

Highlights from this issue

doi:10.1136/emermed-2016-206317

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Editor's Choice: Speaking of the gender gap

The fall is conference season for emergency medicine—RCEM, EuSEM, ACEP all hold their major scientific meetings in September and October. At these meetings we learn from experts in our field about how to improve our practice. In this month's Editor's Choice article, Carley and colleagues report that the gender balance of the experts at EM meetings is a bit lopsided. Only 30% of presentations at 8 major EM conferences in 2014-2015 were given by women. At first this seems an appalling bit of sexism; these days, medical school graduates are about 50% female. However, women represent only 26% of the workforce in EM in the countries holding these conferences. Problem solved? As Kass and Choo write in their accompanying commentary, mirroring the gender imbalance simply perpetuates it, by depriving women of role models. So in a year where, for the second time, a woman is Britain's Prime Minister, and the US has its first woman presidential candidate, EM needs to take a look at the hidden lessons our conferences impart.

Can I PERC this patient?

One of the first patients I ever diagnosed with a PE was a fit 25 yo male who cycled 100 miles a week. When I ordered a V/Q scan (we were doing those back then), the radiologist was, to say the least, sceptical. I prevailed and the scan was floridly positive (unlike most V/Q scan readings). And that's the problem with pulmonary embolism. It looks like many other things. There are known risk factors, but people who get a PE without any risk factors. And it can be fatal. As a result, ED testing rates are for PE are high, and yields are low. D-dimer in combination with a lowto-moderate Wells risk score, reduces scanning rates somewhat, but the lack of specificity of d-dimer causes many unaffected patients to undergo a scan. Pulmonary Embolism Criteria (PERC) has been a welcome addition to EM practice, allowing us to avoid the use of d-dimers or CT's in patients under 50, a population we'd most want to spare from unnecessary radiation. However PERC requires a pre-test probability of less than 15% and since this is usually determined by physician gestalt, its still possible to put the wrong patients in the algorithm, and be falsely reassured by a negative result. Its been suggested that the Wells score could be used to estimate pre-test probability, a strategy that was tested by Theunissen and colleagues in a Dutch ED. In a retrospective study of patients who underwent CT scan for PE, the authors calculated the Wells score. For those with a score of 2 or less, they applied PERC. Of 78 patients with Wells ≤2, and PERC negative, 2 patients had a sub-segmental PE, for a sensitivity of 89% (95% CI 64%-98%). An important limitation of the study is the retrospective calculation of the Wells score; points were only awarded for "an alternative diagnosis is less likely than PE" if the treating physicians documented that PE was the most likely diagnosis in their note. Thus, as the authors point out, patients with Wells scores ≥3 could have been included in the "low risk" group.

Interpretation of this study can be a bit of a Rorshach test. The authors conclude that PERC may not be safe in patients with low risk Wells scores. One could instead argue that the study is a 'stress test' of the PERC rule: even if higher risk patients were included (which could also happen with physician gestalt), the Wells then - PERC strategy missed only two subsegmental PEs, the significance of which is uncertain. As the authors state, larger, prospective studies are neededand we look forward to publishing them!

A more sensible triage tool?

One of the defining processes of an ED, as opposed say, to an outpatient clinic, is the use of triage: patients are seen in order of acuity, not arrival. In areas where EM is still developing, a lack of skilled staff and training opportunity presents a challenge to establishing a triage system. One-two triage (OTT) was developed for low resource settings, but the results of the study by Khan et al



proves that we have lots to learn from newly developing systems. The principle of one-two triage is simple: identify patients that are critically ill and get them seen. (Importantly, recognizing the critically ill in OTT requires, at most, a pulse oximeter.) Then, sort the urgent from the non-urgent with more specific algorithms. Tested in 3 Cambodian EDs, OTT was found to be reliable and valid compared with physician rated acuity. And despite its relative simplicity, OTT performed similarly to the Emergency Severity Index (the most commonly used triage system in the US) and outperformed ESI for the most critically ill patients.

Reader's Choice

While emergency medicine focuses on saving the lives of the critically ill and injured, we are increasingly faced with the confusing and distressing dilemma of how to treat patients with life-limiting illnesses who are brought to the ED for resuscitation. Imagine then being truly on the front line of this decision: a paramedic called to a nursing home to transport a patient at the end of life, knowing that the trip to the ED may not be in the patients' goals of care or best interests. In a qualitative study by Murphy-Jones and Timmons, paramedics describe the difficulty in understanding the wishes of the patients, trying to do the best thing for the patient, and dealing with conflicting pressures from staff or family. These experiences, likely shared by many of us working in EDs, suggest the need for clearer statements of care goals and more training for all of us in this challenging area.





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