

To evaluate the safety and efficacy of a fish oil-enriched parenteral nutrition regimen in trauma and burn patients

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Background: To evaluate the safety and efficacy of a fish oil-enriched parenteral nutrition regimen in trauma and burn patients

Methods: Prospective, randomized, parallel group study carried out at the Intensive Medicine, Department of Critical Care, Amandeep Hospital, Amritsar, India. Patients were divided into two groups: Group A with Omega-3 fatty acid-enriched lipid emulsions were given and Group B: placebo. The patients with polytrauma and burns more than 30% were included in the study. Omega-3 fatty started after the 24 hours in group A.

Results: The combined analysis showed that a fish oil-enriched parenteral nutrition regimen had a positive treatment effect on length of hospital stay (weighed mean difference=-2.98, $P<0.001$), length of intensive care unit stay, postoperative infection rate (odds ratio=0.56, $P=0.04$), and serum levels of Lactate level day 0, 1d, 5d, in these patients. The significant differences were found between the 2 groups in postoperative mortality; incidence of postoperative cardiac complications; serum levels of bilirubin, triglyceride. No serious adverse events related to fish oil treatment were reported.

Conclusions: Based on the analysis, fish oil-supplemented parenteral nutrition was safe, improved clinical outcomes in trauma and burn patients. More laboratory parameters should be considered in future meta-analyses.

Biography

Pankaj Soni has completed his MBBS from Grant Medical College and M.D. (postdoctoral) from Tata memorial hospital, Mumbai University. He is presently the ICU in-charge of Amandeep hospital, Amritsar, Punjab, India. He has presented his studies. He is presently the secretary, ISCCM (Indian Society of Critical Care Medicine).

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