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Can AIMS65 Save the Endoscopists from Midnight Calls?

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See "The AIMS65 Score Is a Useful Predictor of Mortality in Patients with Nonvariceal Upper Gastrointestinal Bleeding: Urgent Endoscopy in Patients with High AIMS65 Scores" by Sun Wook Park, Young Wook Song, Dae Hyun Tak, et al., on page 522-527.

INTRODUCTION

Upper gastrointestinal bleeding (UGIB) is the most common emergency condition that endoscopists encounter, and is associated with substantial morbidity and mortality. Early risk stratification is recommended to classify the patients into high and low risk groups. Among the various scoring tools, the Glasgow Blatchford score (GBS) and Rockall score have been evaluated and widely adopted.¹ Despite recommendations from international guidelines, risk stratifying scores have not been routinely adopted in clinical practice, mainly due to the complex and subjective nature of these scoring systems. Some of the criteria for the GBS and Rockall score lack a clear definition and include subjective variables. Also, endoscopic evaluation is required for the Rockall score, which makes it impossible to use at presentation to the Emergency Department.

The AIMS65 score was recently proposed to overcome the complexity of the existing scoring systems. It includes variables that are easily obtained as part of the initial evaluation and is easy to calculate.² It was originally reported to predict

in-hospital mortality, length of stay, and cost in patients with acute upper gastrointestinal bleeding. Recently, an AIMS65 score ≥ 2 has been reported to predict in-hospital mortality.³ In this issue of *Clinical Endoscopy*, Park et al.⁴ report on the usefulness of AIMS65 score in predicting mortality in patients with non-variceal upper gastrointestinal bleeding (NVUGIB). Their findings suggest that the AIMS65 score was superior to the Rockall score in predicting in-hospital mortality, and that early endoscopy for patients with an AIMS65 score ≥ 2 could reduce hospitalization periods. Recently there was a report that the AIMS65 score was not suitable for predicting clinical outcomes in peptic ulcer bleeding (PUB) patients.⁵ The authors reasoned that since two of the five parameters (albumin level and international normalized ratio) of the AIMS65 score were associated with variceal UGIB, it would not be useful in NVUGIB. The results of Park et al.⁴ contradict these findings and suggest that the AIMS65 score is useful in predicting mortality also for NVUGIB. The different endpoints may explain the disparity between these two studies: the study by Jung et al.⁵ used death within 30 days as its composite endpoint, whereas Park et al.⁴ used in-hospital mortality. A subgroup analysis of PUB patients by Park et al.⁴ could have given more information regarding the efficacy of the AIMS65 score in a subset of patients.

Patients with high AIMS65 scores (≥ 2) were allocated into either an urgent or non-urgent endoscopic procedure group (distinguished by the time to endoscopy). Urgent endoscopy was performed within 8 hours of arrival, and patients in this group experienced significantly reduced admission periods. However, patients in the urgent endoscopy group also had

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higher mortality and re-bleeding rates than those in the non-urgent group, suggesting selection bias. Compared to previous scoring systems, the AIMS65 score has the advantage of simplicity and lack of subjectivity. More and more studies, including the study by Park et al.,⁴ have validated its use in predicting in-hospital mortality. Future studies are warranted to determine its clinical usefulness in risk stratification of NVUGIB and the efficacy of urgent endoscopy in high-risk patients (AIMS65 score ≥ 2). Whether AIMS65 can save the endoscopists from midnight call is unclear yet.

Conflicts of Interest

The authors have no financial conflicts of interest.

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