Dear Editor,

In the management of Type-IIIB injuries, Gustilo’s classification has the disadvantages of a poor intra- and inter-observer agreement rate, low specificity and sensitivity to salvage, and inability to predict functional outcomes. We at ESIC MC PGIMSR Hospital, Bengaluru, here evaluated the open injury of validated score, that is, Ganga Hospital Open Injury Severity Score (GHOISS), which assesses the severity of injury to the covering structures, skeletal structures, and functional tissues of the injured limb separately along with providing weightage to the presence of comorbid factors.[1-3] We studied twenty cases of limb salvage and amputation after traumatic injuries managed at ESIC Hospital, India. The functional and health-related quality-of-life outcomes were assessed. A high sensitivity and specificity for amputation was documented when a score of 14 was used as the threshold score. In the salvaged limbs, the score was found to offer guidelines in protocols for reconstruction. According to the total score, injuries were treated by “Fix and Close” protocol; “Fix, Bone Graft and Close” protocol, “Fix and Flap” protocol or “Stabilize, Watch, Assess, and Reconstruct” protocol. The score was thus found to be useful clinically not only to assess salvage but also to provide guidelines in reconstruction. Out of the twenty Type-IIIB open injuries, 18 were salvaged and 2 were amputated. A Mangled Extremity Severity Score (MESS) of 7 and above had a sensitivity of 25% for amputation, whereas GHOISS of 17 and above was found to be more accurate for determining amputation with a sensitivity of 75% and a specificity of 93.75%. GHOISS is a reliable predictor of injury severity in Type-IIIB open fractures[Figure 1 and 2] and can be used as a guide for decision-making [Table 1]. The use of MESS score has a lower predictive value compared to GHOISS in deciding amputation versus salvage. A GHOISS of 17 or more has the highest sensitivity and specificity to predict amputation.

Table 1: The Gustilo Type-IIIB injuries were widely scattered among the various groups of the GHOISS and the MESS, indicating that injuries of a wide range of severity were clustered together in the Gustilo Grade-III classification

| Gustilo type (n=20) | GHOISS | MESS |
|---------------------|--------|------|
| Group (score)       | Number of injuries | <6 | 7 or more |
| IIIB                | 1 (6-10) | 10 |     |
| IIIB                | II (11-16) | 8 | 18 |
| IIIB                | III (>17) | 2 | 2 |

GHOISS: Ganga Hospital Open Injury Severity Score, MESS: Mangled Extremity Severity Score

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.
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