

The Effect of Immunonutrition on Veterans Undergoing Major Surgery for Gastrointestinal Cancer

Lewis S, Pugsley M, Schneider C, Rakita SS and Moudgill LJ. Federal Practitioner 2018;S49-S56.
James A. Haley Veterans' Hospital, Tampa FL.

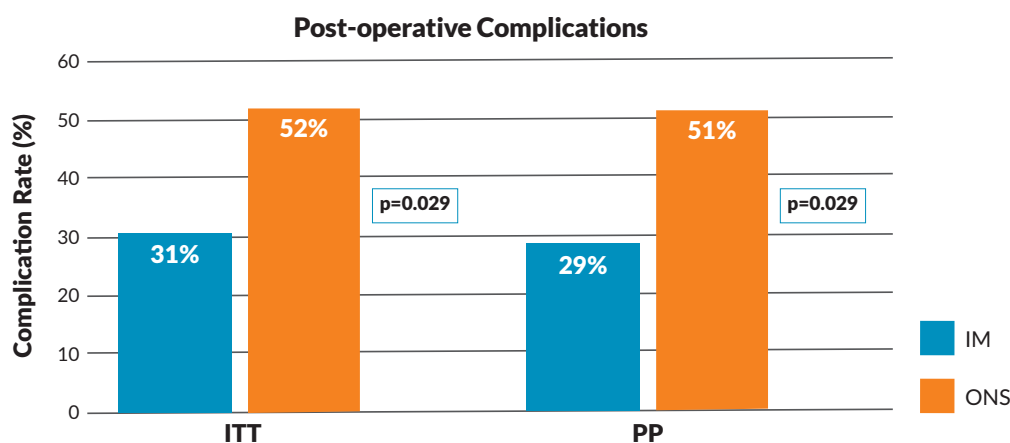
Objective:

Compare surgical outcomes in veterans having major gastrointestinal surgery who received a preoperative immunonutrition supplement vs. a standard oral nutritional supplement.

Methods:

- A 5-year prospective randomized controlled trial of veterans (n=108) having esophageal, gastric, pancreatic, colorectal or liver resections for malignancy. Patients received and were instructed to drink 3 servings of IMPACT Advanced Recovery[®] per day (immunonutrition-IM group), or 3 servings standard oral nutrition supplement (ONS group) per day for 5 days prior to surgery. Post-operatively, patients were interviewed about formula consumption and tolerance. Statistical significance of outcomes was accepted at p<0.05, and clinical significance at p<0.10.

Results:



Both Intent-to-Treat (ITT) and Per Protocol (PP) analyses showed fewer complications up to 30 days postoperatively in the IM group vs. ONS group

- Both analyses found lower numbers for incidence of ileus, anastomotic leak, SSI, pneumonia, UTI and sepsis in the IM vs. ONS groups. No difference in the incidence of intestinal fistula or abdominal abscess was noted.
- Both analyses found numbers trended lower for overall infections in the IM vs. ONS group; 20% vs. 33% and 19% vs. 30% (p<0.12), respectively.
- ITT analysis showed no significant difference in length of stay (LOS), however the PP analysis found a 1.3 day lower LOS in the IM vs. ONS groups (p=0.059).
- Given over half the procedures in each group were colon or rectal, a separate and underpowered PP analysis (n=73) was completed. Results were comparable in terms of fewer complications (36% vs 58%; p=0.08), and a LOS reduction of 1.5 days in IM vs ONS groups (p=0.08).
- No difference was found in regards to intake of supplements, as both groups showed an overall adherence rate of 86%.

Conclusions:

- Preoperative use of the study IM formula in the veteran population was found to positively decrease complications after GI cancer surgery. Authors speculate the addition of postoperative IM may have proven additionally beneficial.

Study summary prepared by Nestlé Health Science.

The complete study can be accessed at:

<https://www.mdedge.com/fedprac/article/165715/colon-and-rectal/effect-immunonutrition-veterans-undergoing-major-surgery>