

Utility of a Perioperative Nutritional Intervention on Postoperative Outcomes in High-Risk Head and Neck Cancer Patients

Rowan NR, Johnson JT, Fratangelo CE, Smith BK, Kemerer PA, Ferris RL. *Oral Onc* 2016; 54:42-46.
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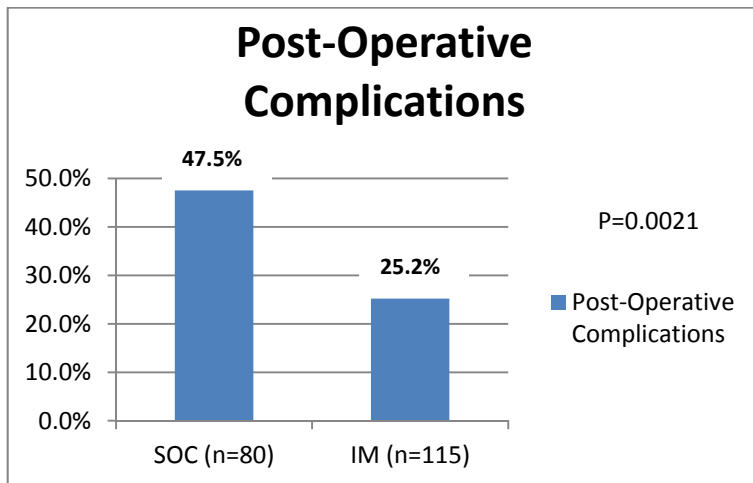
Objectives

Examine the utility and feasibility of implementing perioperative arginine-enriched immunonutrition (IM) in high-risk head and neck (H/N) cancer surgical patients, and measure effects on acute postsurgical outcomes.

Methods

A prospective non-randomized comparison cohort of high-risk H/N cancer patients (n=195), where the intervention group received a 5-day pre- and post-operative course of IM (IMPACT ADVANCED RECOVERY® Drink and IMPACT® PEPTIDE 1.5 formula, respectively). The control group received no supplementation preoperatively and standard tube feeding postoperatively, i.e. standard of care (SOC). Patients non-compliant to the preoperative regimen were placed in the SOC group. Post-operative complications included surgical site infection, pharyngeal leak or fistula, microvascular flap failure or dehiscence, pneumonia, postoperative bleeding or other medical illness. Length of stay (LOS) and readmission were also followed.

Results



- 47.5% of SOC patients registered **complications** vs. 25.2% in the immunonutrition (IM) group (p=0.0021)
- **Pharyngeal leaks or fistulas** were the most frequently noted complication in both groups and more common in the SOC vs. IM group (p=0.007)
- **Mean LOS** was reduced by 2.8 days in those taking IM (p=0.02)
- **Readmission** rates between the two groups at 30 days were similar
- Protocol compliance was 60% at best

Conclusions

Significant reductions in postoperative fistula formation and LOS in high risk H/N cancer patients were demonstrated in patients receiving the perioperative IM protocol as part of a Quality Improvement Project. These results also highlight the further potential gains to be made, both clinically and from a cost perspective in a more compliant population.

Summary prepared by Nestlé HealthCare Nutrition. The complete study can be accessed on line at:
<http://www.ncbi.nlm.nih.gov/pubmed/26803343>

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