Emergency Medicine Organizations Unite to Oppose Medical "Merit Badges" for EPs

In a historic collaboration, 10 major emergency medicine organizations have joined forces to create The Coalition to Oppose Medical Merit Badges (COMMB). In its news release, the Coalition stated it "…believes that board-certified emergency physicians who actively maintain their board certification should not be required to complete short-course certification or acquire condition-specific continuing medical education credits in advanced resuscitation, trauma care, stroke care, cardiovascular care, procedural sedation, or pediatric care in order to obtain or maintain medical staff privileges to work in an emergency department."

The COMMB consists of the American Academy of Emergency Medicine (AAEM), American Academy of Emergency Medicine/Resident and Student Association (AAEM/RSA), American Board of Emergency Medicine (ABEM), American College of Emergency Physicians (ACEP), Association of Academic Chairs of Emergency Medicine (AACEM), Council of Emergency Medicine Residency Directors (CORD), Emergency Medicine Residents' Association (EMRA), Society for Academic Emergency Medicine (SAEM), American Osteopathic Board of Emergency Medicine (AOBEM), and American College of Osteopathic Emergency Physicians (ACOEP).

In a written statement signed by the president/chair of each member organization, COMMB further asserted:

> Similarly, mandatory targeted continuing medical education (CME) requirements do not offer any meaningful value for the public or for the emergency physician who has achieved and maintained board certification. Such requirements are often promulgated by others who incompletely understand the foundation of knowledge and skills acquired by successfully completing an Accreditation Council for Graduate Medical Education-accredited or American Osteopathic Association-approved Emergency Medicine Residency Program. These "merit badges" add no additional value for board-certified emergency physicians. Instead, they devalue the board certification process, failing to recognize the rigor of the ABEM Maintenance of Certification (MOC) Program. In essence, medical merit badges set a lower bar than a diplomate's education, training, and ongoing learning, as measured by initial board certification and maintenance of certification.
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> The Coalition finds no rational justification to require medical merit badges for board-certified emergency physicians who maintain their board certification. Our committed professional organizations provide the best opportunities for continuous professional development and medical merit badges dismiss the quality of those educational efforts.
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> Opposing the requirements for medical merit badges will be a long and challenging struggle. It will take time to help administrators and regulatory bodies to better understand the rigorous standards to which we adhere as board-certified emergency physicians. In the coming months, we will develop our long-term strategy to create success and a pathway to recognize clinical excellence. We welcome your thoughts and suggestions as to how we can best succeed. In the near future, we will ask for strong support and a loud and unified voice.
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> We will persist and we are up to the challenge—

we are board-certified emergency physicians. Opposing medical merit badges is the right thing to do for our specialty. We will forever demonstrate a lifelong commitment to caring for anyone who is ill or injured, at any time, for any reason.

Study Nixed Magnesium for Infants With Acute Bronchiolitis

AMY KARON

FRONTLINE MEDICAL NEWS

Intravenous (IV) magnesium does not benefit, and may harm, infants with moderate-to-severe acute bronchiolitis, investigators reported. Compared with placebo, adding a single IV dose of magnesium sulfate (100 mg/kg) to usual care did not reduce time to medical readiness for discharge, even when patients had eczema or a family history of asthma, and was tied to a more than 3-fold rise in the rate of short-term readmissions, Khalid Al Ansari, MD, of Hamad Medical Corp in Doha, Qatar, and his associates wrote in *Chest*. "To our knowledge, this is the first randomized study to investigate the effect of intravenous magnesium in a bronchiolitis population," they added.

Bronchiolitis lacks new, inexpensive, readily available treatments, despite being a common reason for hospital admission, the researchers noted. For older children with moderate-to-severe exacerbations of asthma, a meta-analysis found that the addition of magnesium to usual care appeared to cut readmissions and shorten lengths of stay, compared with placebo. To explore magnesium therapy in younger children, the investigators enrolled 162 previously healthy infants up to 18 months old who had been admitted to the short-stay unit of a pediatric emergency center with a diagnosis of moderate-to-severe viral bronchiolitis. Patients received usual care with oral dexamethasone and nebulized 5% hypertonic saline in 1 mL of 1:1000 epinephrine, plus a 60-minute IV infusion with a blinded syringe of either 0.9% saline placebo or magnesium sulfate (100 mg/kg).

The primary endpoint, time to medical readiness for discharge, did not statistically differ between groups, averaging 24.1 (95% confidence interval [CI], 20.0-29.1) hours with magnesium and 25.3 (95% CI, 20.3-31.5) hours with placebo (P = .91). Among patients with a history of eczema or a family history of asthma, mean times to readiness for discharge resembled those for the entire cohort and did not statistically differ based on treatment. Average Wang bronchiolitis severity scores also were similar between groups, as were rates of outpatient clinic visits (33.8% with magnesium and 27.2% with placebo). Thus, the trial identified "no benefit in adding intravenous magnesium for infant bronchiolitis, even in patients characterized to be at a higher risk for asthma," the researchers concluded.

Strikingly, 2-week readmission rates were 19.5% with magnesium (95% CI, 11.3-30.1) and 6.2% with placebo (95% CI, 0.02-13.8; P = .016). Among patients with eczema or a family history of asthma, 2-week readmission rates also were significantly higher with magnesium (26.3%; 95% CI, 13.4-43.1) than with placebo (7.5%; 95% CI, 1.6-20.4; P = .034) These might have been chance findings, or magnesium might have masked worse bronchiolitis, prolonged the disease course, or interacted with 5% hypertonic saline or systemic corticosteroids, the investigators said. Intravenous magnesium might contribute to secondary relapse, especially among patients with eczema or a family history of asthma, they added.

