Enteral nutrition

Enteral feeding tubes may be placed in the stomach (gastric tube feeding) or in the upper small bowel (transpyloric tube feeding). There are potential advantages and disadvantages to both routes.

Enteral nutrition via PEG was found to be a positive factor affecting survival rates of older adult patients in palliative care, whereas malignity, high neutrophil/lymphocyte ratio, high CRP and ferritin levels, and prolonged hospital stays were negative risk factors [1].

Early enteral nutrition (EEN) represents the current standard of care for patients treated in general intensive care units (ICU). Specific nutritional recommendations for patients receiving dedicated neurocritical care are not established. This study investigated associations of EEN with clinical outcomes for patients suffering from intracerebral hemorrhage treated at a neurological ICU (NICU). Methods: This retrospective cohort study included patients admitted to the NICU with atraumatic ICH over a 4-year period. Nutritional data, demographic, clinical, radiological, and laboratory characteristics were assessed. EEN was defined as any enteral nutrition within 48 hours after admission. Comparisons were undertaken for patients with EEN vs. those without, further propensity score (PS) matching (caliper 0.2; one: many) was used to account for baseline imbalances. Primary outcome was the modified Rankin Scale (0-3 = favorable, 4-6 = unfavorable) at 12 months, secondary outcomes comprised perihemorrhagic edema (PHE) volume, infectious complications during the hospital stay, and mRS at 3 months, as well as mortality rates at 3 and 12 months. Results: Of 166 ICH-patients treated at the NICU, 51 (30.7%) patients received EEN, and 115 (69.3%) patients received no EEN (nEEN). After propensity score matching, calories delivered from enteral nutrition (EEN 161.4 [106.4-192.3] kcal/day vs. nEEN 0.0 [0.0-0.0], P < 0.001) and the total calories (EEN 190.0 [126.0-357.0] kcal/day vs. nEEN 33.6 [0.0-190.0] kcal/day, P < 0.001) were significantly different during the first 48 h admitted in NICU. Functional outcome at 12 months (mRS 4-6, EEN 33/43 [76.7%] vs. nEEN, 49/64 [76. 6%]; P = 1.00) was similar in the two groups. There were neither differences in mRS at 3 months, nor in mortality rates at 3 and 12 months between the two groups. EEN did not affect incidence of infective complications or gastrointestinal adverse events during the hospital stay; however, EEN was associated with significantly less extent of PHE evolution [maximum absolute PHE (OR 0.822, 95% CI 0.706-0.957, P = 0.012); maximum relative PHE (OR 0.784, 95% CI 0.646-0.952, P = 0.014)]. Conclusion: In our study, EEN was associated with reduced PHE in ICH-patients treated at a NICU. However, this observation did not translate into improved survival or functional outcome at 3 and 12 months [2].

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see Enteral nutrition in Traumatic Brain Injury

1)
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