On Unreliable Eyewitness Accounts, Assessing Risk in GI Bleeding, and Febrile Seizures in Young Children

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Each month, Dr. Nahum Kovalski reviews a handful of abstracts from, or relevant to, urgent care practices and practitioners. For the full reports, go to the source cited under each title.

Beware of Eyewitness Accounts of Syncope or Seizures

Key point: Bystanders' descriptions of acute neurologic events often are simply wrong.

Citation: Thijs RD, Wagenaar WA, Middelkoop HAM, et al. Transient loss of consciousness through the eyes of a witness. *Neurology*. 2008;71:1713-1718.

Diagnosis of sudden catastrophic illness depends a good deal on eyewitness accounts. But, as criminologists know, eyewitnesses can be unreliable. Now, a team of neurologists in the Netherlands has reconfirmed this finding.

Psychology lectures that were attended by 229 students were suddenly interrupted by one of two short video clips. In one, a female tennis player faints; in the other, a woman suffers an epileptic seizure. On written multiple-choice questionnaires that were administered right after the videos ended, the students answered descriptive questions about each event correctly only about half the time (44% for the syncopal episode; 60% for the seizure). Questions about limb twitching—particularly useful for distinguishing between the two diagnoses—were answered incorrectly as often as 40% of the time, and, in some cases, nearly as many students simply did not know whether twitching of a specific limb was present or not.

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In previous studies, researchers have found similar problems with eyewitness accuracy when witnesses are asked to describe neurologic events. These authors go a step further and suggest some tips for clinicians.

First, history takers should phrase questions carefully. For example, instead of asking, "Did the right leg twitch?", asking "Do you know if the right leg twitched?" The latter wording relieves witnesses of the temptation to make incorrect guesses.

Second, a patient's own recall of circumstances leading up to an event generally should be given greater weight than eyewitness reports, particularly if the two accounts conflict.

[Published in *J Watch Gen Med*, December 11, 2008—Abigail Zuger, MD.] ■

In Upper GI Bleeding, Choosing Who Gets Admitted and Who Goes Home

Key point: None of the patients with a low Glasgow-Blatchford bleeding score required intervention for hemorrhage or had died after at least six months' follow-up.

Citation: Stanley AJ, Ashley D, Dalton HR, et al. Outpatient management of patients with low-risk upper-gastrointestinal haemorrhage: Multicentre validation and prospective evaluation. *Lancet*. 2009;373:42-47.

A scoring system based on simple clinical evaluation and without the need for endoscopy can identify low-risk patients who present with upper gastrointestinal bleeding, according to a Lancet study released online.

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pensation. Such incentives should promote gross revenue, whether it is generated through vertical or horizontal sales.

Differentiate by focusing on competitor vulnerabilities. Ahead by two touchdowns early in the fourth quarter? Don't run the ball into the line. Open up your passing attack, especially if that strategy plays into your opponent's greatest liabilities.

In occupational health sales, stick with the playbook that got you in the lead in the first place: selling on your competitive advantages vis-à-vis your prime competitors.

Leverage down times through a survival-of-the-fittest mentality. There is a silver lining out there for market leaders dealing with our current economic downturn. Market leaders are in the best position to quickly regain their strength in the next economic upswing because survival-of-the-fittest principles either weaken or put more vulnerable competitors out of business.

As a market leader, you should invest in more intense sales and marketing to take advantage of your weaker competitors' likely inability to respond in turn.

Watch for signs of slippage. Few clinics proactively monitor metrics such as lost market share, decreasing revenue, or client movement. Monthly scrutiny of such metrics is essential, and immediate action should be taken to stem negative tides.

Building on market leadership rather than letting it slip away should be central to the strategic thinking of every market leader. Market leadership provides many compelling competitive advantages, yet most urgent care occupational health programs take it for granted, thereby setting themselves up to slowly but surely lose their grip on the market.

If not taking advantage of a great mind is a notable tragedy of mankind, then not taking advantage of your market leadership's inherent advantages may be a notable downside of your clinic's strategic plan. ■

Researchers compared two scoring systems for predicting level of risk in patients presenting with upper GI hemorrhage to four U.K. hospitals—the widely used Rockall score and the newer Glasgow-Blatchford bleeding score (GBS). The GBS is based on lab values—namely, blood urea and hemoglobin—along with systolic pressure, pulse, and presenting signs. Patients with normal values and no melena, syncope, or evidence of liver disease or heart failure are considered to be at low risk and thus eligible for outpatient management.

The GBS outperformed the Rockall score at identifying low-risk patients in the ED, resulting in fewer hospitalizations. ■

Utility of Lumbar Puncture for First Simple Febrile Seizure Among Children 6 to 18 Months of Age

Key point: The risk of bacterial meningitis presenting as first simple febrile seizure at ages 6 to 18 months is very low.

Citation: Kimia AA, Capraro AJ, Hummel D, et al. Utility of lumbar puncture for first simple febrile seizure among children 6 to 18 months of age. *Pediatrics*. 2009;123(1):6-12.

The American Academy of Pediatrics consensus statement recommendations for lumbar puncture for cerebrospinal fluid analysis are:

- consider ***strongly*** for infants 6 to 12 months of age with a first simple febrile seizure, and
- consider for children 12 to 18 months of age with a first simple febrile seizure.

A retrospective cohort review was performed for patients 6 to 18 months of age who were evaluated for first simple febrile seizure in a pediatric emergency department between October 1995 and October 2006.

First simple febrile seizure accounted for 1% of all emergency department visits for children of this age, with 704 cases among 71,234 eligible visits during the study period. Twenty-seven percent of first simple febrile seizure visits were for infants 6 to 12 months of age; 73% were for infants 12 to 18 months of age.

Lumbar puncture was performed for 38% of the children. Samples were available for 70% of children 6 to 12 months of age (131 of 188 children) and 25% of children 12 to 18 months of age (129 of 516 children).

Rates of lumbar puncture decreased significantly over time in both age groups. The cerebrospinal fluid white blood cell count was elevated in 10 cases (3.8%). No pathogen was identified in cerebrospinal fluid cultures. Ten cultures (3.8%) yielded a contaminant. No patient was diagnosed as having bacterial meningitis.

The risk of bacterial meningitis presenting as first simple febrile seizure at ages 6 to 18 months is very low. Current American Academy of Pediatrics recommendations should be reconsidered. ■