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Letter to the Editor

Reply - Letter to the Editor - Impact of route and adequacy of nutritional intake on outcomes of allogeneic hematopoietic cell transplantation for hematologic malignancies



We thank Dr Fuji and colleagues for their interest in our recent article. As they identify, published data is limited in terms of how best to support transplant patients nutritionally and indeed whether efforts to do so are justified in terms of transplant outcomes. In our article we sought to add to the evidence with regards to both these issues but within the obvious limitations of a retrospective data analysis.

To clarify, our use of the term enteral nutrition relates to nourishment obtained via the gastrointestinal tract whether those nutrients are delivered via eating or an enteral tube. In our study we identified 47 patients that required enteral tube feeding in order to achieve adequate enteral nutrition during their transplant admission. Unfortunately this group represented less than 10% of our overall participants and hence was too small to analyse individually in a multivariate analysis of mortality and GvHD outcomes.

Our analysis instead explored whether the well-established benefits of enteral nutrition (orally or tube fed) showed any association with improved transplant outcomes when compared to patients receiving significant periods of parenteral nutrition or significant periods without adequate nutrition by any route.

We suggest that the negative associations found between PN and outcome are likely multifactorial. This may well include metabolic complications that are directly associated with PN such as hyperglycaemia, deranged liver function or fluid overload.

Regrettably, in this large cohort, the retrospective data on such metabolic complications were not available for analysis.

The demographic and transplant characteristics of our cohort are summarised in table 2 of the article and here we identify where there are significant differences between the characteristics of the 3 nutrition groups. We used a robust multivariate analytical approach to attempt to address bias introduced by these differences but the only way to completely overcome this is in a prospective randomised study.

Hopefully discussion such as this (with our thanks to Dr Fuji), will stimulate further studies to address unanswered questions surrounding possible benefits of an adequate enteral intake. That is: does adequate enteral nutrition occur as result of a transplant that would be associated with better outcomes anyway?; or does adequate enteral nutrition help ameliorate the negative effects that can occur after HCT?; or are the potential advantages of PN outweighed by its metabolic and other complications?; or are the associations we observed due to a combination of these and other factors.

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