



REPLACING THE JUNE 3, 2015 MEMORANDUM

State of Maryland TO: EMS Providers, Highest EMS Officials, EMS Medical Directors

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FROM: Richard Alcorta, MD FACEP 
State EMS Medical Director

DATE: June 8, 2015

RE: Revision to June 3rd Memo:
Correction/clarification to changes made for the 2015 protocols:
Attention Altered Mental Status

Under General Patient Care on page 28 (p.8 of the pocket protocol), there was an accidental omission under 5. Disability b)(2).

Line (f) Neck pain or torticollis was added with the re-lettering of the three following indications.

Patients who have a blunt trauma with a high-energy mechanism of injury that has potential to cause spinal cord injury or vertebral instability **and** one or more the following should receive spinal protection. **(NEW '15)**

- (a) Midline spinal pain, tenderness, or deformity
- (b) Signs and symptoms of new paraplegia or quadriplegia
- (c) Focal neurological deficit
- (d) Altered mental status or disorientation
- (e) Distracting injury

ALERT: In addition to the above indicators for adults, the below apply to children that have not yet reached their 15th birthday

(f) Neck pain or torticollis

- (g) High impact diving incident or high risk MVC - head on collision, rollover, ejected from the vehicle, death in the same crash, or speed > 55 mph
- (h) Substantial torso injury
- (i) Conditions predisposing to spine injury

Magnesium Sulfate

With the addition of magnesium sulfate to the ALS formulary in 2015, there have been questions about the acceptable way to administer the medication and still be in compliance with the protocol that has specific direction listed in the protocol document. After researching the commercially available products and the national medication shortage, the following preparations are acceptable even though the protocols specifically reference Lactated Ringer's as the diluent.

1. Pre-mixed magnesium sulfate / water inj. bag, 4 gms 100 mL bag (40 mg/mL), (preferred)

2. In-Line Medication Chamber (e.g. Buretrol Chamber) (add-on 150 mL chamber) placed inline, add 100 mL of lactated ringers then add 4 grams of magnesium sulfate to the chamber, mix and administer (preferred)
3. Magnesium Sulfate, 4 gm add 50 or 100 mL bag (water, normal saline, D5W or LR)
4. Magnesium Sulfate, 50%, 5 gm / 10 mL, 10 mL prefilled syringe: Add 4 gm / 8 mL to 50 or 100 mL bag (water, normal saline, D5W or LR).

There may be other acceptable preparations not listed above that jurisdictions may elect to use. If you have questions about the acceptability of preparations to administer MgSO₄ contact the Office of the Medical Director.

p. 107 "Respiratory Distress: Asthma/COPD"

Should Read:

v) **Medical Consult:** Consider magnesium sulfate 50 mg/kg IV/IO to a max of 2 grams given over 10-20 minutes.

A "Medical Consult" symbol is missing, however, it is required to administer magnesium sulfate to both adult and pediatric patients experiencing Asthma/COPD. This dosage should also be listed on p. 238-2 under pediatric dosage.

This correction should also be made on p.82 of the pocket protocol.

Altered Mental Status: Seizures ****REVISION SINCE JUNE 3 MEMO****

Should Read:

P.38-1 l) ~~Administer midazolam 0.2 mg/kg in 2 mg increments slow IV push over one to two minutes. If a patient has no IV or IO in place:~~

Administer midazolam 0.2 mg/kg IN or IM. Maximum total dose 5 mg.

The dose should read midazolam 0.2 mg/kg which is the same that is listed on p. 239-1 under the pediatric dosage.

This correction should also be made on p.18 of the pocket protocol.

Pocket Protocol

The magnesium sulfate was unintentionally omitted from the Pharmaceutical /Formulary medication list on page 113. The dosing of magnesium sulfate is correct throughout the protocol. MIEMSS asks that you manually write the indications on page 113 for quick reference as follows:

Magnesium Sulfate:

Indications

(1) Torsades de Pointes, (2) Seizures with pregnancy, (3) Refractory VF and VT after lidocaine administration, (4) Moderate to severe asthma/bronchospasm exacerbation

If there any questions regarding this memo, please contact the Office of the Medical Director (410-706-0880).