

Category :**Nutritional support**

A26 - Medical nutrition therapy practices in cardiac surgical patients on ICU – current findings of the International Nutrition Survey

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Introduction:

Among critically ill patients, cardiac surgery patients are at increased risk for inadequate medical nutrition therapy (MNT) leading to iatrogenic undernutrition during their stay in an intensive care unit (ICU). This study aimed to evaluate current MNT practices in critically ill patients after cardiac surgery.

Methods:

An international prospective observational study was performed in 13 ICUs enrolling mechanically ventilated cardiac surgery patients with an ICU stay of at least 72 hours. Nutrition data of routine clinical practice (e.g., estimated target energy and protein supply, initiation timepoint and type of nutrition used, actual amounts of energy and protein delivered) were collected daily from ICU admission to a maximum of 12 days. Data on MNT practices are shown as n (%) and mean (range), respectively.

Results:

Across all participating sites, a total of 237 patients were enrolled. In the study population, enteral nutrition (EN) was initiated within 45 (0-227) hours after ICU admission (site average: 53 [10-79] hours). EN was predominantly used in 187 (79 %) and supplemental parenteral nutrition (SPN) in 33 (14%) of patients. Overall, patients received 44.2% (0.0-117.2%) and 39.7% (0.0-122.8%) of prescribed energy and protein, respectively; the average adequacy per site was 47.5% (30.5-78.6%) for calories and 43.6% (21.7-76.6%) for protein, respectively, received from all nutritional sources.

Conclusion:

In patients with prolonged ICU stay after cardiac surgery, initiation of EN was delayed and SPN was rarely used, both leading to inadequate delivery of energy and protein. The findings obtained in the present study emphasize that improvements in clinical practice are urgently needed to avoid iatrogenic undernutrition.