CLINICAL SUMMARY

Pilot study evaluating the efficacy, tolerance and safety of a peptide-based enteral formula versus a high protein enteral formula in multiple ICU settings (medical, surgical, cardiothoracic)

Peptide-based enteral formulas have been developed for critically ill patients with therapeutic intent, including enhancing tolerance and delivering different specific nutrients which have been shown to have favorable properties in healing and recovery in diseased human and animal models. Predigested or peptide-based formulas are used to promote gastrointestinal tolerance in critically ill patients, but studies comparing these against standard polymeric enteral formulas are lacking.

The Columbia University Medical Center conducted a prospective, randomized, double-blind, clinical comparison pilot study to assess safety, tolerance and effectiveness of a peptide-based enteral product.

Study Design

- Fifty patients were enrolled from among multiple adult intensive care units (Medical, Surgical, Cardiothoracic)
- Group A: Twenty- five patients received a peptide-based, high protein, high omega-3 fat enteral formulation (Vital AF 1.2 cal®)
- Group B: Twenty-five patients received a high protein standard enteral formula (Osmolite® 1.2)

Tolerance and comorbidities as well as enteral feeding volume were collected at baseline and then daily for up to 21 days, or until the patient was discharged from the ICU.

Results

Forty-nine patients completed the trial (25 Group A, 24 Group B).

Adverse events and undesired gastrointestinal events at baseline and mean intake post baseline were not different between the groups.

There were significantly fewer days with adverse events (p=0.0336) and undesired gastrointestinal events (p=0.048) in patients who were fed the peptide-based formula (Group A).

NUTRITION CONCLUSION

This pilot study suggests that feeding a peptide-based formula (Vital AF 1.2 cal®) to ICU patients was associated with a significant reduction in the number of days during which adverse events occurred as compared to a standard enteral formula.

Seres DS, Ippolito PR. *Clinical Nutrition* 2016, http://dx.doi.org/10.1016/j.clnu.2016.04.016

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