

Impact of Preoperative Immunonutrition on Morbidity Following Cystectomy for Bladder Cancer: A Case-Control Pilot Study

Bertrand J, Siegler N, Murez T, Poinas G, Segui B, Ayuso D, Gres P, Wagner L, Thuret R, Costa P, Droupy S. *World J Urol* 2014; 32:233-237.

Objective

To compare the rate of postoperative complications in patients with bladder cancer who received preoperative immunonutrition with those that did not prior to cystectomy.

Methods

A prospective, multicenter, case-controlled pilot study. Patients (n=30) receiving 3 cartons/day ORAL IMPACT[®] for 7 days prior to surgery were compared retrospectively with a matched control group (n=30) not having received immunonutrition (IM). 30 patients were required in each group to power the study at 90%.

Results

	Study Group (%)	Control Group %	p value
Postoperative complications	12 (40)	23 (76.7)	0.008
Paralytic ileus at D7	2 (6.6)	10 (33.3)	0.02
Death	1 (3.3)	2 (6.7)	1
Infections	7 (23.3)	18 (60)	0.008
Type of infection			
Pyelonephritis (UTI)	5 (16.7)	14 (46.7)	0.03
Pneumonia	0 (0)	1 (3.3)	1
Pelvic abscess	2 (6.7)	3 (10)	0.65
Pulmonary embolism	1 (3.3)	1 (3.3)	1
Anastomotic fistula	0 (0)	2 (6.7)	0.49
Wound dehiscence	3 (10)	2 (6.7)	0.65

(Adapted from Table 2)

- The IM group had a significantly lower incidence of post-operative complications, including paralytic ileus and infections than the control group.
- Mortality, pulmonary embolism, anastomotic fistula and wound dehiscence were similar between groups.
- Length of stay (LOS) was reduced by 3 days in the immunonutrition group (NS).

Conclusion

Authors found promising results for the use of immunonutrition prior to bladder cancer surgery. Placebo controlled prospective randomized controlled trials are called for.

Summary prepared by Nestlé HealthCare Nutrition, Inc. The complete study can be accessed online at: <http://www.ncbi.nlm.nih.gov/pubmed/24362882>

* IMPACT ADVANCED RECOVERY[®] Specialized Nutrition Drink is the oral form of IMPACT Formula offered in the United States.

IMPACT[®] and IMPACT ADVANCED RECOVERY[®] are registered trademarks of Société des Produits Nestlé S.A., Vevey, Switzerland. IMPACT[®] is a registered trademark of Société des Produits Nestlé S.A., Vevey Switzerland. April 2015