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*In reply:*



We thank Douglas et al for their interest in our work. As noted in our manuscript, we used a multidisciplinary and multiorganizational approach to address the opportunities and limits of current guidelines on sepsis care.<sup>1</sup> We specifically did not create a comprehensive and graded series of recommendations on early care, seeking instead to identify key concerns in current recommendations and care quality measures. We sought to address current controversies and help inform future guideline development and quality measures that bridge all acute care settings. Ongoing updates are important along with unifying efforts across disciplines and organizations that recognize the many settings in which sepsis care must be delivered. We all can do better together.

We also agree with Douglas et al<sup>2</sup> that dynamic fluid response assessment in septic shock has promise and that the FRESH trial was underpowered to show a clear patient-relevant benefit. Other dynamic fluid assessment techniques have also shown promise, and all had a careful review by our experts. We affirm our view that dynamic

fluid responsiveness may be useful in emergency sepsis care; however, we do not currently recommend its routine use. Our conclusion aligns closely with that of Douglas et al<sup>2</sup> in the FRESH manuscript, saying the approach “may improve outcomes for patients with septic shock....”

We look forward to new evidence to better inform future sepsis care.

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## The “Crossed Leg Sign” in the Emergency Department (or Tilli’s Sign): A New Semiotic Sign for the Early Evaluation of Patients Accessing the Emergency Setting



*To the Editor:*

We noticed that some patients, evaluated in the emergency department (ED), maintained one leg crossed over the other leg during the medical assessment. Nonverbal communication and medical semiotics are very important for a patient’s evaluation.<sup>1</sup> Patients can communicate indirectly through signs, facial expressions, and posture, with these

being important medical information for emergency physicians to find a diagnosis and prescribe the best treatment. We conducted an observational study at the Fondazione Policlinico Universitario Agostino Gemelli to evaluate whether the “crossed leg sign” (we called it “Tilli’s sign”) in the ED could be predictive of an emergency clinical condition in patients who access the emergency setting.

Patients who present to the ED usually receive a priority color code by nurses at the moment of triage according to the severity of their condition<sup>2</sup>: red (very critical), yellow (moderately critical), green (not very critical), and white (not critical).<sup>3,4</sup> The emergency physicians can confirm or change the color code that is initially assigned. In addition to the clinical parameters and the color code assigned, patients’ nonverbal behavior can indicate the severity of their disease and the urgency of treatment needed.<sup>5</sup> Crossed legs, for instance, can indicate that the person is relaxed and does not have a serious illness. We analyzed data (triage color code, length of stay in the ED, color code at discharge, etc) from 100 consecutive patients (47 women and 53 men; mean age, 55.8 ± 12) who presented with the Tilli’s sign during the medical examination. We used Student’s *t* test and Mann-Whitney *U* test with 95% confidence intervals and a significant *P* value of <.05. We found that 32 of the 100 patients (32%) were initially categorized with a green code, 50% (50 patients) with a yellow code, and 18% (18 patients) with a red code. After the medical examination, all 32 patients with the green code (100%) received a confirmation for the treatment urgency. Of the 50 patients with the yellow code, 38 patients (76%) received a green code, whereas only 12 (24%) received a confirmation for the treatment urgency. Of the 18 patients with the red code, only 1 patient (5%) received a confirmation for the red code, whereas 62% (11 patients) were reassigned with a yellow code and 33% (6 patients) with a green code. In summary, we found that 87 of the 100 patients (87%) received a lower urgency code. Moreover, 77 of the 100 patients (77%) had a length of stay in the ED of less than 12 hours, 15% (15 patients) had between 12 and 24 hours, and 8% (8 patients) had more than 24 hours. Of the 100 patients, 89 (89%) were directly discharged from the ED and 11 (11%) were hospitalized. Crossed leg sign has a sensitivity of 89% in ruling out the need for urgent treatment or hospitalization. Most importantly, none of the patients with positive Tilli’s sign received an “upper” color code during the first medical evaluation, and none of the patients who were discharged made the second presentation in the ED in the next 30 days of follow-up. In our opinion, the Tilli’s sign, as a form of patients’ nonverbal behavior, may help emergency physicians in the first evaluation of patients, letting them be confident of the absence of an

imminent treatment urgency. However, more studies are needed to confirm these results.

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