

Effect of Perioperative Immuno-Enhanced Enteral Nutrition on Inflammatory Response, Nutritional Status, and Outcomes in Head and Neck Cancer Patients Undergoing Major Surgery

Felekis D, Eleftheriadou A, Papadakos G, Bosinakou I, Ferekidou E, Kandiloros D, Katsaragakis S et al.
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Objective

Evaluate that immunonutrition supplemented with arginine, RNA and n-3 fatty acids improves outcomes in head and neck cancer patients undergoing surgery.

Methods

A randomized, double-blinded, prospective study where patients (n=40) with squamous cell carcinoma of the head and neck were divided into isocaloric groups as follows:

- A. Group 1- Received no nutritional support preoperatively and a standard enteral tube feeding (Nutrison^{®**}) post-surgery.
- B. Group 2- Received oral immunonutrition (Oral IMPACT[®] formula*) for 5 days preoperatively and enteral immunonutrition (IMPACT[®] formula) for 8 days post-surgery.

Major complications included pneumonia, UTI, fistula and wound infection, and were followed until discharge (median = 12 days). Lab values including albumin, prealbumin, fibrinogen, CRP, IL-6, and TNF- α were drawn at 5 days before and 8 days after surgery.

Results

- **Major Complications.** The rate of major complications was significantly lower in Group 2 (immunonutrition) than Group 1 (standard); 5% vs. 25%; p<0.05).
- **Lab values.** No significant difference was shown in lab values across groups or time points.

Conclusion

Perioperative use of oral and tube feeding forms of IMPACT[®] formula in head and neck cancer patient undergoing surgery may influence postoperative outcomes by reducing infections and wound complications.

Summary prepared by Nestlé HealthCare Nutrition. To view the study abstract, please use the following link:

<http://www.ncbi.nlm.nih.gov/pubmed/21058198>

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