electrodes | Adult electrodes cut to size |
| • Pediatric IV Armboards | None |
| • Vaseline Gauze | Commercial Occlusive Dressing |
| • Face Masks | Flight Helmets with Shields |
| • Safety Goggles | Flight Helmets with Shields |
| • Diazepam (Valium)
Lorazepam (Ativan) | Midazolam (Versed)
Diprivan (Propofol) |

