

ABSTRACT

Objective: Perioperative immune-enhancing enteral formula (IEEF) is effective to ~~decrease~~ reduce the rate of infectious complications ~~that are infective~~, but whether the chronic use of IEEF ~~is~~ are beneficial is not known ~~to us~~. A prospective randomized clinical trial was performed ~~undertaken~~. ~~This was done in order~~ to examine the safety and effectiveness ~~impact~~ of ~~the~~ long-term IEEF on the nutritional al condition and immunological status of in non-surgery patients receiving ~~under~~ total enteral nutrition through the gastrostomy access route. A total of 30 patients ~~was~~ were randomly assigned to two ~~groups~~ in the present study.

Comment [A1]: Some singular nouns refer to one specific thing (the only one of its kind) and therefore, "the" is placed before the noun. Here, "the" is used because a specific route is being referred to.

Methods: ~~The~~ Two groups ~~recieved~~ received total enteral nutrition either with IEEF immune-enhancing enteral formula (Group IEEF, $n = 15$) or with regular polymeric enteral formula (Group C, $n = 15$) ~~for~~ 12 weeks. Nutritional al and immunological parameters were periodically examined.

Comment [A2]: Abbreviations are defined at their first mention in the text and the abbreviated form is used consistently at all subsequent instances.

Comment [A3]: Spaces are generally inserted before and after arithmetic symbols.

Results: A significant increase ~~of in the~~ serum levels of insulin-like growth factor 1 ~~(similar to insulin, IGF-1)~~ I was noted in Group IEEF throughout the ~~course of the~~ study. Furthermore, the ~~While~~ serum levels of dihomo- γ -linoleic acid ~~in Group IEEF was~~ significantly decreased and those ~~serum levels of~~ eicosapentaenoic ~~eicosa-pentaenoic acid~~ and docosahexaenoic acids ~~dochsa-hexaenoic acid were~~ significantly increased in Group IEEF. ~~Serum~~ The serum levels of arginine and ornithine ~~concentrations~~ also increased significantly in Group IEEF ~~were significantly increased~~. No significant difference was ~~noted in the~~ CD4/CD8 ratio and NK cell activity ~~were observed~~ in Group IEEF, ~~but the difference was~~ not significant. A significant increase ~~of in the~~ B-cell fraction and ~~the~~ decrease ~~of in the~~ T-cell fraction of peripheral lymphocytes were observed in Group IEEF. There was no infectious or ~~and~~ noninfectious ~~non-~~

~~infectious~~ complications ~~occurred~~ during the study period in both groups, except for a significant increase in ~~the~~ serum ~~levels of~~ BUN and uric acid ~~concentration~~.

Conclusion: ~~The long~~Long-term use of IEEF is ~~safe safely performed~~ in non-surgery patients ~~and results~~ ~~in, which enables to cause~~ a significant increase ~~in the of~~ serum ~~levels of~~ IGF-~~1I~~ ~~concentration~~ associated with ~~an~~ increase in humoral immunity.

SAMPLE