Patients in this study had a median age of 3.7 months (range, 22 days to 17.6 months), about half had eczema or a family history of asthma, and 86% had positive nasopharyngeal virus swabs. Cardiopulmonary monitoring revealed no acute events during treatment. Of 16 readmissions in the magnesium group, 11 entered the infirmary and four entered the hospital. The five placebo readmissions included four to the infirmary and one to the hospital.

"As with other 'negative studies,' we may have failed to identify a benefit from intravenous magnesium in a patient subgroup because of our limited sample size," the investigators wrote. "But we think our findings are generalizable to a similarly heterogeneous group of patients presenting for bronchiolitis care in a busy urban emergency department."

Alansari K, Sayyed R, Davidson BL, Al Jawala S, Ghadier M. Intravenous magnesium sulfate for bronchiolitis: A randomized trial. *Chest*. 2017;pii:S0012-3692(17):30361-30366. doi:10.1016/j.chest.2017.03.002. [Epub ahead of print]

CDC: Some *Shigella* Strains Show Reduced Ciprofloxacin Susceptibility

SHARON WORCESTER

FRONTLINE MEDICAL NEWS

The Centers for Disease Control and Prevention (CDC) has identified an increase in *Shigella* isolates with reduced susceptibility to ciprofloxacin, and has released an official health advisory outlining new recommenda-

tions for clinical diagnosis, management, and reporting, as well as for laboratories and public health officials.

The *Shigella* isolates of concern in the United States have minimum inhibitory concentration (MIC) values of 0.12-1 mcg/mL for ciprofloxacin, which is within the range considered susceptible. These strains, however, "often have a quinolone resistance gene that may lead to clinically significant reduced susceptibility to fluoroquinolone antibiotics," such as ciprofloxacin, according to the CDC advisory.

It is possible that strains with MIC in the 0.12-1 mcg/mL range may have worse clinical outcome or increased risk of transmission, so the CDC made the following recommendations to clinicians:

- Order a stool culture to obtain isolates for antimicrobial susceptibility testing in suspected cases.
- Order antimicrobial susceptibility testing when ordering a stool culture for *Shigella*.
- Avoid routine prescribing of antibiotic therapy for *Shigella* infection, instead reserving antibiotics for patients with a clinical indication or when advised by public health officials in an outbreak setting.
- Tailor antibiotic choice (when antibiotics are indicated) to susceptibility results as soon as possible—with special attention given to the MIC for fluoroquinolone antibiotics.
- Obtain follow-up stool cultures in shigellosis patients who have continued or worsening symptoms despite antibiotic therapy.
- Consult local or state health departments for guidance on when patients may return to childcare, school, or work.
- Counsel patients with active diarrhea on how they can prevent spreading the infection to others, regardless of whether antibiotic treatment is prescribed.

Additionally, the CDC noted that shigellosis is a nationally notifiable condition, and all cases should be reported to one's local health department. If a patient with shigellosis and a ciprofloxacin MIC of 0.12-1 mcg/mL is identified, this information should be included in the report to facilitate further testing of the isolate.

The CDC reported that it is working with state and local public health departments and clinical partners to determine if outcomes are indeed worse for patients treated with ciprofloxacin for *Shigella* strains harboring a quinolone resistance gene, and it will continue to monitor trends in susceptibility of *Shigella* isolates and to perform genetic testing on select strains to confirm the presence and type of resistance genes.

Prenotification, Unequivocal Stroke Promote Ultrafast Door-to-Needle Time

SHARON WORCESTER

FRONTLINE MEDICAL NEWS

Ultrafast door-to-needle times (DNTs) of 10 minutes or less for IV acute ischemic stroke thrombolysis can be safely achieved in carefully selected cases, according to a review of cases at an Austrian teaching hospital.

Raffi Topakian, MD, and his colleagues at the Academic Teaching Hospital Wels-Grieskirchen in Wels, Austria, followed a multidisciplinary intervention to reinforce key components of the well-known Helsinki model of acute stroke care to improve the IV thrombolysis rate and the median DNT at the teaching hospital, and analyzed data from 361 patients who underwent intravenous thrombolysis (IVT) for stroke there between July 2014 and September 2016. The IVT rate increased from 19% to about 27% after intervention, and the DNT during the study period was 60 minutes or less in 316 patients (87.5%), 30 minutes or less in 181 patients (50.1%), and 10 minutes or less in 63 patients (17.5%).

"Over the study period, we reduced the DNT time from 49 minutes to 25 minutes. This was significant, and the door-to-needle times were astonishingly similar for the in-hours service and the out-of-hour service," he said at the annual meeting of the American Academy of Neurology.

Further, the rate of prenotifications from emergency medical services (EMS) rose from about 30% to 63% during the study period.

Patients with ultrafast DNT vs those with slower DNT were older, had more chronic heart failure, had more severe stroke (National Institutes of Health Stroke Scale score of 10 vs 5), had more anterior circulation stroke and cardioembolic stroke, and had clear onset of stroke. Independent predictors of ultrafast DNT included prenotification by EMS, anterior circulation syndrome, chronic heart failure, and having a stroke neurologist on duty, Dr Topakian said.

"Ultrashort DNTs can be achieved safely. The key is that we are prenotified by the EMS, that we can get all the relevant history details during transport, that there is a dedicated multidisciplinary stroke team and EMS staff, and that we have a seemingly unequivocal clinical scenario," he said. "Out-of-hours DNT matched in-hours DNT, but the caveat is we're talking about highly selected candidates; safety must not be sacrificed for the sake of speed, in all of our patients."