

## **Re: Effectiveness of an aspiration risk-reduction protocol**

To the editors:

Metheny and colleagues had described an impressive result from combination of a head-of-bed elevation position and an use of small-bowel feeding site to lower the incidence of aspiration and aspiration-related pneumonia in critically ill and tube-feeding patients (Metheny et al., 2010). Their study revealed a remarkable reduction of incidence by nearly half percentage.

However, their results did not imply the validity of the algorithm for high gastric residual volume (GRV). Failure to complete the algorithm was mainly contributed to no proper implement by the physicians. Their algorithmic procedure concerned by clinical physicians is the adverse effect of prokinetic. In addition, most studies have not been conducted to demonstrate a significant relationship between GRV and aspiration pneumonia (Kattelman et al., 2006; McClave et al., 2005). In a randomized, multicenter and prospective study (the REGANE study) comparing the residual volume in tube-feeding patents of 28 intensive care units in Spain, the result demonstrated the diet volume ratio is not affected by increasing the limit in GRV. Moreover, a limitation of 500 ml is not associated with adverse effects in gastrointestinal complications or the outcome (Montejo et al., 2010). Other reports showed that the GRV is not correlated to the gastric emptying time and the influence of salivary secretion and gastric juice of varied patients should also be considered (Bourgault et al., 2007). Thus, our comment is that the algorithm for high GRV is better adjusted according to different clinical conditions of patients and with other managements not only prokinetics but reducing feeding rate (Williams et al., 2005).

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