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Letter to the Editor

Early enteral nutrition and optimization of the energy with supplemental parenteral nutrition



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Dear Editor,

Enteral nutrition is believed to preserve gut integrity, both structural and functional, through varied mechanisms including blood flow stimulation, induction of trophic endogenous agents and secretory IgA release, and retain of the intra-epithelial tight junctions and villous height. Adverse changes in gut permeability are parts of a dynamic time-dependent phenomenon whose consequences are but not limited to increased systemic infection and multi-organ dysfunction syndrome probability [1]. Yet, the most effective and easiest method for maintaining gut function is providing enteral nutrition as soon as possible.

Some of the recently introduced approaches mention that there are only two options in feeding protocols for the critically-ill patients: either to feed the patients at an escalating rate or keep them nil per os (NPO) [2]. One of the undesirable consequences of such strategies is that many patients who cannot tolerate the standard escalating rate of EN are kept NPO unnecessarily when a lower constant dose of EN can definitely be suitable.

Based on 2009 ASPEN adult critical care guidelines, in critical ill patients unable to meet energy requirements (100% of target goal calories) after 7–10 days by the enteral route alone, we might consider initiating supplemental PN [3]. Hence, considering the fact that the gut plays a pivotal role in the critical illness and in order to maintain the gut integrity and functionality, whenever total energy requirements cannot be met from enteral route, it is logical to use PPN and reserve keeping NPO only for those in which there are contraindications for enteral nutrition. Calorie deficit is accompanied by poor outcome considering the fact that the difficulties in maintaining enteral nutrition could lead to hypocaloric feeding throughout the more critical first week of ICU admission [4]. Therefore, if enteral route fails to deliver the required energy, we should warrant that energy requirements are met either by more proper

delivery of enteral nutrition or supplemental parenteral nutrition instead of keeping the patients NPO; focusing on the common expression that “Use the Gut or Lose it”.

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