

Letter to the Editor

New Equations for Predicting Postoperative Risk in Patients with Hip Fracture

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To the Editor:

I read with interest the paper by Hirose et al. [2] describing the use of E-PASS to predict postoperative risk based on preoperative factors in patients with hip fractures. The authors are to be congratulated on attempting to validate their risk prediction in a separate cohort of patients. However, I have some concerns regarding the data as presented.

First, the subjects chosen were a nonrepresentative population. Patients with no complications were excluded from the study groups, yet this group represents a substantial proportion of patients with hip fractures. As the definition of lack of complications is a retrospective finding, it is not clear how the score then can be used preoperatively.

Second, in addition to the comments made by Zhou and Fan [6], I question the appropriateness of the analysis performed. For a score to be assessed as reliable, there should be some statistical assessment. Hirose et al. report observed-to-estimated ratios, but make no statistical assessment. The Hosmer-Lemeshow test is an appropriate test in these circumstances [3].

Third, I question the rationale for the comparisons made in the paper. POSSUM previously was shown to be not particularly useful in this population [5]. The surgical stress

score has a very narrow range in this population, and therefore is unlikely to have discriminatory ability. As Hirose et al. stated, several scoring systems have been developed. Maxwell et al. [4] reported on a large series of patients, validating a hip fracture score, which is based on recognized risk factors for postoperative mortality, and comparing it with the ASA and Donati scores [1]. Thus, it is unclear why E-PASS would be a better technique than those that have gone before.

References

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