SITE score for de novo spinal infection treatment

TO THE EDITOR: We read with great interest the article by Pluemer et al.1 on the novel scoring system for de novo spinal infection treatment evaluation score (SITE Score) (Pluemer J, Freyvert Y, Pratt N, et al. A novel scoring system concept for de novo spinal infection treatment, the Spinal Infection Treatment Evaluation Score [SITE Score]: a proof-of-concept study. J Neurosurg Spine. 2023;38[3]:396-404). We agree with the authors regarding the need to create a more systemic foundation for surgical assessments of de novo spinal infections. The SITE Score discusses five key variables (neurology, location, radiology, pain, and host comorbidities) to create a scoring system and accordingly give an overall score paving the way for medical or surgical management.

We want to draw attention to two other very important key factors that might be considered in an extended format of this score.

1) Duration of symptoms/intervention. Most, if not all, of these patients would have brief, acute, on/off, or chronic symptoms. We strongly believe and have seen in our clinical practice that either acute disabling pain or chronic symptoms lasting more than 6 weeks are very important predictors for further analyzing this score.

2) C-reactive protein (CRP)/erythrocyte sedimentation rate (ESR). CRP and ESR are two laboratory indicators that might be integrated in this score. Subtle discitis at early stages might be easily appreciated. Being low cost, these laboratory values are particularly easy to obtain in many Asian countries.

We hope that using these two other variables in an extended SITE scoring would further increase its usefulness.

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References

Disclosures
The authors report no conflict of interest.

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Response
On behalf of our authors, we want to thank Drs. Ansari and Lee for their thoughtful and insightful comments on our article.

The goal of the SITE Score is based on a formal evidence-based decision-making process for surgical versus nonsurgical treatment of de novo spine infections. As part of this process, we relied on a formal review of the published literature to extract factors that demonstrated evidence for the failure or success of medical therapy or surgical intervention. In this context, we did not extrapolate clinical variables from spinal deformity correction or surgical site infections, as these variables could additionally impact de novo spinal infection treatment but are much harder to quantify.

Specifically, chronicity of symptoms like duration of back pain or neurological impairment might indeed influence clinical treatment decision-making toward surgical or nonsurgical treatment, yet we could not find any high-level evidence for de novo spinal infections to incorporate these variables in our scoring system.1,2

Furthermore, we found no published evidence suggesting that initial CRP or ESR values predict the need for surgical treatment. CRP has been proven to be a valuable marker after definitive treatment selection has been initiated, but not for the initial treatment evaluation.3 Once again, we thank Ansari and Lee for their insightful observations; realistically, the granularity of their clinical observations exceeds currently available publications and knowledge.

The presented SITE Score is a conceptual scoring system and does not claim to be definitive. Future investigations and further gained evidence are welcome and can supplement different components of the SITE Score because of its structural design. We strongly believe in fur-
ther modifications of our SITE Score at a point in time where evidence for de novo spinal infections emerges.

We appreciate Drs. Ansari and Lee’s interest and active participation in formalizing our decision-making and treatment of this significant pathology.

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