## The Impact of Early Tracheostomy in Neurotrauma Patients: A Retrospective Study

Sir,

We read with immense pleasure the article by Zirpe *et al.*<sup>[1]</sup> titled, "The impact of early tracheostomy in neurotrauma patients: A retrospective study." We appreciate this article along with the limitations highlighted by the authors. We would like to pose a few comments regarding this study to the authors:

- Division of early and late tracheostomy based on 5 days after intubation should be based on some literature or data and needs to be mentioned in the methodology
- 2. Table 1 of the article suggests 45% of the patient population were only from neurotrauma with the title and conclusion applied to that group. Subgroup analysis of these patients could have been more informative for the readers
- 3. Full Outline of UnResponsivenes score would have been better predictor of neurological injury than Glasgow Coma Scale in such patients on ventilator with endotracheal tube with sedation, but we understand the limitation of retrospective data<sup>[2]</sup>
- 4. Early tracheostomy might be challenging in severe traumatic brain injury (TBI), probably due to safety concerns such as worsening of cerebral edema, increasing intracranial pressure (ICP),<sup>[3]</sup> hypoventilation during the procedure, trauma-induced coagulopathy,<sup>[4]</sup> and positioning issues (clearance of cervical spine) in these population. ICP elevation can be significantly high even with minimally invasive procedure such as percutaneous tracheostomy as analyzed by Kocaeli *et al.*<sup>[3]</sup>
- 5. The conclusion of this study needs to be taken with a word of caution. Even the results from the large meta-analysis by Dunham *et al.*<sup>[5]</sup> revealed increased mortality in the early group in TBI population. The other largest multicenter randomized controlled trial with intention-to-treat analysis being performed till date in this field by Young *et al.* in general Intensive Care Unit population too revealed no benefit from early tracheostomy, and indeed the procedure was not needed in a third of late group.<sup>[6]</sup>

We conclude that an elective procedure can always wait, and risks versus benefits need to be assessed before such decisions.

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## **Conflicts of interest**

There are no conflicts of interest.

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