Endotracheal tube as a conduit for difficult gastric feeding tube insertion in a tracheostomized patient

A 60-year-old male was admitted to our hospital with a history of stroke, fever, and weakness and was diagnosed with COVID-19. He was on ventilator support for 20 days in the ICU. He recovered from COVID-19 and was discharged home with a tracheostomy and nasogastric (NG) tube for home-based care. Before discharge, he had a difficult NG tube insertion requiring critical care consultant intervention, use of an ice-cold tube, and direct laryngoscopy with Magills forceps. At home, it got dislodged, and local paramedical personnel could not insert it even with multiple attempts.

He was invited back for critical care follow-up visit the next day. On examination, the swallowing reflex was not strong, but the airway was maintained. As the patient expressed a strong desire for speaking, it was decided to decannulate the tracheostomy and insert a Freka nasogastric tube for a long stay. The Freka tube is a silicone feeding tube with a guidewire. There was resistance after some depth of insertion of the Freka tube. Direct laryngoscopy disclosed a blind false passage in the submucosa of the posterior pharyngeal wall.

Trying different methods, such as different scopes and upward pulling of the trachea,[1-3] did not work. So, we decided to insert the feeding tube orally. However, we were not able to advance from the proximal esophagus even after manipulating with Magill forceps. We first inserted the NG tube through one nare and pulled out the tip through the mouth with Magills forceps. Then, we inserted an endotracheal tube (ETT) into the esophagus under direct vision, and through this inserted the NG tube down the esophagus [Figure 1]. The ETT was split with a pair of scissors while slowly withdrawing it inch by inch. The position of the feeding tube was checked with a gastric insufflation test and imaging. The patient had no respiratory distress and feeds given through the feeding tube.

Kumar *et al.* have described in detail, causes and methods of dealing with difficult NG insertion. In our case, ETT was not *in situ*, and the tracheostomy tube was removed. Still, we faced difficulty in inserting the Ryle's tube even with the maneuver described above. We inserted the feeding tube with the aid of an ETT. Although our technique is closest to Kumar *et al.*,[4] we feel it is simpler and more feasible in resource-limited settings.

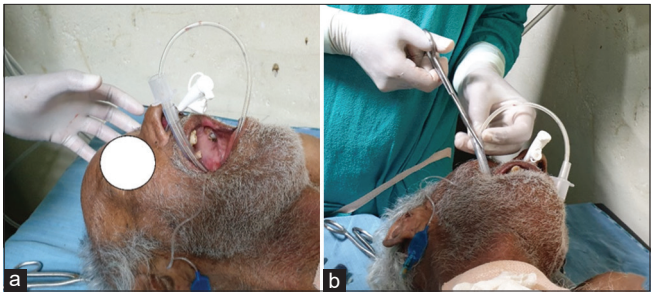

Figure 1: (a) Gastric tube passing through an endotracheal tube inserted into the esophagus. (b) Splitting of the endotracheal tube with a pair of scissors while withdrawing it

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Conflicts of interest

There are no conflicts of interest.

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