*primary studies - published RCT*

# Long-term parenteral nutrition in cystic fibrosis.

**Code:** PM8485323 **Year:** 1993 **Date:** 1993 **Author:** Kirvela O

### Study design (if review, criteria of inclusion for studies)

randomized trial

### Participants

18 cystic fibrosis patients

### Interventions

During the first 4-mo period, group 1 received PN and group 2 received routine therapy. During the second 4-mo period, PN was discontinued in group 1 and instituted in group 2.

### Outcome measures

body fat content, respiratory function, exercise tolerance, or recurrent infections. clinical outcomes, serum dihomo-gamma-linolenic acid (DHLA) concentrations during PN. Pulmonary function improved in patients who normalized their DHLA levels

### Main results

When the effect of PN was considered for both treatment groups, its general effect was to increase body fat content with little or no impact on respiratory function, exercise tolerance, or recurrent infections. However, subsequent analysis and clinical observation suggested that patients receiving PN responded in two seemingly distinct patterns: some demonstrated apparent clinical improvement and benefit, and other did not. A positive response in pulmonary and exercise function was closely correlated to a rise in serum dihomo-gamma-linolenic acid (DHLA) concentrations during PN. Pulmonary function improved in patients who normalized their DHLA levels (vital capacity increased from 2.2 +/- 0.3 to 2.6 +/- 0.3 area %, p

### Authors' conclusions

PN applied to malnourished patients with cystic fibrosis results in beneficial effects in a subgroup characterized by the presence of DHLA in serum; for the group as a whole, the positive effects are minimal.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/908/CN-00092908/frame.html

### See also

Nutrition. 1993 Mar-Apr;9(2):119-26.

### Keywords

Adolescent; Adult; non pharmacological intervention - diet; Parenteral Nutrition; pharmacological_intervention; Prostaglandins; Supplementation; Malnutrition; Nutrition Disorders;