

## Tolerability of a Volume-Based Enteral Nutrition Protocol in Critically Ill Patients Receiving Intravenous Vasopressor Therapy

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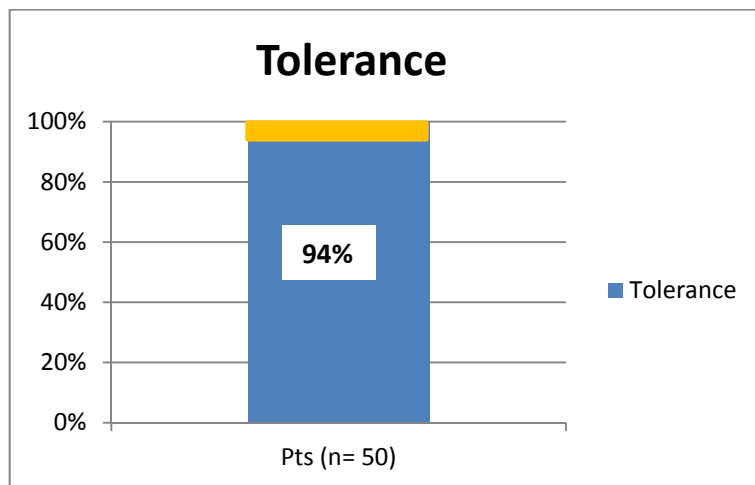
### Objectives

Given recent literature on the tolerability and safety of enteral nutrition in patients receiving  $\leq 12.5$  mcg/min norepinephrine equivalents (NE)<sup>1</sup>, the objective of this study was to measure tolerability of a volume-based enteral (VBE) protocol in medical and surgical/trauma ICUs while patients may also be on IV pressor support.

### Methods

A retrospective, observational cohort of adult ICU patients (n=50) who received either PEPTAMEN® AF or PEPTAMEN® Intense VHP in the MICU, or IMPACT® Peptide 1.5 in the trauma/SICU.\* A subgroup of these patients (n=12) were fed in the presence of vasopressors. Tolerance was defined as an absence of: gastric residuals greater than 300 mL, emesis, positive findings on abdominal imaging or evidence of ileus, bowel ischemia or perforation. Vasopressor therapy (dose and duration) was collected and converted to mcg/min NE. No serious adverse events were observed.

### Results



- 94% (47) of studied patients tolerated the VBE protocol; 6% (3) reported intolerance
- 83% (10) of patients on pressors tolerated the VBE protocol, 17% (2) of patients on pressors had intolerance.
- NE between the tolerant and intolerant groups were similar with a median of 8 vs. 9 mcg/min, respectively.
- Tolerant patients had a lower ICU length of stay (LOS), 7.9 days vs. 18.5 days for the intolerant group, p=0.048

### Conclusions

A high rate of enteral formula tolerance was achieved both in the MICU and trauma/SICU when a volume based feeding protocol was used. The rate of tolerance remained above 80% in the group that also received pressors. Authors conclude, use of the VBE protocol with patients receiving IV vasopressor therapy at or below recorded levels of NE, appears to be reasonably safe.

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Summary prepared by Nestlé Health Science

\*Formulas verified by study investigator

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1. Mancl EE and Muzevich KM et al. Tolerability and safety of enteral nutrition in critically ill patients receiving intravenous vasopressor therapy. JPEN 2013;37(5):641-651.