

Category :**Nutritional support**

A186 - Preferential use of enteral or parenteral nutrition in the world regions: a multivariate nutritionday icu analysis in 16032 patients

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Introduction:

Controversy exists between ESPEN and ASPEN guidelines on the indication for enteral (EN) versus parenteral (PN) nutrition. The aim of the study is the comparison between world regions in preference of enteral over parenteral nutrition after adjustment for patient characteristics.

Methods:

All 16032 patients from the nutritionDay project 2007-2018 are included in the analysis. World region are defined according to WHO definition: EUR A (Central & western Europe), EUR B (Eastern Europe), AMR A (North America), AMR B (South America), Eastern Mediterranean (UA) and Asia. Adjustment risk factors: age, sex, BMI, SAPS2, SOFA, renal replacement therapy, ventilation, duration of ICU stay before nutritionday and reason for ICU dependency. Preference for either EN or PN was analysed with logistic regression with ICUs as clusters. Statistical analysis was done in R 3.3.1.

Results:

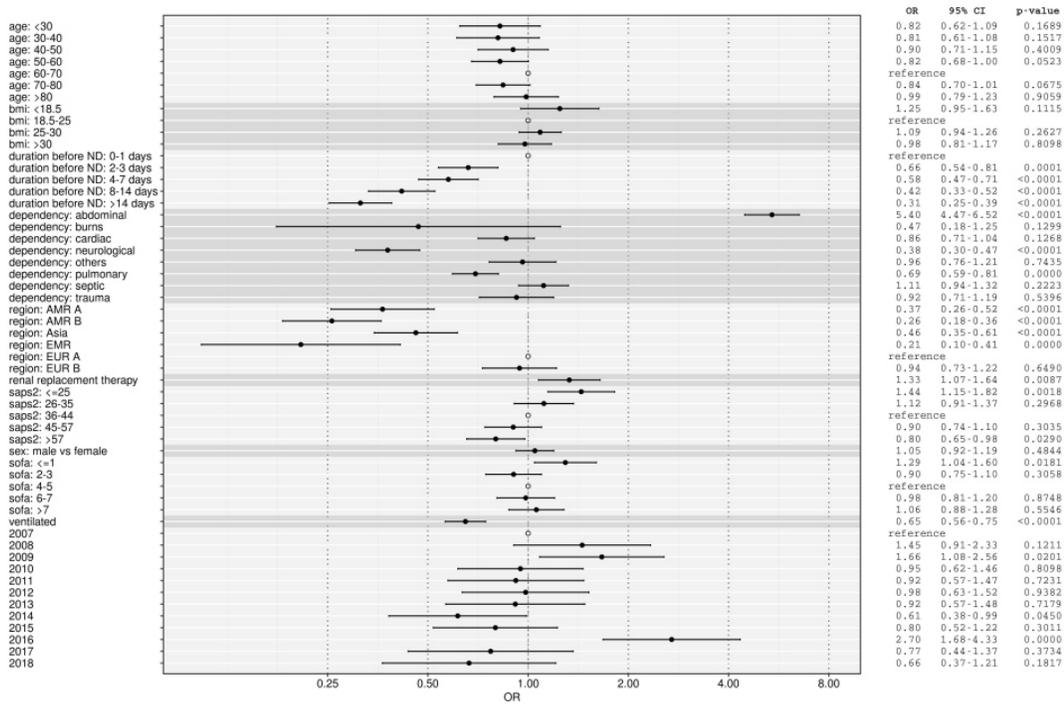
The majority of patients were adults (98.5%), male (63%) with a median age of 64 IQR[51-74], BMI 25.5 [22.6-29.3], SAPS2 38 [27-52], SOFA 4 [1-4]. Observed mortality in hospital was 24% within 60 days. In Europe 39% of patients receive EN either alone or in combination with PN and 27% PN. One out of four patients are on oral nutrition whereas one out of seven receive EN or PN in addition to oral nutrition. Outside Europe more patients were on EN, PN was used about half as frequently and oral nutrition was more prevalent.

The preference for EN was independent of age, BMI and sex. EN became more prevalent with duration of ICU stay. Reason for ICU admission neurological and cardiac increased the preference for EN and abdominal reasons for PN. Americas and Asia preferred EN compared with both European regions. EN was more prevalent with increasing severity of illness at admission. More PN if on CRRT and more EN if ventilated (Figure).

Conclusion:

Preference for EN over PN is strongly associated with world regions after adjustment for multiple patient factors.

Image :



Preferential use of enteral (OR<1) or parenteral (OR>1) nutrition in the nutritionDay cohort 2007-2018 (n=16032)